



**EXPRESSCLUSTER X 5.1 for Linux  
Command Reference Guide for Cluster Configuration**

*Release 1*

**NEC Corporation**

**Apr 26, 2024**



## TABLE OF CONTENTS:

<b>1</b>	<b>Preface</b>	<b>1</b>
1.1	Who Should Use This Guide . . . . .	1
1.2	How This Guide is Organized . . . . .	2
1.3	EXPRESSCLUSTER X Documentation Set . . . . .	3
1.4	Conventions . . . . .	4
1.5	Contacting NEC . . . . .	5
<b>2</b>	<b>Command reference</b>	<b>7</b>
2.1	clpcfadm.py command . . . . .	7
2.2	clpencrypt command . . . . .	11
<b>3</b>	<b>Creating a cluster</b>	<b>13</b>
<b>4</b>	<b>Setting cluster properties</b>	<b>15</b>
4.1	Basic information . . . . .	15
4.2	Interconnect . . . . .	16
4.3	Fencing . . . . .	20
4.4	Timeout . . . . .	31
4.5	Port No. . . . .	32
4.6	Port No. (Mirror) . . . . .	33
4.7	Port No. (Log) . . . . .	34
4.8	Monitor . . . . .	35
4.9	Recovery . . . . .	37
4.10	Alert Service . . . . .	39
4.11	WebManager . . . . .	45
4.12	API . . . . .	49
4.13	Encryption . . . . .	51
4.14	Alert Log . . . . .	53
4.15	Delay Warning . . . . .	54
4.16	Mirror Agent . . . . .	55
4.17	Mirror Driver . . . . .	56
4.18	JVM Monitor . . . . .	57
4.19	Cloud . . . . .	60
4.20	Statistics . . . . .	62
4.21	Extension . . . . .	64
<b>5</b>	<b>Configuring a server</b>	<b>67</b>
5.1	Adding a server . . . . .	68
5.2	Setting parameters common to servers . . . . .	69
5.3	Setting server parameters . . . . .	70

5.4	Deleting a server . . . . .	73
<b>6</b>	<b>Configuring a group</b>	<b>75</b>
6.1	Adding a group . . . . .	76
6.2	Setting parameters common to groups . . . . .	77
6.3	Setting group parameters . . . . .	78
6.4	Deleting a group . . . . .	84
<b>7</b>	<b>Configuring group resources</b>	<b>85</b>
7.1	AWS DNS resource . . . . .	85
7.2	AWS Elastic IP resource . . . . .	93
7.3	AWS Secondary IP resource . . . . .	101
7.4	AWS Virtual IP resource . . . . .	109
7.5	Azure DNS resource . . . . .	117
7.6	Azure probe port resource . . . . .	126
7.7	Dynamic DNS resource . . . . .	133
7.8	Disk resource . . . . .	141
7.9	EXEC resource . . . . .	152
7.10	Floating IP resource . . . . .	161
7.11	Google Cloud DNS resource . . . . .	170
7.12	Google Cloud Virtual IP resource . . . . .	178
7.13	Hybrid disk resource . . . . .	185
7.14	Mirror disk resource . . . . .	199
7.15	Oracle Cloud Virtual IP resource . . . . .	214
7.16	Virtual IP resource . . . . .	221
7.17	Volume manager resource . . . . .	232
<b>8</b>	<b>Configuring monitor resources</b>	<b>241</b>
8.1	ARP monitor resource . . . . .	241
8.2	AWS AZ monitor resource . . . . .	247
8.3	AWS DNS monitor resource . . . . .	254
8.4	AWS Elastic IP monitor resource . . . . .	261
8.5	AWS Secondary IP monitor resource . . . . .	268
8.6	AWS Virtual IP monitor resource . . . . .	274
8.7	Azure DNS monitor resource . . . . .	281
8.8	Azure load balance monitor resource . . . . .	287
8.9	Azure probe port monitor resource . . . . .	293
8.10	DB2 monitor resource . . . . .	299
8.11	Dynamic DNS monitor resource . . . . .	307
8.12	Disk monitor resource . . . . .	313
8.13	Floating IP monitor resource . . . . .	322
8.14	FTP monitor resource . . . . .	329
8.15	Google Cloud DNS monitor resource . . . . .	336
8.16	Google Cloud load balance monitor resource . . . . .	342
8.17	Google Cloud Virtual IP monitor resource . . . . .	348
8.18	Custom monitor resource . . . . .	354
8.19	Hybrid disk connect monitor resource . . . . .	362
8.20	Hybrid disk monitor resource . . . . .	366
8.21	HTTP monitor resource . . . . .	370
8.22	IMAP4 monitor resource . . . . .	379
8.23	IP monitor resource . . . . .	386
8.24	JVM monitor resource . . . . .	393
8.25	Mirror Disk Connect monitor resource . . . . .	415
8.26	Mirror disk monitor resource . . . . .	419

8.27	NIC Link Up/Down monitor resource . . . . .	423
8.28	Message receive monitor resource . . . . .	430
8.29	Multi target monitor resource . . . . .	435
8.30	MySQL monitor resource . . . . .	443
8.31	NFS monitor resource . . . . .	451
8.32	Oracle Cloud load balance monitor resource . . . . .	458
8.33	Oracle Cloud Virtual IP monitor resource . . . . .	464
8.34	ODBC monitor resource . . . . .	470
8.35	Oracle monitor resource . . . . .	477
8.36	WebOTX monitor resource . . . . .	486
8.37	PID monitor resource . . . . .	493
8.38	POP3 monitor resource . . . . .	499
8.39	PostgreSQL monitor resource . . . . .	506
8.40	Process resource monitor resource . . . . .	514
8.41	Process name monitor resource . . . . .	523
8.42	Samba monitor resource . . . . .	530
8.43	SMTP monitor resource . . . . .	537
8.44	SQL Server monitor resource . . . . .	544
8.45	System monitor resource . . . . .	551
8.46	Tuxedo monitor resource . . . . .	563
8.47	User mode monitor resource . . . . .	570
8.48	Virtual IP monitor resource . . . . .	574
8.49	Volume manager monitor resource . . . . .	580
8.50	WebSphere monitor resource . . . . .	587
8.51	WebLogic monitor resource . . . . .	594
<b>9</b>	<b>Retrieving an encrypted password string</b>	<b>603</b>
9.1	Retrieving an encrypted password string with Cluster WebUI/Cluster WebUI Offline . . . . .	604
9.2	Retrieving an encrypted password string with the clpencrypt command . . . . .	605
<b>10</b>	<b>Notes and restrictions</b>	<b>607</b>
<b>11</b>	<b>Legal Notice</b>	<b>609</b>
11.1	Disclaimer . . . . .	609
11.2	Trademark Information . . . . .	610
<b>12</b>	<b>Revision History</b>	<b>611</b>



## 1.1 Who Should Use This Guide

*EXPRESSCLUSTER® X Command Reference Guide for Cluster Configuration* is intended for system engineers who introduce EXPRESSCLUSTER-based cluster systems, and system administrators who maintain and operate the introduced cluster systems. The guide describes how to create clp.conf (a cluster configuration data file) by using command lines.

## 1.2 How This Guide is Organized

- 2. *Command reference* : Provides an overview of commands for creating cluster configuration data.
- 3. *Creating a cluster* : Describes the procedure for creating clusters.
- 4. *Setting cluster properties* : Describes the procedure for setting cluster properties.
- 5. *Configuring a server* : Describes the procedure for configuring servers.
- 6. *Configuring a group* : Describes the procedure for configuring groups.
- 7. *Configuring group resources* : Describes the procedure for configuring group resources.
- 8. *Configuring monitor resources* : Describes the procedure for configuring monitor resources.
- 9. *Retrieving an encrypted password string* : Describes the procedure for getting an encrypted string necessary for setting a password.

## **1.3 EXPRESSCLUSTER X Documentation Set**

The EXPRESSCLUSTER X manuals consist of the following five guides. The title and purpose of each guide is described below:

### **EXPRESSCLUSTER X Getting Started Guide**

This guide is intended for all users. The guide covers topics such as product overview, system requirements, and known problems.

### **EXPRESSCLUSTER X Installation and Configuration Guide**

This guide is intended for system engineers and administrators who want to build, operate, and maintain a cluster system. Instructions for designing, installing, and configuring a cluster system with EXPRESSCLUSTER are covered in this guide.

### **EXPRESSCLUSTER X Reference Guide**

This guide is intended for system administrators. The guide covers topics such as how to operate EXPRESSCLUSTER, function of each module and troubleshooting. The guide is supplement to the *Installation and Configuration Guide*.

### **EXPRESSCLUSTER X Maintenance Guide**

This guide is intended for administrators and for system administrators who want to build, operate, and maintain EXPRESSCLUSTER-based cluster systems. The guide describes maintenance-related topics for EXPRESSCLUSTER.

### **EXPRESSCLUSTER X Hardware Feature Guide**

This guide is intended for administrators and for system engineers who want to build EXPRESSCLUSTER-based cluster systems. The guide describes features to work with specific hardware, serving as a supplement to the Installation and Configuration Guide.

## 1.4 Conventions

In this guide, **Note**, **Important**, **See also** are used as follows:

---

**Note:** Used when the information given is important, but not related to the data loss and damage to the system and machine.

---

**Important:** Used when the information given is necessary to avoid the data loss and damage to the system and machine.

---

**See also:**

Used to describe the location of the information given at the reference destination.

The following conventions are used in this guide.

Convention	Usage	Example
<i>italic</i>	Indicates that users should replace italicized part with values that they are actually working with.	clpcfadm.py add mon <Monitor resource type> <Monitor resource name>

## **1.5 Contacting NEC**

For the latest product information, visit our website below:

<https://www.nec.com/global/prod/expresscluster/>



## COMMAND REFERENCE

### 2.1 clpcfadm.py command

This command generates clp.conf, a cluster configuration data file.

#### Command line

- clpcfadm.py {create} clustername charset [-e encode] [-s serveros]
- clpcfadm.py {add} srv servername priority
- clpcfadm.py {add} device servername type id info [extend]
- clpcfadm.py {add} forcestop env
- clpcfadm.py {add} hb lankhb deviceid priority
- clpcfadm.py {add} hb lanhb deviceid priority
- clpcfadm.py {add} hb diskhb deviceid priority
- clpcfadm.py {add} hb witnesshb deviceid priority host
- clpcfadm.py {add} np pingnp deviceid priority groupid listid ipaddress
- clpcfadm.py {add} np httpnp deviceid priority [--host host]
- clpcfadm.py {add} grp grouptype groupname
- clpcfadm.py {add} rsc groupname resourcetype resourcename
- clpcfadm.py {add} rscdep resourcetype resourcename dependresourcename
- clpcfadm.py {add} mon monitor type resourcename
- clpcfadm.py {del} srv servername
- clpcfadm.py {del} device servername id
- clpcfadm.py {del} forcestop
- clpcfadm.py {del} hb lankhb deviceid
- clpcfadm.py {del} hb lanhb deviceid
- clpcfadm.py {del} hb diskhb deviceid
- clpcfadm.py {del} hb witnesshb deviceid
- clpcfadm.py {del} np pingnp deviceid
- clpcfadm.py {del} np httpnp deviceid
- clpcfadm.py {del} grp groupname

- clpcfadm.py {del} rsc groupname resourcetype resourcename
- clpcfadm.py {del} rscdep resourcetype resourcename
- clpcfadm.py {del} mon monitortype resourcename
- clpcfadm.py {mod} -t [tagname] [--set parameter] [--delete] [--nocheck]

**Return value**

0	Success
Other than 0	Failure

**System requirements**

Software	Version	Remarks
Python	3.6.8 or later	

**Notes**

- Run this command as a root user.
- Run the command with clp.conf placed in the current directory.
- This command generates only clp.conf among cluster configuration data files.  
You must manually create script files for such resources as EXEC resources and custom monitor resources.

**Example** Placing the scripts for the script resource of script1 belonging to the failover group of failover1, and the scripts for the customized monitor resource of genw1:

```
scripts
+--failover1
|   +--exec1
|       start.sh
|       stop.sh
|
+--monitor.s
    +--genw1
        genw.sh
```

- This command does not automatically add monitor resources which are automatically added by adding group resources through Cluster WebUI or Cluster WebUI Offline.  
Refer to the table below and add "Monitor resources that must be added".

Group resource	Monitor resource that must be added
AWS DNS resource	AWS AZ monitor resource
AWS Elastic IP resource	AWS Elastic IP monitor resource
AWS Virtual IP resource	AWS Virtual IP monitor resource
Azure DNS resource	Azure DNS monitor resource
Azure probe port resource	Azure load balance monitor resource Azure probe port monitor resource

Continued on next page

Table 2.3 – continued from previous page

Group resource	Monitor resource that must be added
Dynamic DNS resource	Dynamic DNS monitor resource
Floating IP resource	Floating IP monitor resource
Google Cloud Virtual IP resource	Google Cloud load balance monitor resource Google Cloud Virtual IP monitor resource
Hybrid disk resource	Hybrid disk connect monitor resource Hybrid disk monitor resource
Mirror disk resource	Mirror Disk Connect monitor resource Mirror disk monitor resource
Oracle Cloud Virtual IP resource	Oracle Cloud load balance monitor resource Oracle Cloud Virtual IP monitor resource
Virtual IP resource	Virtual IP monitor resource
Volume manager resource	Volume manager monitor resource

- To apply the cluster configuration data file to an operating cluster, run the clpcfctrl command.
- To format clp.conf, use xmllint.

```
xmllint --format --output <File path of formatted clp.conf> <File path of clp.conf not yet formatted>
```

---

**Note:** Install xmllint according to your environment.

---

#### Error Messages

Message	Cause/Solution
Log in as root.	Log on as the root user.
'%1' is not found.	The file (%1) is not found.
The specified object does not exist. '%1'	The specified object (%1) does not exist.
The specified element '%1' does not exist in '%2'.	The specified element (%1) does not exist in %2.
The specified path does not exist in a config file.	The specified path is not included in the cluster configuration data.
Invalid config file. Use the 'create' option.	Execute this command with the create option.
The config file already exists.	The cluster configuration data already exists.
Non-configurable elements specified.	The tag name cannot be specified.
Invalid value specified. Specify as follows: <resource type>@<resource name>	Specify a value in the form of <type of group resource>@<name of group resource>.
Invalid path specified.	The specified path is invalid.
Cannot register a '%1' any more.	%1 has already reached the upper limit of registration.
The following arguments are required :%1	Specify %1.

Continued on next page

Table 2.4 – continued from previous page

Message	Cause/Solution
Argument %1: allowed only with argument '%2'	The %1 option is effective only with %2.
Argument %1: invalid choice: '%2' (choose from %3)	%2 specified in %1 is invalid. Choose a value from %3.
Argument %1: invalid value: '%2' (The value must be in the range [%3, %4])	%2 specified in %1 is invalid. Specify a numeric value between %3 and %4.
Argument %1: invalid value: '%2' (The length must be less than %3)	The string %2 specified for %1 is too long. Specify the length less than %3.
Argument %1: '%2' already exists.	%2 already exists in %1.
Argument %1: '%2' does not exist.	%2 does not exist in %1.
Argument %1: cannot specify a dependency to the same object.	%1 specifies dependency on the same object. Specify a different object.
Argument %1: does not appear to be an IPv4.	The value %1 is invalid. Specify a value in IPv4 format.
Invalid value: '%1' (The value must be greater than 0)	%1 is invalid. Specify a numeric value greater than 0.

## 2.2 clpencrypt command

Encrypts a character string.

**Command line**

```
clpencrypt <password (plaintext)>
```

**Return value**

0	Success
Other than 0	Failure

**Example of Execution**

- Encrypt a password string.

```
Execute: clpencrypt <password (plaintext)>
Output: <Encrypted password>
```

```
Execution example: clpencrypt password
Output example: 20220001111abaabdbb35c04
```

**Error Messages**

Message	Cause/Solution
Invalid parameter.	The parameter is invalid. Check if there is any error in its format or parameter.



---

## CHAPTER THREE

---

# CREATING A CLUSTER

Be sure to set the following items. For details, see "[Setting cluster properties](#)".

Item (mandatory)
Cluster name
Language
Server settings <sup>1</sup>
Interconnect settings <sup>2</sup>
Monitor resource (user mode monitor) settings <sup>3</sup>

```
# Create a cluster
clpcfadm.py create <Cluster name> <Language>

# Add a server
clpcfadm.py add srv <Server name> <Priority>

# Add an interconnect (kernel mode)
clpcfadm.py add hb lankhb <Device ID> <Priority>
clpcfadm.py add device <Server name> lan <Priority> <IP Address>

# Add a monitor resource (user mode monitor: keepalive)
clpcfadm.py add mon userw userw
clpcfadm.py mod -t monitor/userw@userw/target --set ""
clpcfadm.py mod -t monitor/userw@userw/relation/name --set LocalServer
  ↳--nocheck
clpcfadm.py mod -t monitor/userw@userw/relation/type --set cls --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

<sup>1</sup> For details, see "[Adding a server](#)".

<sup>2</sup> For details, see "[Interconnect](#)".

<sup>3</sup> For details, see "[Adding a User mode monitor resource](#)".



## SETTING CLUSTER PROPERTIES

### 4.1 Basic information

- Cluster name (Within 31 bytes)

```
clpcfadm.py mod -t cluster/name --set <Cluster name>
```

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t cluster/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

- Language

Language	Value
English	ASCII
Japanese	EUC-JP
Chinese	GB2312

```
clpcfadm.py mod -t all/charset --set <Value>
```

## 4.2 Interconnect

### Heartbeat I/F

#### Add

---

**Important:** Set at least one LAN heartbeat (kernel mode, user mode).

---

#### Note:

With only one heartbeat interface, specify 0 for Priority.

With more than one heartbeat interface, specify consecutive numbers (e.g., 0, 1, 2...).

---

#### Kernel mode

```
clpcfadm.py add hb lankhb <Device ID> <Priority>
clpcfadm.py add device <Server name> lan <Device ID> <IP Address>
```

---

#### Note:

With only one LAN heartbeat (kernel mode, user mode), specify 0 for Device ID.

With more than one LAN heartbeat (kernel mode, user mode), specify consecutive numbers (e.g., 0, 1, 2...).

---

#### User mode

```
clpcfadm.py add hb lanhb <Device ID> <Priority>
clpcfadm.py add device <Server name> lan <Device ID> <IP Address>
```

---

#### Note:

With only one LAN heartbeat (kernel mode, user mode), specify 0 for Device ID.

With more than one LAN heartbeat (kernel mode, user mode), specify consecutive numbers (e.g., 0, 1, 2...).

---

#### DISK

```
clpcfadm.py add hb diskhb <Device ID> <Priority>
clpcfadm.py add device <Server name> disk <Device ID> <Device path>
```

---

#### Note:

With only one DISK, specify 0 for Device ID.

With more than one DISK, specify consecutive numbers (e.g., 0, 1, 2...).

---

---

**Note:** Specify the device path as an absolute path.

---

#### Witness

```
clpcfadm.py add hb witnesshb <Witness Device ID> <Priority> <IP
→Address : Port Number>
```

```
clpcfadm.py add device <Server name> witness <Device ID> <Use/Not_Use>
    ↵use <IP Address : Port Number>
```

---

**Note:** Set Use to 1 if you use the device and 0 if not.

---

**Note:**

With only one Witness, specify 0 for Witness Device ID.

With more than one Witness, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Use SSL

Use SSL	Value
Use	1
Do not use (default)	0

```
clpcfadm.py mod -t heartbeat/witnesshb@witnesshb1/ssl/use_
    ↵--set <Value>
```

- Use Proxy

Use Proxy	Value
Use	1
Do not use (default)	0

```
clpcfadm.py mod -t heartbeat/witnesshb@witnesshb1/proxy/use_
    ↵--set <Value>
```

- HTTP Timeout (sec)

Default, 10 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t heartbeat/witnesshb@witnesshb1/http_
    ↵timeout --set <Value>
```

#### MDC

To configure an MDC, which is dedicated to mirroring communication, set as follows:

```
clpcfadm.py add device <Server name> mdc <Device ID> <IP Address>
```

---

**Note:**

With only one MDC, specify 0 for Device ID.

With more than one MDC, specify consecutive numbers (e.g., 0, 1, 2...).

---

#### Delete

##### Kernel mode

```
clpcfadm.py del hb lankhb <Device ID>
clpcfadm.py del device <Server name> <Device ID>
```

##### User mode

```
clpcfadm.py del hb lanhb <Device ID>
clpcfadm.py del device <Server name> <Device ID>
```

#### DISK

```
clpcfadm.py del hb diskhb <Device ID>
clpcfadm.py del device <Server name> <Device ID>
```

**Important:** For Device ID, specify the total of the following: 300 + the value specified in "Add" in this section.

```
# Add  
clpcfadm.py add hb diskhb 0 <Priority>  
clpcfadm.py add device <Server name> disk 0 <Device path>  
  
# Delete  
clpcfadm.py del hb diskhb 300  
clpcfadm.py del device <Server name> 300
```

---

#### **Witness**

```
clpcfadm.py del hb witnesshb <Device ID>  
clpcfadm.py del device <Server name> <Device ID>
```

---

**Important:** For Device ID, specify the total of the following: 700 + the value specified in "Add" in this section.

```
# Add  
clpcfadm.py add hb witnesshb 0 <Priority>  
clpcfadm.py add device <Server name> witness 0 <Use/Not use>  
→<Target IP Address : Port Number>  
  
# Delete  
clpcfadm.py del hb witnesshb 700  
clpcfadm.py del device <Server name> 700
```

---

#### **MDC**

To delete an MDC, which is dedicated to mirroring communication, set as follows:

```
clpcfadm.py del device <Server name> <Device ID>
```

---

**Important:** For Device ID, specify the total of the following: 400 + the value specified in "Add" in this section.

```
# Add  
clpcfadm.py add device <Server name> mdc 0 <IP Address>  
  
# Delete  
clpcfadm.py del device <Server name> 400
```

---

#### **Server Down Notification**

- Server Down Notification

Server Down Notification	Value
Notify (default)	1
Do not notify	0

```
clpcfadm.py mod -t cluster/downnotify --set <Value>
```

#### **Detailed Settings (Server down notification)**

- Server Reset Notification

Server Reset Notification	Value
Notify	1
Do not notify (default)	0

```
clpcfadm.py mod -t cluster/dyingnotify/use --set <Value>
```

---

**Note:** Set as above with "Server Down Notification" set to "Notify".

---

\* Execute Server Alive Check

Execute Server Alive Check	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t cluster/dyingnotify/precheck/use  
↳--set <Value>
```

---

**Note:** Set as above with "Server Reset Notification" set to "Notify".

---

- Timeout (sec)

Default, 1 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t cluster/dyingnotify/precheck/ping/  
↳timeout --set <Value>
```

---

**Note:** Set as above with "Execute Server Alive Check" set to "Check".

---

## Tuning

- Open/Close Timing

Open/Close Timing	Value
Only at Start/Stop (default)	1
Every Heartbeat Interval	0

```
clpcfadm.py mod -t diskhb/onceopen --set <Value> --nocheck
```

## 4.3 Fencing

### 4.3.1 NP resolution

#### Add

---

##### Note:

With only one NP resolution, specify 0 for Priority.

With more than one NP resolution, specify consecutive numbers (e.g., 0, 1, 2...).

---

#### Ping

```
clpcfset add np pingnp <Device ID> <Priority> <Group ID> <List ID>
  ↵<IP Address>
clpcfadm.py add device <Server name> ping <Device ID> <Use/Not use>
```

---

**Note:** Set Use/Not use to 1(if you use the device) or 0 (if not).

---

---

##### Note:

With only one NP resolution (Ping), specify 0 for Device ID.

With more than one NP resolution (Ping), specify consecutive numbers (e.g., 0, 1, 2...).

---

---

##### Note:

With only one group, specify 0 for Group ID.

With more than one group, specify consecutive numbers (e.g., 0, 1, 2...).

---

---

##### Note:

With only one IP address in the same group, specify 0 for List ID.

With more than one IP address in the same group, specify consecutive numbers (e.g., 0, 1, 2...).

---

#### Detailed Settings

---

**Note:** Specify the value of a heartbeat timeout to satisfy the following inequality:

**Heartbeat timeout > Ping NP interval x Ping NP retry count + Ping NP timeout**

---

- Interval (sec)

Default, 5 (minimum, 2; maximum, 999)

```
clpcfadm.py mod -t networkpartition/pingnp@<pingnp_<name(pingnp1)>/interval --set <Value>
```

- Timeout (sec)

Default, 3 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t networkpartition/pingnp@<pingnp_
    ↵name(pingnp1)>/timeout --set <Value>
```

- **Retry Count**

Default, 3 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t networkpartition/pingnp@<pingnp_
    ↵name(pingnp1)>/count --set <Value>
```

#### **HTTP**

```
clpcfadm.py add np httpnp <Device ID> <Priority> --host <IP Address :_
    ↵Port Number>
```

```
clpcfadm.py add device <Server name> http <Device ID> <Use/Not use>
```

---

**Note:** Set Use/Not use to 1(if you use the device) or 0 (if not).

---

**Note:**

With only one NP resolution (HTTP), specify 0 for Device ID.

With more than one NP resolution (HTTP), specify consecutive numbers (e.g., 0, 1, 2...).

---

**Note:** To use Witness HB resource settings, set as follows:

```
clpcfadm.py mod -t networkpartition/httpnp@<httpnp name(httpnp1)>/
    ↵witnesshb/use --set 1
```

---

- **Target Host (Within 255 bytes)**

```
clpcfadm.py mod -t networkpartition/httpnp@<httpnp_
    ↵name(httpnp1)>/host --set <Target Host>
```

- **Service Port**

Default, 80 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t networkpartition/httpnp@<httpnp_
    ↵name(httpnp1)>/port --set <Value>
```

- **Use SSL**

Use SSL	Value
Use	1
Do not use (default)	0

```
clpcfadm.py mod -t networkpartition/httpnp@<httpnp_
    ↵name(httpnp1)>/ssl/use --set <Value>
```

- **Use Proxy**

Use Proxy	Value
Use	1
Do not use (default)	0

```
clpcfadm.py mod -t networkpartition/httpnp@<httpnp_
    ↵name(httpnp1)>/proxy/use --set <Value>
```

- Interval (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t networkpartition/httpnp@<httpnp_<br/>name(httpnp1)>/interval --set <Value>
```

- Timeout (sec)

Default, 20 (minimum, 1; maximum, 99)

```
clpcfadm.py mod -t networkpartition/httpnp@<httpnp_<br/>name(httpnp1)>/timeout --set <Value>
```

- HTTP Timeout (sec)

Default, 10 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t networkpartition/httpnp@<httpnp_<br/>name(httpnp1)>/http_timeout --set <Value>
```

## Delete

### Ping

```
clpcfadm.py del np pingnp <Device ID><br/>clpcfadm.py del device <Server name> <Device ID>
```

---

**Important:** For Device ID, specify the total of the following: 10200 + the value specified in "Add" in this section.

```
# Add<br/>clpcfadm.py add np pingnp 0 <Priority> <Group ID> <List ID> <IP_<br/>Address><br/>clpcfadm.py add device <Server name> ping 0 <Use/Not use>
```

```
# Delete<br/>clpcfadm.py del np pingnp 10200<br/>clpcfadm.py del device <Server name> 10200
```

---

### HTTP

```
clpcfadm.py del np httpnp <Device ID><br/>clpcfadm.py del device <Server name> <Device ID>
```

---

**Important:** For Device ID, specify the total of the following: 10700 + the value specified in "Add" in this section.

```
# Add<br/>clpcfadm.py add np httpnp 0 <Priority><br/>clpcfadm.py add device <Server name> http 0 <Use/Not use>
```

```
# Delete<br/>clpcfadm.py del np httpnp 10700<br/>clpcfadm.py del device <Server name> 10700
```

---

## Tuning

- Action at NP Occurrence

Action at NP Occurrence	Value
Stop the cluster service	1
Stop the cluster service and shutdown OS (default)	2
Stop the cluster service and reboot OS	3
Sysrq Panic	4
Keepalive Reset	5
Keepalive Panic	6
BMC Reset	7
BMC Power Off	8
BMC Power Cycle	9
BMC NMI	10

```
clpcfadm.py mod -t cluster/networkpartition/npaction --set <Value>
```

### 4.3.2 Forced Stop

---

**Note:** For a forced-stop configuration, configure two or more servers.

---

#### Add

##### BMC

```
clpcfadm.py add forcestop bmc
clpcfadm.py mod -t forcestop/bmc/server@<Server name>/parameters/ip_
    ↵--set <IP Address> --nocheck
clpcfadm.py mod -t forcestop/bmc/server@<Server name>/parameters/user_
    ↵--set <User Name> --nocheck
clpcfadm.py mod -t forcestop/bmc/server@<Server name>/parameters/
    ↵password --set <Encrypted password> --nocheck
clpcfadm.py mod -t forcestop/bmc/server@<Server name>/use --set 1_
    ↵--nocheck
```

##### Server List

- IP Address
 

```
clpcfadm.py mod -t forcestop/bmc/server@<Server name>/
        ↵parameters/ip --set <IP Address> --nocheck
```
- User Name (Within 255 bytes)
 

```
clpcfadm.py mod -t forcestop/bmc/server@<Server name>/
        ↵parameters/user --set <User Name> --nocheck
```
- Password (Within 255 bytes)
 

```
clpcfadm.py mod -t forcestop/bmc/server@<Server name>/
        ↵parameters/password --set <Encrypted password> --nocheck
```

---

##### Note:

Set an encrypted password string.

For details, see "[Retrieving an encrypted password string](#)".

---

##### Forced Stop

- Forced Stop Action

Forced Stop Action	Value
BMC Power Off (default)	poweroff
BMC Power Cycle	powercycle
BMC Reset	reset
BMC NMI	nmi

- ```
clpcfadm.py mod -t forcestop/bmc/parameters/action --set  
    ↳<Value>
  - Forced Stop Timeout (sec)  
    Default, 5 (minimum, 5; maximum, 999)  
    clpcfadm.py mod -t forcestop/bmc/exec/timeout --set <Value>
  - Time to Wait for Stop to Be Completed (sec)  
    Default, 10 (minimum, 5; maximum, 999)  
    clpcfadm.py mod -t forcestop/bmc/wait/timeout --set <Value>
```

**Note:** Set as above with "Forced Stop Action" set to "BMC Power Off".

---

- Lead Time between a Stop Request and a Failover Start (sec)  
Default, 5 (minimum, 0; maximum, 999)  
clpcfadm.py mod -t forcestop/bmc/wait/fodelay --set <Value>

**Note:** Set as above with "Forced Stop Action" set to "BMC Power Cycle", "BMC Reset", or "BMC NMI".

---

- Disable Group Failover When Execution Fails

| Disable Group Failover When Execution Fails | Value |
|---------------------------------------------|-------|
| Suppress                                    | 1     |
| Do not suppress (default)                   | 0     |

```
clpcfadm.py mod -t forcestop/bmc/suppression --set <Value>
```

#### vCenter

```
clpcfadm.py add forcestop vcenter  
clpcfadm.py mod -t forcestop/vcenter/parameters/ip --set <Host Name>  
    ↳--nocheck  
clpcfadm.py mod -t forcestop/vcenter/parameters/user --set <User Name>  
    ↳ --nocheck  
clpcfadm.py mod -t forcestop/vcenter/parameters/password --set  
    ↳<Encrypted password> --nocheck  
clpcfadm.py mod -t forcestop/vcenter/parameters/method --set <Method>  
    ↳of performing forced stop  
clpcfadm.py mod -t forcestop/vcenter/server@<Server name>/parameters/  
    ↳vmname --set <Virtual Machine Name> --nocheck  
clpcfadm.py mod -t forcestop/vcenter/server@<Server name>/parameters/  
    ↳datacenter --set <Data Center> --nocheck  
clpcfadm.py mod -t forcestop/vcenter/server@<Server name>/parameters/  
    ↳commandpath --set "" --nocheck  
clpcfadm.py mod -t forcestop/vcenter/server@<Server name>/use --set 1  
    ↳--nocheck
```

#### Server List

- Virtual Machine Name (Within 80 bytes)

```
clpcfadm.py mod -t forcestop/vcenter/server@<Server name>/  
    ↳parameters/vmname --set <Virtual Machine Name> --nocheck
```

- Data Center (Within 80 bytes)

```
clpcfadm.py mod -t forcestop/vcenter/server@<Server name>/  
    ↳parameters/datacenter --set <Data Center> --nocheck
```

#### **Forced Stop**

- Forced Stop Action

| Forced Stop Action  | Value    |
|---------------------|----------|
| Power Off (default) | poweroff |
| Reset               | reset    |

```
clpcfadm.py mod -t forcestop/vcenter/parameters/action --set  
    ↳<Value>
```

- Forced Stop Timeout (sec)

Default, 10 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t forcestop/vcenter/exec/timeout --set  
    ↳<Value>
```

- Time to Wait for Stop to Be Completed (sec)

Default, 10 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t forcestop/vcenter/wait/timeout --set  
    ↳<Value>
```

---

**Note:** Set as above with "Forced Stop Action" set to "Power Off".

---

- Lead Time between a Stop Request and a Failover Start (sec)

Default, 10 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t forcestop/vcenter/wait/fodelay --set  
    ↳<Value>
```

---

**Note:** Set as above with "Forced Stop Action" set to "Reset".

---

- Disable Group Failover When Execution Fails

| Disable Group Failover When Execution Fails | Value |
|---------------------------------------------|-------|
| Suppress                                    | 1     |
| Do not suppress (default)                   | 0     |

```
clpcfadm.py mod -t forcestop/vcenter/suppression --set  
    ↳<Value>
```

#### **vCenter**

- Method of performing forced stop

| Method of performing forced stop | Value   |
|----------------------------------|---------|
| vSphere Automation API (default) | restapi |
| VMware vSphere CLI               | vcli    |

```
clpcfadm.py mod -t forcestop/vcenter/parameters/method --set  
    ↳<Value>
```

- VMware vSphere CLI Installation Path (Within 1023 bytes)

|                                      |
|--------------------------------------|
| VMware vSphere CLI Installation Path |
| /usr/lib/vmware-vcli                 |

```
clpcfadm.py mod -t forcestop/vcenter/server@<Server  
↳name>/parameters/commandpath --set <VMware vSphere CLI  
↳Installation Path> --nocheck
```

**Note:** Set as above with "Method of performing forced stop" set to "VMware vSphere CLI".

---

**Note:** Set the same path for all target servers.

---

**Note:** Set it according to the environment (e.g., installation folder).

---

- Host Name (Within 255 bytes)

```
clpcfadm.py mod -t forcestop/vcenter/parameters/ip --set  
↳<Host Name>
```

- User Name (Within 255 bytes)

```
clpcfadm.py mod -t forcestop/vcenter/parameters/user --set  
↳<User Name>
```

- Password (Within 255 bytes)

```
clpcfadm.py mod -t forcestop/vcenter/parameters/password  
↳--set <Encrypted password>
```

---

**Note:**

Set an encrypted password string.

For details, see "[Retrieving an encrypted password string](#)".

---

#### AWS

```
clpcfadm.py add forcestop aws  
clpcfadm.py mod -t forcestop/aws/server@<Server name>/parameters/id  
↳--set <Instance ID> --nocheck  
clpcfadm.py mod -t forcestop/aws/server@<Server name>/use --set 1  
↳--nocheck
```

#### Server List

- Instance ID (Within 31 bytes)

```
clpcfadm.py mod -t forcestop/aws/server@<Server name>/  
↳parameters/id --set <Instance ID> --nocheck
```

#### Forced Stop

- Forced Stop Action

|                |
|----------------|
| Value          |
| stop (default) |
| reboot         |

```
clpcfadm.py mod -t forcestop/aws/parameters/action --set  
↳<Value>
```

- Forced Stop Timeout (sec)  
Default, 10 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t forcestop/aws/exec/timeout --set <Value>`
- Time to Wait for Stop to Be Completed (sec)  
Default, 180 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t forcestop/aws/wait/timeout --set <Value>`

---

**Note:** Set as above with "Forced Stop Action" set to "stop".

---

- Lead Time between a Stop Request and a Failover Start (sec)  
Default, 120 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t forcestop/aws/wait/fodelay --set <Value>`

---

**Note:** Set as above with "Forced Stop Action" set to "reboot".

---

- Disable Group Failover When Execution Fails

| Disable Group Failover When Execution Fails | Value |
|---------------------------------------------|-------|
| Suppress                                    | 1     |
| Do not suppress (default)                   | 0     |

`clpcfadm.py mod -t forcestop/aws/suppression --set <Value>`

#### Azure

```
clpcfadm.py add forcestop azure
clpcfadm.py mod -t forcestop/azure/parameters/useruri --set <User URI>
  ↳ --nocheck
clpcfadm.py mod -t forcestop/azure/parameters/tenantid --set <Tenant ID>
  ↳ --nocheck
clpcfadm.py mod -t forcestop/azure/parameters/certfile --set <File Path of Service Principal> --nocheck
clpcfadm.py mod -t forcestop/azure/parameters/rscgrp --set <Resource Group Name> --nocheck
clpcfadm.py mod -t forcestop/azure/server@<Server name>/parameters/
  ↳ vmname --set <Virtual Machine Name> --nocheck
clpcfadm.py mod -t forcestop/azure/server@<Server name>/use --set 1
  ↳ --nocheck
```

#### Server List

- Virtual Machine Name (Within 31 bytes)  
`clpcfadm.py mod -t forcestop/azure/server@<Server name>/parameters/vmname --set <Virtual Machine Name> --nocheck`

#### Forced Stop

- Forced Stop Action

| Value          |
|----------------|
| stop (default) |
| reboot         |

`clpcfadm.py mod -t forcestop/azure/parameters/action --set <Value>`

- Forced Stop Timeout (sec)  
Default, 15 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t forcestop/azure/exec/timeout --set <Value>`

- Time to Wait for Stop to Be Completed (sec)  
Default, 180 (minimum, 5; maximum, 999)  
clpcfadm.py mod -t forcestop/azure/wait/timeout --set <Value>

**Note:** Set as above with "Forced Stop Action" set to "stop".

---

- Lead Time between a Stop Request and a Failover Start (sec)  
Default, 120 (minimum, 0; maximum, 999)  
clpcfadm.py mod -t forcestop/azure/wait/fodelay --set <Value>

**Note:** Set as above with "Forced Stop Action" set to "reboot".

---

- Disable Group Failover When Execution Fails

| Disable Group Failover When Execution Fails | Value |
|---------------------------------------------|-------|
| Suppress                                    | 1     |
| Do not suppress (default)                   | 0     |

clpcfadm.py mod -t forcestop/azure/suppression --set <Value>

#### Azure

- User URI (Within 2048 bytes)  
clpcfadm.py mod -t forcestop/azure/parameters/useruri --set  
↳<User URI> --nocheck
- Tenant ID (Within 36 bytes)  
clpcfadm.py mod -t forcestop/azure/parameters/tenantid --set  
↳<Tenant ID> --nocheck
- File Path of Service Principal (Within 1024 bytes)  
clpcfadm.py mod -t forcestop/azure/parameters/certfile --set  
↳<File Path of Service Principal> --nocheck
- Resource Group Name (Within 90 bytes)  
clpcfadm.py mod -t forcestop/azure/parameters/rscgrp --set  
↳<Resource Group Name> --nocheck

#### OCI

```
clpcfadm.py add forcestop oci
clpcfadm.py mod -t forcestop/oci/server@<Server name>/parameters/id
↳--set <Instance ID> --nocheck
clpcfadm.py mod -t forcestop/oci/server@<Server name>/use --set 1
↳--nocheck
```

#### Server List

- Instance ID (Within 31 bytes)  
clpcfadm.py mod -t forcestop/oci/server@<Server name>/
↳parameters/id --set <Instance ID> --nocheck

#### Forced Stop

- Forced Stop Action

| Value          |
|----------------|
| stop (default) |
| reboot         |

clpcfadm.py mod -t forcestop/oci/parameters/action --set  
↳<Value>

- Forced Stop Timeout (sec)  
Default, 15 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t forcestop/oci/exec/timeout --set <Value>`
- Time to Wait for Stop to Be Completed (sec)  
Default, 180 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t forcestop/oci/wait/timeout --set <Value>`

---

**Note:** Set as above with "Forced Stop Action" set to "stop".

---

- Lead Time between a Stop Request and a Failover Start (sec)  
Default, 120 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t forcestop/oci/wait/fodelay --set <Value>`

---

**Note:** Set as above with "Forced Stop Action" set to "reboot".

---

- Disable Group Failover When Execution Fails

| Disable Group Failover When Execution Fails | Value |
|---------------------------------------------|-------|
| Suppress                                    | 1     |
| Do not suppress (default)                   | 0     |

`clpcfadm.py mod -t forcestop/oci/suppression --set <Value>`

#### Custom

```
clpcfadm.py add forcestop custom
clpcfadm.py mod -t forcestop/custom/parameters/path --set forcestop.sh
clpcfadm.py mod -t forcestop/custom/parameters/account --set ""  
↳--nocheck
clpcfadm.py mod -t forcestop/custom/server@<Server name>/use --set 1  
↳--nocheck
```

#### Forced Stop

- Forced Stop Timeout (sec)  
Default, 10 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t forcestop/custom/exec/timeout --set  
↳<Value>`
- Disable Group Failover When Execution Fails

| Disable Group Failover When Execution Fails | Value |
|---------------------------------------------|-------|
| Suppress                                    | 1     |
| Do not suppress (default)                   | 0     |

`clpcfadm.py mod -t forcestop/custom/suppression --set <Value>`

#### Script Settings

- File type

| Script file type                           | Value |
|--------------------------------------------|-------|
| Script created with this product (default) | 1     |
| User Application                           | 0     |

`clpcfadm.py mod -t forcestop/custom/parameters/default --set  
↳<Value>`

---

**Note:** If you change this parameter, change "Path".

---

- Path (Within 1023 bytes)

```
clpcfadm.py mod -t forcestop/custom/parameters/path --set  
→<File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **forcestop.sh**.

```
clpcfadm.py mod -t forcestop/custom/parameters/path --set  
→forcestop.sh
```

---

**Delete (Do not use)**

```
clpcfadm.py del forcestop
```

## 4.4 Timeout

- Service Startup Delay Time (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t cluster/startupdelay --set <Value>
```

- Server Sync Wait Time (sec)

Default, 300 (minimum, 0; maximum, 5940)

```
clpcfadm.py mod -t cluster/bootwait --set <Value>
```

---

**Note:** Specify a value in seconds (divisible by 60).

---

### Heartbeat

- Interval (msec)

Default, 3000 (minimum, 1000; maximum, 99000)

```
clpcfadm.py mod -t cluster/heartbeat/interval --set <Value>
```

---

**Note:** Specify a value in milliseconds (divisible by 1000).

---

- Timeout (msec)

Default, 90000 (minimum, 2000; maximum, 999000)

```
clpcfadm.py mod -t cluster/heartbeat/timeout --set <Value>
```

---

**Note:** Specify a value in milliseconds (divisible by 1000).

---

- Server Internal Timeout (sec)

Default, 180 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t cluster/api/timeout --set <Value>
```

## 4.5 Port No.

### TCP

- Server Internal Port Number

Default, 29001 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t cluster/api/port --set <Value>
```

- Information Base Port Number

Default, 29008 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t cluster/api/ibport --set <Value>
```

- Data Transfer Port Number

Default, 29002 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t cluster/trns/port --set <Value>
```

- WebManager HTTP Port Number

Default, 29003 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t webmgr/http/port --set <Value>
```

- API HTTP Port Number

Default, 29009 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t cluster/rstd/http/port --set <Value>
```

- API Server Internal Port Number

Default, 29010 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t cluster/rstd/service/port --set <Value>
```

### UDP

- Heartbeat Port Number

Default, 29002 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t cluster/heartbeat/port/recv --set <Value>
```

- Kernel Mode Heartbeat Port Number

Default, 29006 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t cluster/heartbeat/khbport/recv --set <Value>
```

- Alert Sync Port Number

Default, 29003 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t webalert/daemon/udpport --set <Value>
```

## 4.6 Port No. (Mirror)

### TCP

- Mirror Agent Port Number

Default, 29004 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t mdagent/port --set <Value> --nocheck
```

## 4.7 Port No. (Log)

- Communication Method for Internal Logs

| Communication Method for Internal Logs | Value |
|----------------------------------------|-------|
| UDP                                    | 1     |
| UNIX Domain (default)                  | 0     |
| Message Queue                          | 2     |

```
clpcfadm.py mod -t cluster/event/method --set <Value>
```

- Port Number

Default, None (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t cluster/event/port --set <Value>
```

---

**Note:** Set as above with "Communication Method for Internal Logs" set to "UDP".

---

## 4.8 Monitor

### Shutdown Monitor

- Shutdown Monitor

| Shutdown Monitor                                              | Value |
|---------------------------------------------------------------|-------|
| Always execute                                                | 1     |
| Execute when the group deactivation has been failed (default) | 2     |
| Do not execute                                                | 0     |

```
clpcfadm.py mod -t cluster/haltp --set <Value>
```

---

**Note:** To set the following items, set "Shutdown Monitor" to "Always execute" or "Execute when the group deactivation has been failed" in advance.

---

- Method

| Value               |
|---------------------|
| softdog             |
| ipmi                |
| keepalive (default) |

```
clpcfadm.py mod -t haltp/method --set <Value> --nocheck
```

- Action at Timeout Occurrence

| Value (with "Method" set to "keepalive") | Value (with "Method" set to "ipmi") |
|------------------------------------------|-------------------------------------|
| RESET (default)                          | RESET                               |
| PANIC                                    | NMI (default)                       |

```
clpcfadm.py mod -t haltp/action --set <Value> --nocheck
```

---

**Note:** Set as above with "Method" set to "keepalive" or "ipmi".

---

- Enable SIGTERM handler

| Enable SIGTERM handler | Value |
|------------------------|-------|
| Enable (default)       | 1     |
| Do not enable          | 0     |

```
clpcfadm.py mod -t haltp/term --set <Value> --nocheck
```

- Timeout

| Timeout                         | Value |
|---------------------------------|-------|
| Use Heartbeat Timeout (default) | 1     |
| Set Timeout                     | 0     |

```
clpcfadm.py mod -t haltp/usehb --set <Value> --nocheck
```

- Set Timeout (sec)

Default, 90 (minimum, 2; maximum, 9999)

```
clpcfadm.py mod -t haltp/timeout --set <Value> --nocheck
```

---

**Note:** Set as above with "Timeout" set to "Set Timeout".

---

**Note:** Specify the value of a heartbeat timeout and that of a shutdown monitoring timeout, to satisfy the following inequality.

**Heartbeat timeout >= Shutdown monitoring timeout**

---

## 4.9 Recovery

- Action When the Cluster Service Process Is Failure

| Action When the Cluster Service Process Is Failure | Value |
|----------------------------------------------------|-------|
| OS shutdown (default)                              | 2     |
| OS reboot                                          | 3     |
| Sysrq Panic                                        | 5     |
| Keepalive Reset                                    | 6     |
| Keepalive Panic                                    | 7     |
| BMC Reset                                          | 8     |
| BMC Power Off                                      | 9     |
| BMC Power Cycle                                    | 10    |
| BMC NMI                                            | 11    |

```
clpcfadm.py mod -t pm/exec0/recover --set <Value>
clpcfadm.py mod -t pm/exec1/recover --set <Value>
clpcfadm.py mod -t pm/exec2/recover --set <Value> --nocheck
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### Recovery Action for HA Agents

- Max Restart Count
 

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t rm/agent/retrynum --set <Value>
```
- Actions when the retry count reaches the threshold

| Actions when the retry count reaches the threshold | Value |
|----------------------------------------------------|-------|
| No operation (default)                             | 1     |
| Stop the cluster service                           | 3     |
| Stop the cluster service and shutdown OS           | 4     |
| Stop the cluster service and reboot OS             | 5     |

- ```
clpcfadm.py mod -t rm/agent/action --set <Value>
```
- Action at Group Resource Activation or Deactivation Stall

Action at Group Resource Activation or Deactivation Stall	Value
Stop the cluster service and shutdown OS (default)	2
Stop the cluster service and reboot OS	3
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14
No operation (operates as an activity or deactivity failure)	0

```
clpcfadm.py mod -t cluster/rsctimeout/rsctoaction --set <Value>
```

**Disable the Final Action when OS Stops Due to Failure Detection**

- Group Resource When Activation Failure Detected

Final Action When OS Stops Due to All Server Shutdown	Value
Perform the final action	1
Do not perform the final action (default)	0

```
clpcfadm.py mod -t cluster/survive/rscact --set <Value>
```

- Group Resource When Deactivation Failure Detected

Final Action When OS Stops Due to All Server Shutdown	Value
Perform the final action	1
Do not perform the final action (default)	0

```
clpcfadm.py mod -t cluster/survive/rscdeact --set <Value>
```

- Monitor Resource When Failure Detected

Final Action When OS Stops Due to All Server Shutdown	Value
Perform the final action	1
Do not perform the final action (default)	0

```
clpcfadm.py mod -t cluster/survive/monitor --set <Value>
```

**Disable Shutdown When Multi-Failover-Service Detected**

- Server Group Survives When Multi-Failover-Service Detected

Server Group Survives When Multi-Failover-Service Detected	Value
Shut down (default)	0
Do not shut down	1

```
clpcfadm.py mod -t servergroup@<Server group name>/survive --set  
  -><Value>
```

- Server Survives When Multi-Failover-Service Detected

Server Survives When Multi-Failover-Service Detected	Value
Shut down (default)	0
Do not shut down	1

```
clpcfadm.py mod -t server@<Server name>/survive --set <Value>
```

## 4.10 Alert Service

- Enable Alert Setting

Enable Alert Setting	Value
Enable	1
Do not enable (default)	0

```
clpcfadm.py mod -t cluster/messages/use --set <Value>
```

**Add**

---

**Note:** For details on "Module type" and "Event ID", refer to "EXPRESSCLUSTER X Reference Guide" -> "Error messages" -> "Messages reported by syslog, alert, mail, SNMP trap, and Message Topic".

---

- Destination

Alert	Value
Set	1
Do not set	0

```
clpcfadm.py mod -t messages/types@<Module Type> --set ""
  ↵--nocheck
clpcfadm.py mod -t messages/<Module Type>@<Event ID>/syslog
  ↵--set <Value(Destination(System Log))> --nocheck
clpcfadm.py mod -t messages/<Module Type>@<Event ID>/alert
  ↵--set <Value(Destination(Alert Logs))> --nocheck
clpcfadm.py mod -t messages/<Module Type>@<Event ID>/mail
  ↵--set <Value(Destination(Mail Report))> --nocheck
clpcfadm.py mod -t messages/<Module Type>@<Event ID>/trap
  ↵--set <Value(Destination(SNMP Trap))> --nocheck
clpcfadm.py mod -t messages/<Module Type>@<Event ID>/pubsub
  ↵--set <Value(Destination(Message Topic))> --nocheck
clpcfadm.py mod -t messages/<Module Type>@<Event ID>/altexec
  ↵--set <Value(Destination(Alert Extension))> --nocheck
```

---

**Note:** Even when you change part of the destinations, specify settings for all destinations as shown above.

---

- Command (Within 511 bytes)

**Add**

```
clpcfadm.py mod -t messages/<Module Type>@<Event ID>/cmd@
  ↵<Command ID>/cmdline --set <Command> --nocheck
```

---

**Note:** Set as above with "Destination (Alert Extension)" set to "Set".

---

**Note:**

With only one command, specify 0 for Command ID.

With more than one command, specify consecutive numbers (e.g., 0, 1, 2...).

---

**Delete**

```
clpcfset del clsparam messages/<Module Type>@<Event ID>/cmd@  
→<Command ID>
```

**Delete**

```
clpcfset del clsparam messages/<Module Type>@<Event ID>  
clpcfadm.py mod -t messages/types@<Module Type> --delete
```

**Mail Report**

- E-mail Address (Within 255 bytes)

```
clpcfadm.py mod -t cluster/mail/address --set <E-mail Address>
```

- Subject (Within 127 bytes)

Default: EXPRESSCLUSTER

```
clpcfadm.py mod -t cluster/mail/subject --set <Subject>
```

- Mail Method

Value
MAIL (default)
SMTP

```
clpcfadm.py mod -t cluster/mail/sendtype --set <Value>
```

**SMTP Settings**

- Mail Charset (Within 127 bytes)

Mail Charset
ISO-2022-jp
US-ASCII
GB2312

```
clpcfadm.py mod -t cluster/mail/smtp/charset --set <Mail  
→Charset> --nocheck
```

- Send Mail Timeout (sec)

Default, 30 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t cluster/mail/smtp/timeout --set <Value>
```

- Subject Encode

Subject Encode	Value
Encode	1
Do not encode (default)	0

```
clpcfadm.py mod -t cluster/mail/smtp/subencode --set <Value>
```

**SMTP Server**

## Add

---

### Note:

With only one SMTP Server, specify 0 for ID.

With more than one SMTP Server, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Priority

Default, None (minimum, 0; maximum, SMTP Server count - 1)

```
clpcfadm.py mod -t cluster/mail/smtp/smtpsrv@<ID>/priority
    ↳--set <Value> --nocheck
```

- SMTP Server (Within 255 bytes)

```
clpcfadm.py mod -t cluster/mail/smtp/smtpsrv@<ID>/srvname
    ↳--set <SMTP Server> --nocheck
```

- Use SSL

Use SSL	Value
Use	1
Do not use	0

```
clpcfadm.py mod -t cluster/mail/smtp/smtpsrv@<ID>/ssl/use
    ↳--set <Value> --nocheck
```

- Connection Method

Value
SMTPS
STARTTLS

```
clpcfadm.py mod -t cluster/mail/smtp/smtpsrv@<ID>/ssl/method
    ↳--set <Value> --nocheck
```

---

**Note:** Set as above with "Use SSL" set to "Use".

- SMTP Port

Default, None (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t cluster/mail/smtp/smtpsrv@<ID>/port --set
    ↳<Value> --nocheck
```

- Sender Address (Within 255 bytes)

```
clpcfadm.py mod -t cluster/mail/smtp/smtpsrv@<ID>/
    ↳senderaddress --set <Sender Address> --nocheck
```

- Enable SMTP Authentication

Enable SMTP Authentication	Value
Enable	1
Do not enable	0

```
clpcfadm.py mod -t cluster/mail/smtp/smtpsrv@<ID>/auth --set
    ↳<Value> --nocheck
```

---

**Note:** To set the following items, set "Enable SMTP Authentication" to "Enable" in advance.

- Authentication Method

Value
CRAM-MD5
LOGIN
PLAIN

```
clpcfadm.py mod -t cluster/mail/smtp/smtpsrv@<ID>/authmethod
    ↵--set <Value> --nocheck
```

- User Name (Within 255 bytes)

```
clpcfadm.py mod -t cluster/mail/smtp/smtpsrv@<ID>/username
    ↵--set <User Name> --nocheck
```

- Password (Within 255 bytes)

```
clpcfadm.py mod -t cluster/mail/smtp/smtpsrv@<ID>/passwd
    ↵--set <Encrypted password> --nocheck
```

---

**Note:**

Set an encrypted password string.

For details, see "[Retrieving an encrypted password string](#)".

---

**Delete**

```
clpcfadm.py mod -t cluster/mail/smtp/smtpsrv@<ID> --delete
```

**SNMP Trap**

**Destination Settings**

---

**Note:**

With only one SNMP Trap Destination Server, specify 0 for ID.

With more than one SNMP Trap Destination Server, specify consecutive numbers (e.g., 0, 1, 2...).

---

**Add**

```
clpcfadm.py mod -t cluster/trap/snmpsrv@<ID>/srvname --set
    ↵<Destination Server> --nocheck
clpcfadm.py mod -t cluster/trap/snmpsrv@<ID>/port --set <SNMP Port>
    ↵ --nocheck
clpcfadm.py mod -t cluster/trap/snmpsrv@<ID>/snmpver --set <SNMP
    ↵Version> --nocheck
clpcfadm.py mod -t cluster/trap/snmpsrv@<ID>/snmpcom --set <SNMP
    ↵Community Name> --nocheck
```

- Destination Server (Within 255 bytes)

```
clpcfadm.py mod -t cluster/trap/snmpsrv@<ID>/srvname --set
    ↵<Destination Server> --nocheck
```

- SNMP Port

Default, 162 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t cluster/trap/snmpsrv@<ID>/port --set
    ↵<Value> --nocheck
```

- SNMP Version

Value
v1
v2c (default)

```
clpcfadm.py mod -t cluster/trap/snmpsrv@<ID>/snmpver --set
  ↵<Value> --nocheck
```

- SNMP Community Name (Within 255 bytes)

SNMP Community Name
public (default)
private

```
clpcfadm.py mod -t cluster/trap/snmpsrv@<ID>/snmpcom --set
  ↵<SNMP Community Name> --nocheck
```

**Delete**

```
clpcfadm.py mod -t cluster/trap/snmpsrv@<ID> --delete
```

- Output log level to syslog

Output log level to syslog	Value
Output (default)	1
Do not output	0

```
clpcfadm.py mod -t cluster/syslog/format/level --set <Value>
```

- Use Network Warning Light

Use Network Warning Light	Value
Use	1
Do not use (default)	0

```
clpcfadm.py mod -t cluster/dn1000s/use --set <Value>
```

---

**Important:** Configure "Warning Light" of the server properties.

---

**Note:** For "Use", set as follows:

```
clpcfadm.py mod -t alertservice/types@dn1000s --set "" --nocheck
clpcfadm.py mod -t alertservice/dn1000s@dn1000s1 --set "" --nocheck
clpcfadm.py mod -t alertservice/dn1000s@dn1000s1/priority --set 0
  ↵--nocheck
clpcfadm.py mod -t alertservice/dn1000s@dn1000s1/device --set_
  ↵20000 --nocheck
clpcfadm.py mod -t alertservice/dn1000s@dn1000s1/kind --set nm
  ↵--nocheck
```

---

**Note:** To change the setting for "Use Network Warning Light" from "Use" to "Do not use", set as follows:

```
clpcfset del clsparam alertservice
```



## 4.11 WebManager

- Enable WebManager Service

Enable WebManager Service	Value
Enable (default)	1
Do not enable	0

```
clpcfadm.py mod -t webmgr/use --set <Value>
```

---

**Note:** To set the following items, set "Enable WebManager Service" to "Enable" in advance.

---

- Communication Method

Communication Method	Value
HTTP (default)	0
HTTPS	1

```
clpcfadm.py mod -t webmgr/server/encryption/method --set <Value>
```

---

**Important:** With "Communication Method" set to "HTTPS", configure "*Encryption*".

---

- Number of sessions which can be established simultaneously

Default, 64 (minimum, 10; maximum, 999)

```
clpcfadm.py mod -t webmgr/server/maxclient --set <Value>
```

### Control connection by using password

- Password Method

Password Method	Value
Cluster Password Method (default)	0
OS Authentication Method	1

```
clpcfadm.py mod -t webmgr/security/loginuser/use --set <Value>
```

### Cluster Password Method

---

**Note:** To set the following items, set "Password Method" to "Cluster Password Method" in advance.

---

- Password for Operation

```
clpcfadm.py mod -t webmgr/security/userpwd --set
→<Encrypted password> --nocheck
```

---

**Note:**

Set an encrypted password string.

For details, see "*Retrieving an encrypted password string*".

---

- Password for Reference

```
clpcfadm.py mod -t webmgr/security/adminpwd --set  
→<Encrypted password> --nocheck
```

---

**Note:**

Set an encrypted password string.

For details, see "*Retrieving an encrypted password string*".

---

### OS Authentication Method

---

**Note:** To set the following items, set "Password Method" to "OS Authentication Method" in advance.

---

- Authorized Group

**Add**

```
clpcfadm.py mod -t webmgr/security/loginuser/grouplist/  
→ope@<Group Name> --set "" --nocheck
```

**Delete**

```
clpcfadm.py mod -t webmgr/security/loginuser/  
→grouplist/ope@<Group Name> --delete
```

- Login Session Lifetime Period (min)

Default, 1440 (minimum, 0; maximum, 525600)

```
clpcfadm.py mod -t webmgr/security/loginuser/duration  
→--set <Value>
```

- Automatic Logout Time Period (min)

Default, 60 (minimum, 0; maximum, 99999)

```
clpcfadm.py mod -t webmgr/security/loginuser/autologout/  
→time --set <Value>
```

- Lockout Threshold (time)

Default, 0 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t webmgr/security/loginuser/failure/count  
→--set <Value>
```

- Lockout Time (min)

Default, 10 (minimum, 1; maximum, 99999)

```
clpcfadm.py mod -t webmgr/security/loginuser/failure/  
→duration --set <Value>
```

- Control connection by using client IP addresses

Control connection by using client IP addresses	Value
Control	1
Do not control (default)	0

```
clpcfadm.py mod -t webmgr/security/clientlist/iprest --set <Value>
```

**Note:** To set the following items, set "Control connection by using client IP addresses" to "Control" in advance.

---

#### Add

- IP Address (Operation privilege granted)
 

```
clpcfadm.py mod -t webmgr/security/clientlist/ip@<IP_<br/>    ↳Address> --set "" --nocheck
```
- IP Address (Operation privilege not granted)
 

```
clpcfadm.py mod -t webmgr/security/clientlist/ipro@<IP_<br/>    ↳Address> --set "" --nocheck
```

#### Delete

- IP Address (Operation privilege granted)
 

```
clpcfadm.py mod -t webmgr/security/clientlist/ip@<IP_<br/>    ↳Address> --delete
```
- IP Address (Operation privilege not granted)
 

```
clpcfadm.py mod -t webmgr/security/clientlist/ipro@<IP_<br/>    ↳Address> --delete
```

#### Cluster WebUI Operation Log

- Output Cluster WebUI Operation Log

Output Cluster WebUI Operation Log	Value
Output (default)	1
Do not output	0

`clpcfadm.py mod -t webmgr/server/logopeuser/use --set <Value>`

- Log Output Path (Within 255 bytes) (Unless you specify a Log Output Path, the log is outputted to the default directory.)

`clpcfadm.py mod -t webmgr/server/logopeuser/path --set <Log_<br/> ↳Output Path>`

---

**Note:** Specify it as an absolute path.

---



---

**Note:** Use this setting if the "Output Cluster WebUI Operation Log" setting is "Output".

---

- File Size (MB)

Default, 1 (minimum, 1; maximum, 10)

`clpcfadm.py mod -t webmgr/server/logopeuser/size --set <Value>`

---

**Note:** Use this setting if the "Output Cluster WebUI Operation Log" setting is "Output".

---

## Integrated WebManager

### Connection IP address

#### Add

```
clpcfadm.py mod -t server@<Server name>/device@<ID>/type --set
  ↳public --nocheck
clpcfadm.py mod -t server@<Server name>/device@<ID>/info --set <IP
  ↳Address> --nocheck
```

---

#### Note:

With only one IP address to be added, specify 100 for ID.

With more than one IP address to be added, specify consecutive numbers (e.g., 100, 101, 102...).  
(Maximum: 199)

---

#### Delete

```
clpcfadm.py mod -t server@<Server name>/device@<ID> --delete
```

## Tuning

- Client Session Timeout (sec)

Default, 30 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t webmgr/server/timeout --set <Value>
```

- Screen Data Refresh Interval (sec)

Default, 90 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t webmgr/client/pollinginterval --set <Value>
```

- Mirror Agent Timeout (sec)

Default, 120 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t webmgr/server/mdagenttimeout --set <Value>
```

- Time Limit For Keeping Log Files (sec)

Default, 600 (minimum, 60; maximum, 43200)

```
clpcfadm.py mod -t webmgr/server/logc/timeout/getfile --set <Value>
```

- Use Time Information Display Function

Use Time Information Display Function	Value
Use (default)	1
Do not use	0

```
clpcfadm.py mod -t cluster/timeinfo/use --set <Value>
```

## 4.12 API

- Enable API Service

Enable API Service	Value
Enable	1
Do not enable (default)	0

```
clpcfadm.py mod -t rstd/use --set <Value> --nocheck
```

---

**Important:** With "Enable API Service" set to "Enable", configure "*Encryption*".

---

**Note:** To set the following items, set "Enable API Service" to "Enable" in advance.

---

- Communication Method

Communication Method	Value
HTTP	0
HTTPS (default)	1

```
clpcfadm.py mod -t rstd/server/encryption/method --set <Value>  
↳--nocheck
```

- Set a privilege per group

Set a privilege per group	Value
Set	1
Do not set (default)	0

```
clpcfadm.py mod -t rstd/security/loginuser/use --set <Value>  
↳--nocheck
```

---

**Note:** To set the following items, set "Set a privilege per group" to "Set" in advance.

---

### Add

- \* Operation privilege granted

```
clpcfadm.py mod -t rstd/security/loginuser/grouplist/ope@  
↳<Group Name> --set "" --nocheck
```

- \* Operation privilege not granted

```
clpcfadm.py mod -t rstd/security/loginuser/grouplist/ref@  
↳<Group Name> --set "" --nocheck
```

### Delete

- \* Operation privilege granted

```
clpcfset del clsparam rstd/security/loginuser/grouplist/ope@  
↳<Group Name>
```

\* Operation privilege not granted

**clpcfset** del clsparam rstd/security/loginuser/grouplist/ref@  
↳<Group Name>

- Control connection by using client IP addresses

Control connection by using client IP addresses	Value
Control	1
Do not control (default)	0

clpcfadm.py mod -t rstd/security/clientlist/iprest --set <Value>  
↳ --nocheck

#### **Connection Permit Client IP Address**

---

**Note:** To set the following items, set "Control connection by using client IP addresses" to "Control" in advance.

---

##### **Add**

- IP Address (Operation privilege granted)  
clpcfadm.py mod -t rstd/security/clientlist/ip@<IP Address>  
↳ --set "" --nocheck
- IP Address (Operation privilege not granted)  
clpcfadm.py mod -t rstd/security/clientlist/ipro@<IP  
↳ Address> --set "" --nocheck

##### **Delete**

- IP Address (Operation privilege granted)  
**clpcfset** del clsparam rstd/security/clientlist/ip@<IP  
↳ Address>
- IP Address (Operation privilege not granted)  
**clpcfset** del clsparam rstd/security/clientlist/ipro@<IP  
↳ Address>

##### **Tuning**

- Authentication Lockout Threshold (time)  
Default, 3 (minimum, 1; maximum, 5)  
clpcfadm.py mod -t rstd/security/authretry --set <Value>  
↳ --nocheck
- HTTP Server Start Retry Count (time)  
Default, 3 (minimum, 0; maximum, 99)  
clpcfadm.py mod -t rstd/communication/http/retry --set <Value>  
↳ --nocheck
- HTTP Server Start Interval (time)  
Default, 5 (minimum, 1; maximum, 99)  
clpcfadm.py mod -t rstd/communication/http/interval --set  
↳ <Value> --nocheck

## 4.13 Encryption

- Certificate File (Within 1023 bytes)

```
clpcfadm.py mod -t webmgr/server/encryption/crtfile --set  
→<Certificate File>
```

---

**Note:** Specify it as an absolute path.

---

- Private Key File (Within 1023 bytes)

```
clpcfadm.py mod -t webmgr/server/encryption/keyfile --set <Private  
→Key File>
```

---

**Note:** Specify it as an absolute path.

---

- SSL Library (Within 1023 bytes)

SSL Library
/usr/lib64/libssl.so.10
/lib64/libssl.so.1.0.0
/lib/x86_64-linux-gnu/libssl.so.1.0.0
/usr/lib64/libssl.so.1.1
/usr/lib/x86_64-linux-gnu/libssl.so.1.1
/usr/lib64/libssl.so.3
/usr/lib/x86_64-linux-gnu/libssl.so.3

```
clpcfadm.py mod -t webmgr/server/encryption/ssllib --set <SSL Library>
```

---

**Note:** Specify it as an absolute path.

---

---

**Note:** Set it according to the environment (e.g., installation folder).

---

- Crypto Library (Within 1023 bytes)

Crypto Library
/usr/lib64/libcrypto.so.10
/lib64/libcrypto.so.1.0.0
/lib/x86_64-linux-gnu/libcrypto.so.1.0.0
/usr/lib64/libcrypto.so.1.1
/usr/lib/x86_64-linux-gnu/libcrypto.so.1.1
/usr/lib64/libcrypto.so.3
/usr/lib/x86_64-linux-gnu/libcrypto.so.3

```
clpcfadm.py mod -t webmgr/server/encryption/cryptolib --set <Crypto  
→Library>
```

---

**Note:** Specify it as an absolute path.

---

---

**Note:** Set it according to the environment (e.g., installation folder).

---

## 4.14 Alert Log

- Enable Alert Service

Enable Alert Service	Value
Enable (default)	1
Do not enable	0

```
clpcfadm.py mod -t webalert/use --set <Value>
```

- Max. Number to Save Alert Records

Default, 10000 (minimum, 1; maximum, 99999)

```
clpcfadm.py mod -t webalert/main/alertlog/maxrecordcount --set <Value>
```

### **Alert Sync**

- Method

Method	Value
unicast (default)	0

```
clpcfadm.py mod -t webalert/daemon/method --set <Value>
```

- Communication Timeout (sec)

Default, 30 (minimum, 1; maximum, 300)

```
clpcfadm.py mod -t webalert/daemon/timeout --set <Value>
```

## 4.15 Delay Warning

- Heartbeat Delay Warning (%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t cluster/delaywarn/heartbeat --set <Value>
```

- Monitor Delay Warning (%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t cluster/delaywarn/monitor --set <Value>
```

## 4.16 Mirror Agent

- Auto Mirror Recovery

Auto Mirror Recovery	Value
Automatically recover a mirror (default)	1
Do not automatically recover a mirror	0

```
clpcfadm.py mod -t mdagent/autorecovery --set <Value> --nocheck
```

- Receive Timeout (sec)

Default, 10 (minimum, 1; maximum, 600)

```
clpcfadm.py mod -t mdagent/servertimeout --set <Value> --nocheck
```

- Send Timeout (sec)

Default, 120 (minimum, 1; maximum, 600)

```
clpcfadm.py mod -t mdagent/timeout --set <Value> --nocheck
```

- Recovery Data Size (KB)

Default, 4096 (minimum, 64; maximum, 32768)

```
clpcfadm.py mod -t mddriver/maxtransize --set <Value> --nocheck
```

- Start Wait Time (sec)

Default, 10 (minimum, 10; maximum, 600)

```
clpcfadm.py mod -t mdagent/starttimeout --set <Value> --nocheck
```

- Cluster Partition I/O Timeout (sec)

Default, 30 (minimum, 5; maximum, 300)

```
clpcfadm.py mod -t mdagent/diskhb/timeout --set <Value> --nocheck
```

### Recovery Limitation

- Recovery count

Default, None (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t mdagent/iteration_times --set <Value> --nocheck
```

---

**Note:** If you do not limit the recovery count, specify 0.

---

```
clpcfadm.py mod -t mdagent/iteration_times --set 0 --nocheck
```

---

## 4.17 Mirror Driver

- Max. Number of Request Queues

Default, 2048 (minimum, 2048; maximum, 65535)

```
clpcfadm.py mod -t mddriver/reqlimit/value --set <Value> --nocheck
```

- Difference Bitmap Size (MB)

Default, 1 (minimum, 1; maximum, 99)

```
clpcfadm.py mod -t mddriver/bmpsize --set <Value> --nocheck
```

- Difference Bitmap Refresh Interval (sec)

Default, 100 (minimum, 1; maximum, 600)

```
clpcfadm.py mod -t mddriver/bpchkinterval --set <Value> --nocheck
```

- Mirror Recovery I/O Size (KB)

Value
4
64 (default)

```
clpcfadm.py mod -t mddriver/mirroriosize/iosize --set <Value>  
↳--nocheck
```

- History Recording Area Size in Asynchronous Mode (MB)

Default, 100 (minimum, 1; maximum, 200)

```
clpcfadm.py mod -t mddriver/cphistorysize --set <Value> --nocheck
```

### Operation at I/O Error Detection

- Cluster Partition

Value
RESET (default)
PANIC

```
clpcfadm.py mod -t mddriver/ioerror/cp/action --set <Value>  
↳--nocheck
```

- Data Partition

Value
RESET (default)
PANIC
NONE

```
clpcfadm.py mod -t mddriver/ioerror/dp/action --set <Value>  
↳--nocheck
```

## 4.18 JVM Monitor

- Java Installation Path (Within 255 bytes)

```
clpcfadm.py mod -t jra/path/java --set <Java Installation Path>
  ↳--nocheck
```

---

**Note:** Specify it as an absolute path.

---

- Maximum Java Heap Size (MB)

Default, 16 (minimum, 7; maximum, 4096)

```
clpcfadm.py mod -t jra/javaopt/xmx --set <Value> --nocheck
```

- Java VM Additional Option (Within 1024 bytes)

```
clpcfset add clsparam jra/javaopt/javaoptex <Java VM Additional
  ↳Option>
```

---

**Note:** Enter a hyphen (-) as the first character of an additional option for Java VM.

---

### Log Output Setting

- Log Level

Value
DEBUG
INFO (default)
WARN
ERROR
FATAL

```
clpcfadm.py mod -t jra/log/level --set <Value> --nocheck
```

- Generation

Default, 10 (minimum, 2; maximum, 100)

```
clpcfadm.py mod -t jra/log/count --set <Value> --nocheck
```

### Rotation Type

- Rotation Type

Rotation Type	Value
File Size (default)	1
Time	2

```
clpcfadm.py mod -t jra/log/rotation/common --set <Value>
  ↳--nocheck
```

- Max Size (KB)

Default, 3072 (minimum, 200; maximum, 2097151)

```
clpcfadm.py mod -t jra/log/maxsize --set <Value> --nocheck
```

---

**Note:** Set as above with "Rotation Type" set to "File Size".

---

- Start Time

Default, 00:00 (00:00 to 23:59)

```
clpcfadm.py mod -t jra/log/timerotation/point --set <Value>  
  ↵--nocheck
```

---

**Note:** Set as above with "Rotation Type" set to "Time".

---

- Interval (hours)

Default, 24 (minimum, 1; maximum, 8784)

```
clpcfadm.py mod -t jra/log/timerotation/interval --set <Value>  
  ↵--nocheck
```

---

**Note:** Set as above with "Rotation Type" set to "Time".

---

## **Resource Measurement Setting**

### **Common**

- Retry Count

Default, 10 (minimum, 1; maximum, 1440)

```
clpcfadm.py mod -t jra/measure/retry --set <Value> --nocheck
```

- Failure Threshold (time)

Default, 5 (minimum, 1; maximum, 10)

```
clpcfadm.py mod -t jra/change/count --set <Value> --nocheck
```

### **Interval**

- Memory Usage, Active Threads (sec)

Default, 60 (minimum, 15; maximum, 600)

```
clpcfadm.py mod -t jra/measure/interval/value --set <Value>  
  ↵--nocheck
```

- The time and count in Full GC (sec)

Default, 120 (minimum, 15; maximum, 600)

```
clpcfadm.py mod -t jra/measure/interval/gc --set <Value>  
  ↵--nocheck
```

### **WebLogic**

- Retry Count

Default, 3 (minimum, 1; maximum, 5)

```
clpcfadm.py mod -t jra/wl/queue/retry --set <Value> --nocheck
```

- Failure Threshold (time)

Default, 5 (minimum, 1; maximum, 10)

```
clpcfadm.py mod -t jra/wl/queue/change/count --set <Value>  
↳--nocheck
```

#### Interval

- The number of request (sec)

Default, 60 (minimum, 15; maximum, 600)

```
clpcfadm.py mod -t jra/wl/queue/measure/interval --set <Value>  
↳ --nocheck
```

- The average number of the request (sec)

Default, 300 (minimum, 15; maximum, 600)

```
clpcfadm.py mod -t jra/wl/queue/average/interval --set <Value>  
↳ --nocheck
```

---

**Note:** For the interval for measuring the average, specify an integral multiple of the measured interval value for Requests.

---

#### Connection Setting

- Management Port

Default, 25500 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t jra/admin/port --set <Value> --nocheck
```

- Retry Count

Default, 3 (minimum, 1; maximum, 5)

```
clpcfadm.py mod -t jra/connect/retry --set <Value> --nocheck
```

- Waiting time for reconnection (sec)

Default, 60 (minimum, 15; maximum, 60)

```
clpcfadm.py mod -t jra/connect/wait --set <Value> --nocheck
```

- Action Timeout (sec)

Default, 60 (minimum, 30; maximum, 300)

```
clpcfadm.py mod -t jra/action/wait --set <Value> --nocheck
```

## 4.19 Cloud

### Amazon SNS

- Enable Amazon SNS Linkage Function

Enable Amazon SNS Linkage Function	Value
Enable	1
Do not enable (default)	0

```
clpcfadm.py mod -t cluster/cloud/aws/sns/use --set <Value>
```

- TopicArn (Within 512 bytes)

```
clpcfadm.py mod -t cluster/cloud/aws/sns/topicarn --set <TopicArn>
```

---

**Note:** Set as above with "Enable Amazon SNS Linkage Function" set to "Enable".

---

### Amazon CloudWatch

- Enable Amazon CloudWatch Linkage Function

Enable Amazon CloudWatch Linkage Function	Value
Enable	1
Do not enable (default)	0

```
clpcfadm.py mod -t cluster/cloud/metrics/aws/cloudwatch/use --set  
→<Value>
```

- Namespace (Within 255 bytes)

```
clpcfadm.py mod -t cluster/cloud/metrics/aws/cloudwatch/namespace  
→--set <Namespace>
```

---

**Note:** Set as above with "Enable Amazon CloudWatch Linkage Function" set to "Enable".

---

- Interval for Sending Metrics

Default, 60 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t cluster/cloud/metrics/interval --set <Value>
```

---

**Note:** Set as above with "Enable Amazon CloudWatch Linkage Function" set to "Enable".

---

### Command line options (AWS CLI)

#### AWS CLI Command line options

- aws cloudwatch (Within 2047 bytes)

```
clpcfadm.py mod -t cluster/cloud/aws/cmdopt/cloudwatch --set  
→<Command line options>
```

- aws ec2 (Within 2047 bytes)

```
clpcfadm.py mod -t cluster/cloud/aws/cmdopt/ec2 --set <Command_
↳ line options>

• aws route53 (Within 2047 bytes)

    clpcfadm.py mod -t cluster/cloud/aws/cmdopt/route53 --set
    ↳ <Command line options>

• aws sns (Within 2047 bytes)

    clpcfadm.py mod -t cluster/cloud/aws/cmdopt/sns --set <Command_
    ↳ line options>
```

#### **Environment variable**

##### **Environment variables at the time of performing AWS-related features**

- Add

```
clpcfadm.py mod -t cluster/cloud/aws/env@<ID>/name --set
    ↳ <Name> --nocheck
    clpcfadm.py mod -t cluster/cloud/aws/env@<ID>/value --set
    ↳ <Value> --nocheck
```

---

##### **Note:**

With only one environment variable, specify 0 for ID.

With more than one environment variable, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Delete

```
clpcfadm.py mod -t cluster/cloud/aws/env@<ID> --delete
```

## 4.20 Statistics

### Cluster Statistics

- Heartbeat

Heartbeat	Value
Enable (default)	1
Do not enable	0

```
clpcfadm.py mod -t cluster/perf/log/heartbeat/use --set <Value>
```

- File Size (MB)

Default, 50 (minimum, 1; maximum, 50)

```
clpcfadm.py mod -t cluster/perf/log/heartbeat/size --set  
  -><Value>
```

---

**Note:** Set as above with "Heartbeat" set to "Enable".

---

- Group

Group	Value
Enable (default)	1
Do not enable	0

```
clpcfadm.py mod -t cluster/perf/log/group/use --set <Value>
```

- File Size (MB)

Default, 1 (minimum, 1; maximum, 5)

```
clpcfadm.py mod -t cluster/perf/log/group/size --set <Value>
```

---

**Note:** Set as above with "Group" set to "Enable".

---

- Group Resource

Group Resource	Value
Enable (default)	1
Do not enable	0

```
clpcfadm.py mod -t cluster/perf/log/resource/use --set <Value>
```

- File Size (MB)

Default, 1 (minimum, 1; maximum, 5)

```
clpcfadm.py mod -t cluster/perf/log/resource/size --set  
  -><Value>
```

---

**Note:** Set as above with "Group Resource" set to "Enable".

---

- Monitor Resource

Monitor Resource	Value
Enable (default)	1
Do not enable	0

```
clpcfadm.py mod -t cluster/perf/log/monitor/use --set <Value>
```

- File Size (MB)

Default, 10 (minimum, 1; maximum, 10)

```
clpcfadm.py mod -t cluster/perf/log/monitor/size --set <Value>
```

---

**Note:** Set as above with "Monitor Resource" set to "Enable".

---

#### Mirror Statistics

- Collect Statistics

Collect Statistics	Value
Collect (default)	1
Do not collect	0

```
clpcfadm.py mod -t mdagent/perf/enable --set <Value> --nocheck
```

#### System Resource Statistics

- Collect Statistics

Collect Statistics	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t cluster/sysinfo/collect --set <Value>
```

## 4.21 Extension

### Reboot Limitation

- Max Reboot Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t reg/rc/halt/count --set <Value> --nocheck  
clpcfadm.py mod -t reg/rm/halt/count --set <Value> --nocheck
```

---

**Note:** Set each of the <Value> fields to the same value.

---

---

**Note:** If you set "Max Reboot Count" to 0, the repetition of reboot is not limited.

---

---

**Note:** If you set "Max Reboot Count" to 0, the reboot count is not reset.

---

- Max Reboot Count Reset Time (min)

Default, 60 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t reg/rc/halt/reset --set <Value> --nocheck  
clpcfadm.py mod -t reg/rm/halt/reset --set <Value> --nocheck
```

---

**Note:** Set each of the <Value> fields to the same value.

---

- Start Automatically After System Down

Start Automatically After System Down	Value
Start Automatically After System Down (default)	1
Not prohibit cluster service automatic startup after improper stop	0

```
clpcfadm.py mod -t cluster/isolate --set <Value>
```

- Exclude Mount/Unmount Commands

Exclude Mount/Unmount Commands	Value
Execute exclusively (default)	1
Do not execute exclusively	0

```
clpcfadm.py mod -t cluster/exclusion/mount --set <Value>
```

- Grace period of server group failover policy (msec)

Default, 0 (minimum, 0; maximum, 99999000)

```
clpcfadm.py mod -t cluster/heartbeat/fodelay --set <Value>
```

---

**Note:** Specify a value in milliseconds (divisible by 1000).

---

- Change from OS Stop to OS Restart

Change from OS Stop to OS Restart	Value
Yes	1
No (default)	0

```
clpcfadm.py mod -t cluster/override/finalaction --set <Value>
```

#### **Disable Cluster Operation (Recommended for maintenance purposes)**

- Group Automatic Startup

Group Automatic Startup	Value
Disable	1
Do not disable (default)	0

```
clpcfadm.py mod -t rc/autostart/group/disable --set <Value>  
→ --nocheck
```

- Recovery Operation when Group Resource Activation Failure Detected

Recovery Operation when Group Resource Activation Failure Detected	Value
Disable	1
Do not disable (default)	0

```
clpcfadm.py mod -t rc/errordetect/rscact/norecovery --set <Value>  
→ --nocheck
```

- Recovery Operation when Group Resource Deactivation Failure Detected

Recovery Operation when Group Resource Deactivation Failure Detected	Value
Disable	1
Do not disable (default)	0

```
clpcfadm.py mod -t rc/errordetect/rscdeact/norecovery --set <Value>  
→ --nocheck
```

- Recovery Action when Monitor Resource Failure Detected

Recovery Action when Monitor Resource Failure Detected	Value
Disable	1
Do not disable (default)	0

```
clpcfadm.py mod -t rm/errordetect/norecovery --set <Value>
```

- Failover when Server Failure Detected

Failover when Server Failure Detected	Value
Disable	1
Do not disable (default)	0

```
clpcfadm.py mod -t rc/svdowndetect/nofailover --set <Value>  
→ --nocheck
```

**Settings of log storage period**

- Use Settings of log storage period

Use Settings of log storage period	Value
Use	1
Do not use (default)	0

```
clpcfadm.py mod -t cluster/logarc/use --set <Value>
```

---

**Note:** To set the following items, set "Use Settings of log storage period" to "Use" in advance.

---

- Store log for (days)

Default, 7 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t cluster/logarc/period --set <Value>
```

- Log storage destination (Within 170 bytes)

```
clpcfadm.py mod -t cluster/logarc/path --set <Log storage  
destination>
```

---

**Note:** Specify it as an absolute path.

---

- Log storage timing

Default, None (00:00 to 23:59)

```
clpcfadm.py mod -t cluster/logarc/time --set <Value>
```

---

**CHAPTER  
FIVE**

---

## **CONFIGURING A SERVER**

---

**Note:**

The command lines in this chapter use **srv1** as the Server Name.  
Change it to suit your environment.

---

## 5.1 Adding a server

Be sure to set the following items. For details, see "[Setting server parameters](#)".

Item (mandatory)
Server Name
Priority

```
clpcfadm.py add srv srv1 <Priority>
```

---

**Note:** Of the cluster properties, configure the interconnect in advance.

---

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

## 5.2 Setting parameters common to servers

### Priority of servers that can start

```
clpcfadm.py mod -t server@<Server name>/priority --set <Priority of  
→servers that can start>
```

---

#### Note:

For the master server, specify 0 for Priority of servers that can start.

For servers other than the master server, specify consecutive numbers (e.g., 1, 2, 3...).

---

### Server Group

#### Add

```
clpcfadm.py mod -t servergroup@<Server group name>/comment --set  
→<Comment> --nocheck  
clpcfadm.py mod -t servergroup@<Server group name>/policy@<Server  
→name>/order --set <Priority> --nocheck
```

---

**Note:** Enclose in double quotes a comment including spaces (e.g., "Sample Comment").

---

#### Note:

With only one server belonging to the server group, specify 0 for Priority.

With more than one server belonging to the server group, specify consecutive numbers (e.g., 0, 1, 2...).

---

#### Delete

```
clpcfadm.py mod -t servergroup@<Server group name> --delete
```

## 5.3 Setting server parameters

### 5.3.1 Basic information

- Server Name (Within 31 bytes)

**This is set when the server is added. To change the Server Name, delete the server and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t server@srv1/comment --set <Comment> --nocheck
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

### 5.3.2 Warning Light

#### Add (Edit)

- Warning Light

Warning Light	Value
DN-1000S / DN-1000R / DN-1300GL (default)	dn1000s
DN-1500GL	dn1500gl
NH-FB series / NH-FB1 series	patlite
NH-FV1 series	nhfv1

```
clpcfadm.py mod -t server@srv1/device@20000/type --set <Value>  
→--nocheck
```

---

**Important:** To change the setting for "Warning Light", set as follows:

```
clpcfadm.py mod -t server@srv1/device@20000/normal/voice --set ""  
→--nocheck  
clpcfadm.py mod -t server@srv1/device@20000/normal/voicefile --set "  
→"" --nocheck  
clpcfadm.py mod -t server@srv1/device@20000/error/voice --set ""  
→--nocheck  
clpcfadm.py mod -t server@srv1/device@20000/error/voicefile --set "  
→"" --nocheck
```

---

- IP Address

```
clpcfadm.py mod -t server@srv1/device@20000/info --set <Value>  
→--nocheck
```

- Alert When Server Starts

Alert When Server Starts	Value
Yes	1
No (default)	0

```
clpcfadm.py mod -t server@srv1/device@20000/normal/voice --set
→<Value> --nocheck
```

---

**Note:** Set as above with "Warning Light" set to "DN-1500GL" or "NH-FV1 series".

---

- Voice File No.

**If "Warning Light" is set to "DN-1500GL"** Default, 01 (minimum, 01; maximum, 20)

**If "Warning Light" is set to "NH-FV1 series"** Default, 65 (minimum, 01; maximum, 70)

```
clpcfadm.py mod -t server@srv1/device@20000/normal/voicefile --set
→<Value> --nocheck
```

---

**Note:** Set as above with "Alert When Server Starts" set to "Yes".

---

- Alert When Server Stops

Alert When Server Stops	Value
Yes	1
No (default)	0

```
clpcfadm.py mod -t server@srv1/device@20000/error/voice --set
→<Value> --nocheck
```

---

**Note:** Set as above with "Warning Light" set to "DN-1500GL" or "NH-FV1 series".

---

- Voice File No.

**If "Warning Light" is set to "DN-1500GL"** Default, 02 (minimum, 01; maximum, 20)

**If "Warning Light" is set to "NH-FV1 series"** Default, 66 (minimum, 01; maximum, 70)

```
clpcfadm.py mod -t server@srv1/device@20000/error/voicefile --set
→<Value> --nocheck
```

---

**Note:** Set as above with "Alert When Server Starts" set to "Yes".

---

#### Delete

```
clpcfadm.py mod -t server@srv1/device@20000 --delete
```

### 5.3.3 Proxy

- Proxy Scheme

Proxy Scheme	Value
None (default)	0
HTTP	1

```
clpcfadm.py mod -t server@srv1/proxy/scheme --set <Value>
```

- Proxy Server (Within 255 bytes)

```
clpcfadm.py mod -t server@srv1/proxy/server --set <Proxy Server>
```

---

**Note:** Set as above with "Proxy Scheme" set to "HTTP".

---

- Proxy Port

Default, None (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t server@srv1/proxy/port --set <Value>
```

---

**Note:** Set as above with "Proxy Scheme" set to "HTTP".

---

## **5.4 Deleting a server**

Specify and delete a Server Name.

```
clpcfadm.py del srv srv1
```



---

CHAPTER  
**SIX**

---

## **CONFIGURING A GROUP**

---

**Note:**

The command lines in this chapter use **failover1** as the group name.  
Change it to suit your environment.

---

## 6.1 Adding a group

Be sure to set the following items. For details, see "[Setting group parameters](#)".

Item (mandatory)
Group Name

Group type	Value
Failover group	failover
Management group	ManagementGroup

```
clpcfadm.py add grp <Group type> <Group Name>
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

## 6.2 Setting parameters common to groups

### 6.2.1 Exclusion

#### Add

```
clpcfadm.py mod -t xclrule@<Exclusion Name> --set "" --nocheck
clpcfadm.py mod -t xclrule@<Exclusion Name>/comment --set <Comment>
  ↵--nocheck
clpcfadm.py mod -t xclrule@<Exclusion Name>/type --set <Exclusive_
  ↵Attribute> --nocheck
clpcfadm.py mod -t xclrule@<Exclusion Name>/group@<Exclusive Group> --set_
  ↵"" --nocheck
clpcfadm.py mod -t xclrule@<Exclusion Name>/order --set 0 --nocheck
```

- Exclusion Name (Within 31 bytes)

```
  clpcfadm.py mod -t xclrule@<Exclusion Name> --set "" --nocheck
```

- Comment (Within 127 bytes)

```
  clpcfadm.py mod -t xclrule@<Exclusion Name>/comment --set <Comment>
    ↵ --nocheck
```

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

- Exclusive Attribute

Exclusive Attribute	Value
Normal Exclusion (default)	normal
Absolute Exclusion	high

```
  clpcfadm.py mod -t xclrule@<Exclusion Name>/type --set <Value>
    ↵--nocheck
```

- Exclusive Group

#### Add

```
  clpcfadm.py mod -t xclrule@<Exclusion Name>/group@<Exclusive_
  ↵Group> --set "" --nocheck
```

#### Delete

```
  clpcfadm.py mod -t xclrule@<Exclusion Name>/group@<Exclusive_
  ↵Group> --delete
```

#### Delete

```
  clpcfadm.py mod -t xclrule@<Exclusion Name> --delete
```

## 6.3 Setting group parameters

### 6.3.1 Basic information

- Use Server Group Settings

**Set**

```
clpcfadm.py mod -t group@failover1/svgpolicy@<ID>/order --set <The  
→priority of a server group> --nocheck  
clpcfadm.py mod -t group@failover1/svgpolicy@<ID>/svgname --set  
→<Server group name> --nocheck  
clpcfadm.py mod -t group@failover1/policy@<Server name>/order  
→--set <Priority> --nocheck
```

**Delete**

```
clpcfadm.py mod -t group@failover1/svgpolicy@<ID> --delete  
clpcfadm.py mod -t group@failover1/policy --delete
```

- Group Name (Within 31 bytes)

**This is set when the group is added. To change the group name, delete the group and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t group@failover1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

### 6.3.2 Startup Server

- Failover is possible at all servers (default)

```
clpcfadm.py mod -t group@failover1/policy@<Server name> --delete
```

---

**Note:** Delete all configured servers.

---

- Set Up Individually

**Add**

```
clpcfadm.py mod -t group@failover1/policy@<Server name>/order  
→--set <The priority of starting up> --nocheck
```

**Delete**

```
clpcfadm.py mod -t group@failover1/policy@<Server name> --delete
```

### 6.3.3 Attribute

- Startup Attribute

Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t group@failover1/start --set <Value>
```

- Execute Multi-Failover-Service Check

Execute Multi-Failover-Service Check	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t group@failover1/checksvv/use --set <Value>
```

- Timeout (sec)

Default, 300 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t group@failover1/checksvv/preactping/timeout --set
  ↳<Value>
```

---

**Note:** Set as above with "Execute Multi-Failover-Service Check" set to "Check".

---

### Failover Attribute

- Failover Attribute

#### **Automatic failover**

- Use startable server settings

```
clpcfadm.py mod -t group@failover1/failover --set 1
```

- Failover dynamically

```
clpcfadm.py mod -t group@failover1/failover --set 100
```

- \* Prioritize server group failover policy

Prioritize server group failover policy	Value
Prioritize	1
Do not prioritize (default)	0

```
clpcfadm.py mod -t group@failover1/autonomic/functype/
  ↳srvgrp/use --set <Value>
```

- \* Perform a Smart Failover

Perform a Smart Failover	Value
Perform a Smart Failover	1
Do not perform smart failover (default)	0

```
clpcfadm.py mod -t group@failover1/autonomic/functype/
  ↳sra/use --set <Value>
```

- Prioritize server group failover policy

```
clpcfadm.py mod -t group@failover1/failover --set 200
```

- \* Enable only manual failover among the server groups

```
clpcfadm.py mod -t group@failover1/failover --set 201
```

- Manual failover

```
clpcfadm.py mod -t group@failover1/failover --set 0
```

#### **Failover Attribute (Advanced)**

- Exclude Server with Error Detected by Specified Monitor Resource, from Failover Destination

Exclude Server with Error Detected by Specified Monitor Resource, from Failover Destination	Value
Exclude	1
Do not exclude (default)	0

```
clpcfadm.py mod -t group@failover1/autonomic/blacklist/use --set  
→<Value>
```

#### **Edit Monitor**

---

**Note:** Set as above with "Exclude Server with Error Detected by Specified Monitor Resource, from Failover Destination" set to "Exclude".

---

- Monitor resource type

#### **Add**

Monitor resource type	Value
AWS AZ monitor	awsazw
AWS DNS monitor	awsdnsnsw
AWS Elastic IP monitor	awseipw
AWS Secondary IP monitor	awssipw
AWS Virtual IP monitor	awsvipw
Azure DNS monitor	azurednsnsw
Azure load balance monitor	azurelbw
Azure probe port monitor	azureppw
DB2 monitor	db2w
Dynamic DNS monitor	ddnsnsw
Disk monitor	diskw
Floating IP monitor	fipw
FTP monitor	ftpw
Google Cloud DNS monitor	gcdnsnsw
Google Cloud load balance monitor	gclbw
Google Cloud Virtual IP monitor	gcvipw
Custom monitor	genw
Hybrid disk connect monitor	hdnw
Hybrid disk monitor	hdw
HTTP monitor	httpw
IMAP4 monitor	imap4w
JVM monitor	jraw

Continued on next page

Table 6.9 – continued from previous page

Monitor resource type	Value
Mirror disk monitor	mdw
Message reception monitor	mrw
Multi target monitor	mtw
MySQL monitor	mysqlw
NFS monitor	nfsrw
Oracle Cloud load balance monitor	oclbw
Oracle Cloud Virtual IP monitor	ocvipw
ODBC monitor	odbcw
Oracle monitor	oraclew
WebOTX monitor	otxw
PID monitor	pidw
POP3 monitor	pop3w
PostgreSQL monitor	psqlw
Process resource monitor	psrw
Process name monitor	psw
Samba monitor	sambaw
SMTP monitor	smtpw
SQL Server monitor	sqlserverw
System monitor	sraw
Tuxedo monitor	tuxw
Volume manager monitor	volmgrw
WebSphere monitor	wasw
WebLogic monitor	wlsw

```
clpcfadm.py mod -t group@failover1/autonomic/functype/
  ↵blacklist/target --set <Value>
```

**Note:** To add two or more monitor resource types, put commas (,) to separate them.

```
clpcfadm.py mod -t group@failover1/autonomic/functype/
  ↵blacklist/target --set ipw,miiw
```

---

#### Delete

```
clpcfadm.py mod -t group@failover1/autonomic/functype/
  ↵blacklist/target --delete
```

---

**Important:** Delete all set monitor resource types.

- Monitor resource group

#### Add

```
clpcfadm.py mod -t group@failover1/autonomic/functype/
  ↵blacklist/targetgrp@0/rsc@<Monitor resource name> --set_
  ↵"" --nocheck
```

#### Delete

```
clpcfadm.py mod -t group@failover1/autonomic/functype/
  ↵blacklist/targetgrp@0/rsc@<Monitor resource name> --delete
```

- Failover with Error Ignored If It Is Detected in All Servers

Failover with Error Ignored If It Is Detected in All Servers	Value
Fail over	1
Do not fail over (default)	0

```
clpcfadm.py mod -t group@failover1/autonomic/forcefo/use --set  
→<Value>
```

---

**Note:** Set as above with "Exclude Server with Error Detected by Specified Monitor Resource, from Failover Destination" set to "Exclude".

---

#### **Failback Attribute**

- Failback Attribute

Failback Attribute	Value
Automatic failback	1
Manual failback (default)	0

```
clpcfadm.py mod -t group@failover1/failback --set <Value>
```

### **6.3.4 Start Dependency**

- Dependent Group

#### **Add**

```
clpcfadm.py mod -t group@failover1/depend/act/depend@<Group Name>  
→--set "" --nocheck
```

#### **Delete**

```
clpcfadm.py mod -t group@failover1/depend/act/depend@<Group Name>  
→--delete
```

#### **Properties**

- Wait Only when on the Same Server

Wait Only when on the Same Server	Value
Wait	1
Do not wait (default)	0

```
clpcfadm.py mod -t group@failover1/depend/act/depend@<Server name>/  
→sameserver --set <Value> --nocheck
```

- Start Wait Time (sec)

Default, 1800 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t group@failover1/depend/act/timeout --set <Value>
```

### 6.3.5 Stop Dependency

- Dependent Group

**Add**

```
clpcfadm.py mod -t group@failover1/depend/deact/depend@<Group Name>
↳ --set "" --nocheck
```

**Delete**

```
clpcfadm.py mod -t group@failover1/depend/deact/depend@<Group Name>
↳ --delete
```

- Start Wait Time (sec)

Default, 1800 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t group@failover1/depend/deact/timeout --set <Value>
```

- Wait the Dependent Groups when a Cluster Stops

Wait the Dependent Groups when a Cluster Stops	Value
Wait for the stop (default)	1
Do not wait for the stop	0

```
clpcfadm.py mod -t group@failover1/depend/deact/cluster/use --set
↳ <Value>
```

- Wait the Dependent Groups when a Server Stops

Wait the Dependent Groups when a Server Stops	Value
Wait for the stop	1
Do not wait for the stop (default)	0

```
clpcfadm.py mod -t group@failover1/depend/deact/server/use --set
↳ <Value>
```

- Wait the Dependent Groups when a Group Stops

Wait the Dependent Groups when a Group Stops	Value
Wait for the stop	1
Do not wait for the stop (default)	0

```
clpcfadm.py mod -t group@failover1/depend/deact/other/use --set
↳ <Value>
```

## **6.4 Deleting a group**

Specify and delete a group name.

```
clpcfadm.py del grp failover1
```

## CONFIGURING GROUP RESOURCES

### 7.1 AWS DNS resource

---

**Note:**

The command lines in this section use **awsdns1** as the group resource name.  
Change it to suit your environment.

---

#### 7.1.1 Adding an AWS DNS resource

Be sure to set the following items. For details, see "[Setting AWS DNS resource parameters](#)".

Item (mandatory)
Group resource name
Hosted Zone ID
Resource Record Set Name
IP Address

```
clpcfadm.py add rsc <Name of a group to which the resource belongs>  
↳ awsdns awsdns1  
clpcfadm.py mod -t resource/awsdns@awsdns1/parameters/hostedzoneid --set  
↳ <Hosted Zone ID>  
clpcfadm.py mod -t resource/awsdns@awsdns1/parameters/recordset --set  
↳ <Resource Record Set Name>  
clpcfadm.py mod -t resource/awsdns@awsdns1/parameters/ip --set <IP  
↳ Address (Common)>  
clpcfadm.py mod -t resource/awsdns@awsdns1/server@<Server name>/  
↳ parameters/ip --set <IP Address (Individual)> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

## 7.1.2 Setting AWS DNS resource parameters

### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/awsdns@awsdns1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

### Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep awsdns awsdns1
```

- Set a parent resource

```
clpcfadm.py add rscdep awsdns awsdns1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep awsdns awsdns1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/awsdns@awsdns1/depend@<Parent resource_<br/>name> --delete
```

### Recovery Operation

#### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 5 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/awsdns@awsdns1/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/awsdns@awsdns1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4

Continued on next page

Table 7.2 – continued from previous page

Final Action	Value
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

clpcfadm.py mod -t resource/awsdns@awsdns1/act/action --set <Value>

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

clpcfadm.py mod -t resource/awsdns@awsdns1/act/preaction/use --set  
↳<Value>

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

clpcfadm.py mod -t resource/awsdns@awsdns1/act/preaction/  
↳default --set <Value>

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

clpcfadm.py mod -t resource/awsdns@awsdns1/act/preaction/  
↳path --set <File> --nocheck

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **preactaction.sh**.

clpcfadm.py mod -t resource/awsdns@awsdns1/act/preaction/  
↳path --set preactaction.sh

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/awsdns@awsdns1/act/preaction/  
    ↳timeout --set <Value>
```

#### **Recovery Operation at Deactivity Failure Detection**

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/awsdns@awsdns1/deact/retry --set  
    ↳<Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/awsdns@awsdns1/deact/action --set  
    ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awsdns@awsdns1/deact/preaction/use  
    ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### **Script Settings**

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/awsdns@awsdns1/deact/preaction/  
    ↳default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/awsdns@awsdns1/deact/preaction/
    ↳path --set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/awsdns@awsdns1/deact/preaction/
    ↳path --set predeactaction.sh
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/awsdns@awsdns1/deact/preaction/
    ↳timeout --set <Value>
```

## Details

### Common

- Hosted Zone ID (Within 255 bytes)

```
clpcfadm.py mod -t resource/awsdns@awsdns1/parameters/hostedzoneid_
    ↳--set <Hosted Zone ID>
```

- Resource Record Set Name (Within 255 bytes)

```
clpcfadm.py mod -t resource/awsdns@awsdns1/parameters/recordset_
    ↳--set <Resource Record Set Name>
```

- IP Address

```
clpcfadm.py mod -t resource/awsdns@awsdns1/parameters/ip --set <IP_
    ↳Address>
```

- TTL (sec)

Default, 300 (minimum, 0; maximum, 2147483647)

```
clpcfadm.py mod -t resource/awsdns@awsdns1/parameters/ttl --set
    ↳<Value>
```

- Delete a resource record set at deactivation

Delete a resource record set at deactivation	Value
Delete	1
Do not delete (default)	0

```
clpcfadm.py mod -t resource/awsdns@awsdns1/parameters/delete --set
    ↳<Value>
```

### Tuning

#### AWS CLI

- Timeout (sec)

Default, 100 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t resource/awsdns@awsdns1/parameters/  
    ↳awsclitimeout --set <Value>
```

#### **Set Up Individually**

Set the following for each server.

- IP Address

```
clpcfadm.py mod -t resource/awsdns@awsdns1/server@<Server name>/  
    ↳parameters/ip --set <IP Address> --nocheck
```

#### **Extension**

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/awsdns@awsdns1/start --set <Value>
```

#### **Execute Script before or after Activation or Deactivation**

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awsdns@awsdns1/preact/use --set  
    ↳<Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awsdns@awsdns1/predeact/use --set  
    ↳<Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awsdns@awsdns1/postact/use --set  
    ↳<Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awsdns@awsdns1/postdeact/use --set
↳ <Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/awsdns@awsdns1/preact/default
↳ --set <Value>
clpcfadm.py mod -t resource/awsdns@awsdns1/predeact/default
↳ --set <Value>
clpcfadm.py mod -t resource/awsdns@awsdns1/postact/default
↳ --set <Value>
clpcfadm.py mod -t resource/awsdns@awsdns1/postdeact/default
↳ --set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---



---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/awsdns@awsdns1/preact/path --set
↳ <File>
clpcfadm.py mod -t resource/awsdns@awsdns1/predeact/path
↳ --set <File>
clpcfadm.py mod -t resource/awsdns@awsdns1/postact/path --set
↳ <File>
clpcfadm.py mod -t resource/awsdns@awsdns1/postdeact/path
↳ --set <File>
```

---

**Note:** Set all <File> fields to the same value.

---



---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **rsextent.sh**.

```
clpcfadm.py mod -t resource/awsdns@awsdns1/preact/path --set
↳ rsextent.sh
```

```
clpcfadm.py mod -t resource/awsdns@awsdns1/predeact/path  
  ↵--set rscextent.sh  
clpcfadm.py mod -t resource/awsdns@awsdns1/postact/path --set  
  ↵rscextent.sh  
clpcfadm.py mod -t resource/awsdns@awsdns1/postdeact/path  
  ↵--set rscextent.sh
```

---

- **Timeout (sec)**

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/awsdns@awsdns1/preact/timeout  
  ↵--set <Value>  
clpcfadm.py mod -t resource/awsdns@awsdns1/predeact/timeout  
  ↵--set <Value>  
clpcfadm.py mod -t resource/awsdns@awsdns1/postact/timeout  
  ↵--set <Value>  
clpcfadm.py mod -t resource/awsdns@awsdns1/postdeact/timeout  
  ↵--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.1.3 Deleting an AWS DNS resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs>  
  ↵awsdns awsdns1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.2 AWS Elastic IP resource

---

### Note:

The command lines in this section use **awseip1** as the group resource name.  
Change it to suit your environment.

---

### 7.2.1 Adding an AWS Elastic IP resource

Be sure to set the following items. For details, see "*Setting AWS Elastic IP resource parameters*".

Item (mandatory)
Group resource name
EIP ALLOCATION ID
ENI ID

```
clpcfadm.py add rsc <Name of a group to which the resource belongs>  
→awseip awseip1  
clpcfadm.py mod -t resource/awseip@awseip1/parameters/allocid --set <EIP  
→ALLOCATION ID>  
clpcfadm.py mod -t resource/awseip@awseip1/parameters/eniid --set <ENI  
→ID (Common)>  
clpcfadm.py mod -t resource/awseip@awseip1/server@<Server name>/  
→parameters/eniid --set <ENI ID (Individual)> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.2.2 Setting AWS Elastic IP resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/awseip@awseip1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep awseip awseipl
```

- Set a parent resource

```
clpcfadm.py add rscdep awseip awseipl <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep awseip awseipl ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/awseip@awseipl/depend@<Parent resource_<br/>name> --delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 5 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/awseip@awseipl/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/awseip@awseipl/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/awseip@awseipl/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1

Continued on next page

Table 7.17 – continued from previous page

Execute Script before Final Action	Value
Do not check (default)	0

```
clpcfadm.py mod -t resource/awseip@awseipl/act/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/awseip@awseipl/act/preaction/
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/awseip@awseipl/act/preaction/
→path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t resource/awseip@awseipl/act/preaction/
→path --set preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/awseip@awseipl/act/preaction/
→timeout --set <Value>
```

#### Recovery Operation at Deactivity Failure Detection

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/awseip@awseipl/deact/retry --set
→<Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1

Continued on next page

Table 7.19 – continued from previous page

Final Action	Value
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/awseip@awseip1/deact/action --set
↳ <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awseip@awseip1/deact/preaction/use_
↳ --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/awseip@awseip1/deact/preaction/
↳ default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/awseip@awseip1/deact/preaction/
↳ path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/awseip@awseip1/deact/preaction/
↳ path --set predeactaction.sh
```

- Timeout (sec)

```
Default, 5 (minimum, 1; maximum, 9999)
clpcfadm.py mod -t resource/awseip@awseipl/deact/preaction/
    ↵timeout --set <Value>
```

## Details

### Common

- EIP ALLOCATION ID (Within 255 bytes)

```
clpcfadm.py mod -t resource/awseip@awseipl/parameters/allocid_
    ↵--set <EIP ALLOCATION ID>
```

- ENI ID (Within 45 bytes)

```
clpcfadm.py mod -t resource/awseip@awseipl/parameters/eniid --set
    ↵<ENI ID>
```

### Tuning

#### AWS CLI

- Timeout (sec)

Default, 100 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t resource/awseip@awseipl/parameters/
    ↵awsclitimeout --set <Value>
```

### Set Up Individually

Set the following for each server.

- ENI ID

```
clpcfadm.py mod -t resource/awseip@awseipl/server@<Server name>/
    ↵parameters/eniid --set <ENI ID> --nocheck
```

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/awseip@awseipl/start --set <Value>
```

### Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1

Continued on next page

Table 7.23 – continued from previous page

Execute Script before Activation	Value
Do not check (default)	0

```
clpcfadm.py mod -t resource/awseip@awseip1/preact/use --set
    ↵<Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awseip@awseip1/predeact/use --set
    ↵<Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awseip@awseip1/postact/use --set
    ↵<Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awseip@awseip1/postdeact/use --set
    ↵<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/awseip@awseip1/preact/default_
    ↵--set <Value>
clpcfadm.py mod -t resource/awseip@awseip1/predeact/default_
    ↵--set <Value>
clpcfadm.py mod -t resource/awseip@awseip1/postact/default_
    ↵--set <Value>
clpcfadm.py mod -t resource/awseip@awseip1/postdeact/default_
    ↵--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/awseip@awseipl/preact/path --set
  ↵<File>
clpcfadm.py mod -t resource/awseip@awseipl/predeact/path
  ↵--set <File>
clpcfadm.py mod -t resource/awseip@awseipl/postact/path --set
  ↵<File>
clpcfadm.py mod -t resource/awseip@awseipl/postdeact/path
  ↵--set <File>
```

---

**Note:** Set all <File> fields to the same value.

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **rsextent.sh**.

```
clpcfadm.py mod -t resource/awseip@awseipl/preact/path --set
  ↵rsextent.sh
clpcfadm.py mod -t resource/awseip@awseipl/predeact/path
  ↵--set rsextent.sh
clpcfadm.py mod -t resource/awseip@awseipl/postact/path --set
  ↵rsextent.sh
clpcfadm.py mod -t resource/awseip@awseipl/postdeact/path
  ↵--set rsextent.sh
```

---

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/awseip@awseipl/preact/timeout
  ↵--set <Value>
clpcfadm.py mod -t resource/awseip@awseipl/predeact/timeout
  ↵--set <Value>
clpcfadm.py mod -t resource/awseip@awseipl/postact/timeout
  ↵--set <Value>
clpcfadm.py mod -t resource/awseip@awseipl/postdeact/timeout
  ↵--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.2.3 Deleting an AWS Elastic IP resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs>  
↳awseip awseipl
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.3 AWS Secondary IP resource

---

### Note:

The command lines in this section use **awssip1** as the group resource name.  
Change it to suit your environment.

---

### 7.3.1 Adding an AWS Secondary IP resource

Be sure to set the following items. For details, see "*Setting AWS Secondary IP resource parameters*".

Item (mandatory)
Group resource name
IP Address
ENI ID

```
clpcfadm.py add rsc <Name of a group to which the resource belongs>  
    ↪awssip awssip1  
clpcfadm.py mod -t resource/awssip@awssip1/parameters/ip --set <IP  
    ↪Address>  
clpcfadm.py mod -t resource/awssip@awssip1/parameters/eniid --set <ENI  
    ↪ID (Common)>  
clpcfadm.py mod -t resource/awssip@awssip1/server@<Server name>/  
    ↪parameters/eniid --set <ENI ID (Individual)> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.3.2 Setting AWS Secondary IP resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/awssip@awssip1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep awssip awssipl
```

- Set a parent resource

```
clpcfadm.py add rscdep awssip awssipl <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep awssip awssipl ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/awssip@awssipl/depend@<Parent resource_<br/>name> --delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 5 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/awssip@awssipl/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/awssip@awssipl/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/awssip@awssipl/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1

Continued on next page

Table 7.30 – continued from previous page

Execute Script before Final Action	Value
Do not check (default)	0

```
clpcfadm.py mod -t resource/awssip@awssip1/act/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/awssip@awssip1/act/preaction/
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/awssip@awssip1/act/preaction/
→path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t resource/awssip@awssip1/act/preaction/
→path --set preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/awssip@awssip1/act/preaction/
→timeout --set <Value>
```

#### Recovery Operation at Deactivation Failure Detection

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/awssip@awssip1/deact/retry --set
→<Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1

Continued on next page

Table 7.32 – continued from previous page

Final Action	Value
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/awssip@awssip1/deact/action --set
→<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awssip@awssip1/deact/preaction/use_
→--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/awssip@awssip1/deact/preaction/
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/awssip@awssip1/deact/preaction/
→path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/awssip@awssip1/deact/preaction/
→path --set predeactaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)  
`clpcfadm.py mod -t resource/awssip@awssip1/deact/preaction/  
 ↳timeout --set <Value>`

## Details

### Common

- IP Address

```
clpcfadm.py mod -t resource/awssip@awssip1/parameters/ip --set <IP  

    ↳Address>
```

- ENI ID (Within 48 bytes)

```
clpcfadm.py mod -t resource/awssip@awssip1/parameters/eniid --set  

    ↳<ENI ID>
```

### Tuning

- Start Timeout (sec)

Default, 180 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/awssip@awssip1/parameters/timeout/  

    ↳start --set <Value>
```

- Stop Timeout (sec)

Default, 180 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/awssip@awssip1/parameters/timeout/  

    ↳stop --set <Value>
```

### Set Up Individually

Set the following for each server.

- ENI ID (Within 48 bytes)

```
clpcfadm.py mod -t resource/awssip@awssip1/server@<Server name>/  

    ↳parameters/eniid --set <ENI ID> --nocheck
```

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/awssip@awssip1/start --set <Value>
```

### Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awssip@awssip1/preact/use --set  
  ↳<Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awssip@awssip1/predeact/use --set  
  ↳<Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awssip@awssip1/postact/use --set  
  ↳<Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awssip@awssip1/postdeact/use --set  
  ↳<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/awssip@awssip1/preact/default  
  ↳--set <Value>  
clpcfadm.py mod -t resource/awssip@awssip1/predeact/default  
  ↳--set <Value>  
clpcfadm.py mod -t resource/awssip@awssip1/postact/default  
  ↳--set <Value>  
clpcfadm.py mod -t resource/awssip@awssip1/postdeact/default  
  ↳--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/awssip@awssipl/preact/path --set
  ↵<File>
clpcfadm.py mod -t resource/awssip@awssipl/predeact/path
  ↵--set <File>
clpcfadm.py mod -t resource/awssip@awssipl/postact/path --set
  ↵<File>
clpcfadm.py mod -t resource/awssip@awssipl/postdeact/path
  ↵--set <File>
```

---

**Note:** Set all <File> fields to the same value.

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **rsextent.sh**.

```
clpcfadm.py mod -t resource/awssip@awssipl/preact/path --set
  ↵rsextent.sh
clpcfadm.py mod -t resource/awssip@awssipl/predeact/path
  ↵--set rsextent.sh
clpcfadm.py mod -t resource/awssip@awssipl/postact/path --set
  ↵rsextent.sh
clpcfadm.py mod -t resource/awssip@awssipl/postdeact/path
  ↵--set rsextent.sh
```

---

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/awssip@awssipl/preact/timeout
  ↵--set <Value>
clpcfadm.py mod -t resource/awssip@awssipl/predeact/timeout
  ↵--set <Value>
clpcfadm.py mod -t resource/awssip@awssipl/postact/timeout
  ↵--set <Value>
clpcfadm.py mod -t resource/awssip@awssipl/postdeact/timeout
  ↵--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.3.3 Deleting an AWS Secondary IP resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs>  
↳awssip awssipl
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.4 AWS Virtual IP resource

---

### Note:

The command lines in this section use **awsvip1** as the group resource name.  
Change it to suit your environment.

---

### 7.4.1 Adding an AWS Virtual IP resource

Be sure to set the following items. For details, see "*Setting AWS Virtual IP resource parameters*".

Item (mandatory)
Group resource name
IP Address
VPC ID
ENI ID

```
clpcfadm.py add rsc <Name of a group to which the resource belongs>
  ↳awsvip awsvip1
clpcfadm.py mod -t resource/awsvip@awsvip1/parameters/ip --set <IP>
  ↳Address
clpcfadm.py mod -t resource/awsvip@awsvip1/parameters/vpcid --set <VPC>
  ↳ID (Common)
clpcfadm.py mod -t resource/awsvip@awsvip1/server@<Server name>/
  ↳parameters/vpcid --set <VPC ID (Individual)> --nocheck
clpcfadm.py mod -t resource/awsvip@awsvip1/parameters/eniid --set <ENI>
  ↳ID (Common)
clpcfadm.py mod -t resource/awsvip@awsvip1/server@<Server name>/
  ↳parameters/eniid --set <ENI ID (Individual)> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.4.2 Setting AWS Virtual IP resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

clpcfadm.py mod -t resource/awsvip@awsvip1/comment --set <Comment>

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep awsvip awsvipl
```

- Set a parent resource

```
clpcfadm.py add rscdep awsvip awsvipl <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep awsvip awsvipl ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/awsvip@awsvipl/depend@<Parent resource_<br/>name> --delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 5 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/awsvip@awsvipl/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/awsvip@awsvipl/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/awsvip@awsvipl/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1

Continued on next page

Table 7.43 – continued from previous page

Execute Script before Final Action	Value
Do not check (default)	0

```
clpcfadm.py mod -t resource/awsvip@awsvip1/act/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/awsvip@awsvip1/act/preaction/
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/awsvip@awsvip1/act/preaction/
→path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t resource/awsvip@awsvip1/act/preaction/
→path --set preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/awsvip@awsvip1/act/preaction/
→timeout --set <Value>
```

#### Recovery Operation at Deactivity Failure Detection

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/awsvip@awsvip1/deact/retry --set
→<Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1

Continued on next page

Table 7.45 – continued from previous page

Final Action	Value
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/awsvip@awsvip1/deact/action --set
↳ <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awsvip@awsvip1/deact/preaction/use_
↳ --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/awsvip@awsvip1/deact/preaction/
↳ default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/awsvip@awsvip1/deact/preaction/
↳ path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/awsvip@awsvip1/deact/preaction/
↳ path --set predeactaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)  
clpcfadm.py mod -t resource/awsvip@awsvip1/deact/preaction/  
  ↳timeout --set <Value>

## Details

### Common

- IP Address

```
clpcfadm.py mod -t resource/awsvip@awsvip1/parameters/ip --set <IP  
  ↳Address>
```

- VPC ID (Within 45 bytes)

```
clpcfadm.py mod -t resource/awsvip@awsvip1/parameters/vpcid --set  
  ↳<VPC ID>
```

- ENI ID (Within 45 bytes)

```
clpcfadm.py mod -t resource/awsvip@awsvip1/parameters/eniid --set  
  ↳<ENI ID>
```

### Tuning

- Start Timeout (sec)

Default, 300 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/awsvip@awsvip1/parameters/timeout/  
  ↳start --set <Value>
```

- Stop Timeout (sec)

Default, 60 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/awsvip@awsvip1/parameters/timeout/  
  ↳stop --set <Value>
```

### Set Up Individually

Set the following for each server.

- VPC ID (Within 45 bytes)

```
clpcfadm.py mod -t resource/awsvip@awsvip1/server@<Server name>/  
  ↳parameters/vpcid --set <VPC ID> --nocheck
```

- ENI ID (Within 45 bytes)

```
clpcfadm.py mod -t resource/awsvip@awsvip1/server@<Server name>/  
  ↳parameters/eniid --set <ENI ID> --nocheck
```

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/awsvip@awsvip1/start --set <Value>
```

### Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awsvip@awsvip1/preact/use --set  
  -><Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awsvip@awsvip1/predeact/use --set  
  -><Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awsvip@awsvip1/postact/use --set  
  -><Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/awsvip@awsvip1/postdeact/use --set  
  -><Value>
```

## Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/awsvip@awsvip1/preact/default_
↳--set <Value>
clpcfadm.py mod -t resource/awsvip@awsvip1/predeact/default_
↳--set <Value>
clpcfadm.py mod -t resource/awsvip@awsvip1/postact/default_
↳--set <Value>
clpcfadm.py mod -t resource/awsvip@awsvip1/postdeact/default_
↳--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/awsvip@awsvip1/preact/path --set
↳<File>
clpcfadm.py mod -t resource/awsvip@awsvip1/predeact/path_
↳--set <File>
clpcfadm.py mod -t resource/awsvip@awsvip1/postact/path --set
↳<File>
clpcfadm.py mod -t resource/awsvip@awsvip1/postdeact/path_
↳--set <File>
```

---

**Note:** Set all <File> fields to the same value.

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **rscextent.sh**.

```
clpcfadm.py mod -t resource/awsvip@awsvip1/preact/path --set_
↳rscextent.sh
clpcfadm.py mod -t resource/awsvip@awsvip1/predeact/path_
↳--set rscextent.sh
clpcfadm.py mod -t resource/awsvip@awsvip1/postact/path --set_
↳rscextent.sh
clpcfadm.py mod -t resource/awsvip@awsvip1/postdeact/path_
↳--set rscextent.sh
```

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/awsvip@awsvip1/preact/timeout_
↳--set <Value>
```

```
clpcfadm.py mod -t resource/awsvip@awsvip1/predeact/timeout ↵
    ↵--set <Value>
clpcfadm.py mod -t resource/awsvip@awsvip1/postact/timeout ↵
    ↵--set <Value>
clpcfadm.py mod -t resource/awsvip@awsvip1/postdeact/timeout ↵
    ↵--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.4.3 Deleting an AWS Virtual IP resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs> ↵
    ↵awsvip awsvip1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.5 Azure DNS resource

---

**Note:**

The command lines in this section use **azuredns1** as the group resource name.

Change it to suit your environment.

---

### 7.5.1 Adding an Azure DNS resource

Be sure to set the following items. For details, see "*Setting Azure DNS resource parameters*".

Item (mandatory)
Group resource name
Record Set Name
Zone Name
IP Address
Resource Group Name
User URI
Tenant ID
File Path of Service Principal
Azure CLI File Path

```
clpcfadm.py add rsc <Name of a group to which the resource belongs>
  ↳azuredns azuredns1
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/recordset --set
  ↳<Record Set Name>
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/zone --set
  ↳<Zone Name>
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/ip --set <IP
  ↳Address (Common)>
clpcfadm.py mod -t resource/azuredns@azuredns1/server@<Server name>/
  ↳parameters/ip --set <IP Address (Individual)> --nocheck
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/resourcegroup
  ↳--set <Resource Group Name>
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/uri --set <User
  ↳URI>
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/tenantid --set
  ↳<Tenant ID>
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/certfile --set
  ↳<File Path of Service Principal>
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/azurecli --set
  ↳<Azure CLI File Path>
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

## 7.5.2 Setting Azure DNS resource parameters

### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

### Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep azuredns azuredns1
```

- Set a parent resource

```
clpcfadm.py add rscdep azuredns azuredns1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep azuredns azuredns1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/azuredns@azuredns1/depend@<Parent  
resource name> --delete
```

### Recovery Operation

#### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/act/retry --set  
→<Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3

Continued on next page

Table 7.55 – continued from previous page

Final Action	Value
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/azuredns@azuredns1/act/action --set
↳ <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/azuredns@azuredns1/act/preaction/use
↳ --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/azuredns@azuredns1/act/preaction/
↳ default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/act/preaction/
↳ path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t resource/azuredns@azuredns1/act/preaction/
↳ path --set preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)  
clpcfadm.py mod -t resource/azuredns@azuredns1/act/preaction/  
  ↳timeout --set <Value>

#### **Recovery Operation at Deactivity Failure Detection**

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

clpcfadm.py mod -t resource/azuredns@azuredns1/deact/retry --set  
  ↳<Value>

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

clpcfadm.py mod -t resource/azuredns@azuredns1/deact/action --set  
  ↳<Value>

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

clpcfadm.py mod -t resource/azuredns@azuredns1/deact/preaction/use  
  ↳--set <Value>

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File").

---

#### **Script Settings**

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

clpcfadm.py mod -t resource/azuredns@azuredns1/deact/  
  ↳preaction/default --set <Value>

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/deact/  
    ↪preaction/path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/azuredns@azuredns1/deact/  
    ↪preaction/path --set predeactaction.sh
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/deact/  
    ↪preaction/timeout --set <Value>
```

## Details

### Common

- Record Set Name (Within 253 bytes)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/  
    ↪recordset --set <Record Set Name>
```

- Zone Name (Within 253 bytes)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/zone  
    ↪--set <Zone Name>
```

- IP Address

```
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/ip --set  
    ↪<IP Address>
```

- TTL (sec)

Default, 3600 (minimum, 0; maximum, 2147483647)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/ttl  
    ↪--set <Value>
```

- Resource Group Name (Within 180 bytes)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/  
    ↪resourcegroup --set <Resource Group Name>
```

- User URI (Within 2083 bytes)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/uri  
    ↪--set <User URI>
```

- Tenant ID (Within 36 bytes)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/tenantid  
    ↪--set <Tenant ID>
```

- File Path of Service Principal (Within 1023 bytes)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/certfile  
    ↳--set <File Path of Service Principal>
```

- Thumbprint of Service Principal (Within 256 bytes)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/  
    ↳thumbprint --set <Thumbprint of Service Principal>
```

- Azure CLI File Path (Within 1023 bytes)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/azurecli  
    ↳--set <Azure CLI File Path>
```

- Delete a resource record set at deactivation

Delete a resource record set at deactivation	Value
Delete (default)	1
Do not delete	0

```
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/delete  
    ↳--set <Value>
```

## Tuning

### Azure CLI

- Timeout (sec)

Default, 100 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/parameters/  
    ↳azureclitimeout --set <Value>
```

### Set Up Individually

Set the following for each server.

- IP Address

```
clpcfadm.py mod -t resource/azuredns@azuredns1/server@<Server name>  
    ↳/parameters/ip --set <IP Address> --nocheck
```

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/azuredns@azuredns1/start --set <Value>
```

### Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/azuredns@azuredns1/preact/use --set
    ↵<Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/azuredns@azuredns1/predeact/use
    ↵--set <Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/azuredns@azuredns1/postact/use
    ↵--set <Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/azuredns@azuredns1/postdeact/use
    ↵--set <Value>
```

#### **Script Settings**

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/azuredns@azuredns1/preact/default
    ↵--set <Value>
clpcfadm.py mod -t resource/azuredns@azuredns1/predeact/
    ↵default --set <Value>
clpcfadm.py mod -t resource/azuredns@azuredns1/postact/
    ↵default --set <Value>
clpcfadm.py mod -t resource/azuredns@azuredns1/postdeact/
    ↵default --set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/preact/path_
    ↵--set <File>
clpcfadm.py mod -t resource/azuredns@azuredns1/predeact/path_
    ↵--set <File>
clpcfadm.py mod -t resource/azuredns@azuredns1/postact/path_
    ↵--set <File>
clpcfadm.py mod -t resource/azuredns@azuredns1/postdeact/path_
    ↵--set <File>
```

---

**Note:** Set all <File> fields to the same value.

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **rsextent.sh**.

```
clpcfadm.py mod -t resource/azuredns@azuredns1/preact/path_
    ↵--set rsextent.sh
clpcfadm.py mod -t resource/azuredns@azuredns1/predeact/path_
    ↵--set rsextent.sh
clpcfadm.py mod -t resource/azuredns@azuredns1/postact/path_
    ↵--set rsextent.sh
clpcfadm.py mod -t resource/azuredns@azuredns1/postdeact/path_
    ↵--set rsextent.sh
```

---

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/azuredns@azuredns1/preact/timeout_
    ↵--set <Value>
clpcfadm.py mod -t resource/azuredns@azuredns1/predeact/
    ↵timeout --set <Value>
clpcfadm.py mod -t resource/azuredns@azuredns1/postact/
    ↵timeout --set <Value>
clpcfadm.py mod -t resource/azuredns@azuredns1/postdeact/
    ↵timeout --set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.5.3 Deleting an Azure DNS resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs>  
↳azuredns azuredns1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.6 Azure probe port resource

---

### Note:

The command lines in this section use **azurepp1** as the group resource name.  
Change it to suit your environment.

---

### 7.6.1 Adding an Azure probe port resource

Be sure to set the following items. For details, see "*Setting Azure probe port resource parameters*".

Item (mandatory)
Group resource name
Probeport

```
clpcfadm.py add rsc <Name of a group to which the resource belongs>  
  ↪azurepp azurepp1  
clpcfadm.py mod -t resource/azurepp@azurepp1/parameters/probeport --set  
  ↪<Probeport>
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.6.2 Setting Azure probe port resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/azurepp@azurepp1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep azureapp azurepp1
```

- Set a parent resource

```
clpcfadm.py add rscdep azureapp azurepp1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep azureapp azurepp1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/azureapp@azurepp1/depend@<Parent resource_
→name> --delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 5 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/azureapp@azurepp1/act/retry --set
→<Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/azureapp@azurepp1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/azureapp@azurepp1/act/action --set
→<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/azurepp@azurepp1/act/preaction/use_
↪--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### **Script Settings**

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/azurepp@azurepp1/act/preaction/
↪default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/azurepp@azurepp1/act/preaction/
↪path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preactaction.sh**.

```
clpcfadm.py mod -t resource/azurepp@azurepp1/act/preaction/
↪path --set preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/azurepp@azurepp1/act/preaction/
↪timeout --set <Value>
```

#### **Recovery Operation at Deactivity Failure Detection**

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/azurepp@azurepp1/deact/retry --set
↪<Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1

Continued on next page

Table 7.72 – continued from previous page

Final Action	Value
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/azurepp@azurepp1/deact/action --set
↳ <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/azurepp@azurepp1/deact/preaction/use
↳ --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/azurepp@azurepp1/deact/preaction/
↳ default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/azurepp@azurepp1/deact/preaction/
↳ path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/azurepp@azurepp1/deact/preaction/
↳ path --set predeactaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)  
clpcfadm.py mod -t resource/azurepp@azurepp1/deact/preaction/  
    ↳timeout --set <Value>

## Details

- Probeport

Default, None (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t resource/azurepp@azurepp1/parameters/probeport  
    ↳--set <Value>
```

## Tuning

- Probe wait timeout (sec)

Default, 30 (minimum, 5; maximum, 999999999)

```
clpcfadm.py mod -t resource/azurepp@azurepp1/parameters/  
    ↳probedelay --set <Value>
```

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/azurepp@azurepp1/start --set <Value>
```

## Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/azurepp@azurepp1/preact/use --set  
    ↳<Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/azurepp@azurepp1/predeact/use --set
```

↳<Value>

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/azurepp@azurepp1/postact/use --set
↳<Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/azurepp@azurepp1/postdeact/use
--set <Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/azurepp@azurepp1/preact/default
--set <Value>
clpcfadm.py mod -t resource/azurepp@azurepp1/predeact/default
--set <Value>
clpcfadm.py mod -t resource/azurepp@azurepp1/postact/default
--set <Value>
clpcfadm.py mod -t resource/azurepp@azurepp1/postdeact/
--default --set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---



---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/azurepp@azurepp1/preact/path
--set <File>
clpcfadm.py mod -t resource/azurepp@azurepp1/predeact/path
--set <File>
clpcfadm.py mod -t resource/azurepp@azurepp1/postact/path
--set <File>
clpcfadm.py mod -t resource/azurepp@azurepp1/postdeact/path
--set <File>
```

---

**Note:** Set all <File> fields to the same value.

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **rscextent.sh**.

```
clpcfadm.py mod -t resource/azurepp@azurepp1/preact/path
↳--set rscextent.sh
clpcfadm.py mod -t resource/azurepp@azurepp1/predeact/path
↳--set rscextent.sh
clpcfadm.py mod -t resource/azurepp@azurepp1/postact/path
↳--set rscextent.sh
clpcfadm.py mod -t resource/azurepp@azurepp1/postdeact/path
↳--set rscextent.sh
```

---

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/azurepp@azurepp1/preact/timeout
↳--set <Value>
clpcfadm.py mod -t resource/azurepp@azurepp1/predeact/timeout
↳--set <Value>
clpcfadm.py mod -t resource/azurepp@azurepp1/postact/timeout
↳--set <Value>
clpcfadm.py mod -t resource/azurepp@azurepp1/postdeact/
↳timeout --set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.6.3 Deleting an Azure probe port resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs>
↳azurepp azurepp1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.7 Dynamic DNS resource

---

**Note:**

The command lines in this section use **ddns1** as the group resource name.  
Change it to suit your environment.

---

### 7.7.1 Adding a dynamic DNS resource

Be sure to set the following items. For details, see "*Setting dynamic DNS resource parameters*".

Item (mandatory)
Group resource name
Virtual Host Name
IP Address
DDNS Server

```
clpcfadm.py add rsc <Name of a group to which the resource belongs> ddns1
clpcfadm.py mod -t resource/ddns1/parameters/host/ddnsname --set
  <Virtual Host Name>
clpcfadm.py mod -t resource/ddns1/parameters/host/ip --set <IP Address>
clpcfadm.py mod -t resource/ddns1/parameters/dnsserver/name --set
  <DDNS Server>
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.7.2 Setting dynamic DNS resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/ddns1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep ddns ddns1
```

- Set a parent resource

```
clpcfadm.py add rscdep ddns ddns1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep ddns ddns1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/ddns@ddns1/depend@<Parent resource name>  
    ↳--delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/ddns@ddns1/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/ddns@ddns1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/ddns@ddns1/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1

Continued on next page

Table 7.83 – continued from previous page

Execute Script before Final Action	Value
Do not check (default)	0

```
clpcfadm.py mod -t resource/ddns@ddns1/act/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/ddns@ddns1/act/preaction/default_
→--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/ddns@ddns1/act/preaction/path_
→--set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t resource/ddns@ddns1/act/preaction/path_
→--set preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/ddns@ddns1/act/preaction/timeout_
→--set <Value>
```

#### Recovery Operation at Deactivity Failure Detection

- Retry Count at Deactivation Failure

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/ddns@ddns1/deact/retry --set <Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1
Stop the cluster service and shutdown OS (default)	4

Continued on next page

Table 7.85 – continued from previous page

Final Action	Value
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

clpcfadm.py mod -t resource/ddns@ddns1/deact/action --set <Value>

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

clpcfadm.py mod -t resource/ddns@ddns1/deact/preaction/use --set  
 ↳<Value>

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

clpcfadm.py mod -t resource/ddns@ddns1/deact/preaction/  
 ↳default --set <Value>

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

clpcfadm.py mod -t resource/ddns@ddns1/deact/preaction/path\_  
 ↳--set <File>

---

**Note:** When specifying "User Application" (any script file on the cluster server),  
 specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

clpcfadm.py mod -t resource/ddns@ddns1/deact/preaction/path\_  
 ↳--set predeactaction.sh

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/ddns@ddns1/deact/preaction/  
    ↳timeout --set <Value>
```

## Details

### Common

- Virtual Host Name (Within 255 bytes)

```
clpcfadm.py mod -t resource/ddns@ddns1/parameters/host/ddnsname  
    ↳--set <Virtual Host Name>
```

- IP Address

```
clpcfadm.py mod -t resource/ddns@ddns1/parameters/host/ip --set  
    ↳<IP Address>
```

- DDNS Server (Within 255 bytes)

```
clpcfadm.py mod -t resource/ddns@ddns1/parameters/dnsserver/name  
    ↳--set <DDNS Server>
```

- Port Number

Default, 53 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t resource/ddns@ddns1/parameters/dnsserver/port  
    ↳--set <Value>
```

- Authentication Key Name (Within 255 bytes)

```
clpcfadm.py mod -t resource/ddns@ddns1/parameters/dnsserver/  
    ↳keyname --set <Authentication Key Name>
```

- Authentication Key Value (Within 255 bytes)

```
clpcfadm.py mod -t resource/ddns@ddns1/parameters/dnsserver/  
    ↳keyvalue --set <Authentication Key Value>
```

### Set Up Individually

Set the following for each server.

- IP Address

```
clpcfadm.py mod -t resource/ddns@ddns1/server@<Server name>/  
    ↳parameters/host/ip --set <IP Address> --nocheck
```

---

**Note:** To return to the common settings, set the following for each server.

```
clpcfadm.py mod -t resource/ddns@ddns1/server@<Server name> --delete
```

---

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/ddns@ddns1/start --set <Value>
```

### Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/ddns@ddns1/preact/use --set <Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/ddns@ddns1/predeact/use --set  
  -><Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/ddns@ddns1/postact/use --set <Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/ddns@ddns1/postdeact/use --set  
  -><Value>
```

### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/ddns@ddns1/preact/default --set
  ↵<Value>
clpcfadm.py mod -t resource/ddns@ddns1/predeact/default --set
  ↵<Value>
clpcfadm.py mod -t resource/ddns@ddns1/postact/default --set
  ↵<Value>
clpcfadm.py mod -t resource/ddns@ddns1/postdeact/default
  ↵--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/ddns@ddns1/preact/path --set
  ↵<File>
clpcfadm.py mod -t resource/ddns@ddns1/predeact/path --set
  ↵<File>
clpcfadm.py mod -t resource/ddns@ddns1/postact/path --set
  ↵<File>
clpcfadm.py mod -t resource/ddns@ddns1/postdeact/path --set
  ↵<File>
```

---

**Note:** Set all <File> fields to the same value.

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **rscextent.sh**.

```
clpcfadm.py mod -t resource/ddns@ddns1/preact/path --set
  ↵rscextent.sh
clpcfadm.py mod -t resource/ddns@ddns1/predeact/path --set
  ↵rscextent.sh
clpcfadm.py mod -t resource/ddns@ddns1/postact/path --set
  ↵rscextent.sh
clpcfadm.py mod -t resource/ddns@ddns1/postdeact/path --set
  ↵rscextent.sh
```

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/ddns@ddns1/preact/timeout --set
  ↵<Value>
clpcfadm.py mod -t resource/ddns@ddns1/predeact/timeout --set
  ↵<Value>
```

```
clpcfadm.py mod -t resource/ddns@ddns1/postact/timeout --set  
  ↵<Value>  
clpcfadm.py mod -t resource/ddns@ddns1/postdeact/timeout  
  ↵--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.7.3 Deleting a dynamic DNS resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs>  
  ↵ddns ddns1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.8 Disk resource

---

### Note:

The command lines in this section use **disk1** as the group resource name.

Change it to suit your environment.

---

### 7.8.1 Adding a disk resource

Be sure to set the following items. For details, see "*Setting disk resource parameters*".

Item (mandatory)
Group resource name
File System
Device Name
Mount Point

```
clpcfadm.py add rsc <Name of a group to which the resource belongs> disk_  
  ↳disk1  
clpcfadm.py mod -t resource/disk@disk1/parameters/fs --set <File System>  
clpcfadm.py mod -t resource/disk@disk1/parameters/device --set <Device_  
  ↳Name>  
clpcfadm.py mod -t resource/disk@disk1/parameters/mount/point --set  
  ↳<Mount Point>
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.8.2 Setting disk resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/disk@disk1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep disk disk1
```

- Set a parent resource

```
clpcfadm.py add rscdep disk disk1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep disk disk1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/disk@disk1/depend@<Parent resource name>  
    --delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/disk@disk1/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/disk@disk1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/disk@disk1/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1

Continued on next page

Table 7.96 – continued from previous page

Execute Script before Final Action	Value
Do not check (default)	0

```
clpcfadm.py mod -t resource/disk@disk1/act/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/disk@disk1/act/preaction/default_
→--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/disk@disk1/act/preaction/path_
→--set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t resource/disk@disk1/act/preaction/path_
→--set preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/disk@disk1/act/preaction/timeout_
→--set <Value>
```

#### Recovery Operation at Deactivity Failure Detection

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/disk@disk1/deact/retry --set <Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1
Stop the cluster service and shutdown OS (default)	4

Continued on next page

Table 7.98 – continued from previous page

Final Action	Value
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/disk@disk1/deact/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/disk@disk1/deact/preaction/use --set
↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### **Script Settings**

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/disk@disk1/deact/preaction/
↳default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/disk@disk1/deact/preaction/path_
↳--set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/disk@disk1/deact/preaction/path_
↳--set predeactaction.sh
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/disk@disk1/deact/preaction/
    ↳timeout --set <Value>
```

## Details

### Common

- Disk Type

Value
disk (default)
raw
lvm

```
clpcfadm.py mod -t resource/disk@disk1/parameters/disktype --set
    ↳<Value>
```

- File System (Within 15 bytes)

File System
ext3
ext4
xfs
reiserfs
vxfs
zfs

```
clpcfadm.py mod -t resource/disk@disk1/parameters/fs --set <File_
    ↳System>
```

---

**Note:** Set as above with "Disk Type" set to "disk" or "lvm".

---

- Device Name (Within 1023 bytes)

```
clpcfadm.py mod -t resource/disk@disk1/parameters/device --set
    ↳<Device Name>
```

---

**Note:** Specify it as an absolute path.

---

- RAW Device Name (Within 1023 bytes)

```
clpcfadm.py mod -t resource/disk@disk1/parameters/rawdevice --set
    ↳<Raw Device Name>
```

---

**Note:** Set as above with "Disk Type" set to "raw".

---

- Mount Point (Within 1023 bytes)

```
clpcfadm.py mod -t resource/disk@disk1/parameters/mount/point_
    ↳--set <Mount Point>
```

---

**Note:** Specify it as an absolute path.

---

---

**Note:** Set as above with "Disk Type" set to "disk" or "lvm".

---

## Tuning

**If "Disk type" is set to "disk" or "lvm":**

### Mount

- Mount Option (Within 1023 bytes)

Default: rw

```
clpcfadm.py mod -t resource/disk@disk1/parameters/mount/  
    ↳option --set <Mount Option>
```

- Timeout (sec)

Default, 180 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t resource/disk@disk1/parameters/mount/  
    ↳timeout --set <Value>
```

- Retry Count

Default, 3 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t resource/disk@disk1/parameters/mount/  
    ↳retry --set <Value>
```

### Unmount

- Timeout (sec)

Default, 120 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t resource/disk@disk1/parameters/umount/  
    ↳timeout --set <Value>
```

- Retry Count

Default, 3 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t resource/disk@disk1/parameters/umount/  
    ↳retry --set <Value>
```

- Retry Interval

Default, 5 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t resource/disk@disk1/parameters/umount/  
    ↳interval --set <Value>
```

- Forced operation when failure is detected

Forced operation when failure is detected	Value
Kill (default)	kill
Do nothing	none

```
clpcfadm.py mod -t resource/disk@disk1/parameters/umount/  
    ↳action --set <Value>
```

## fsck

---

**Note:** To set the following items, set "File System" to a value other than "xfs" in advance.

---

- fsck Option (Within 1023 bytes)

Default: -y  
 clpcfadm.py mod -t resource/disk@disk1/parameters/fsck/  
 ↳option --set <fsck Option>

- fsck Timeout

Default, 7200 (minimum, 1; maximum, 9999)

clpcfadm.py mod -t resource/disk@disk1/parameters/fsck/  
 ↳timeout --set <Value>

#### **fsck Action Before Mount**

- fsck Action Before Mount

fsck Action Before Mount	Value
Always Execute	1
Execute at Specified Count (default)	2
Do not execute	0

clpcfadm.py mod -t resource/disk@disk1/parameters/fsck/  
 ↳timing --set <Value>

- Count

Default, 10 (minimum, 0; maximum, 999)

clpcfadm.py mod -t resource/disk@disk1/parameters/fsck/  
 ↳interval --set <Value>

---

**Note:** Set as above with "fsck Action Before Mount" set to "Execute at Specified Count".

---

#### **fsck Action When Mount Failed**

- fsck Action When Mount Failed

fsck Action When Mount Failed	Value
Execute (default)	1
Do not execute	0

clpcfadm.py mod -t resource/disk@disk1/parameters/mount/  
 ↳action --set <Value>

#### **Rebuilding of reiserfs**

- Rebuilding of reiserfs

Rebuilding of reiserfs	Value
Check	1
Do not check (default)	0

clpcfadm.py mod -t resource/disk@disk1/parameters/fsck/  
 ↳fixopt --set <Value>

#### **xfs\_repair**

---

**Note:** To set the following items, set "File System" to "xfs" in advance.

---

- xfs\_repair Option (Within 1023 bytes)

```
clpcfadm.py mod -t resource/disk@disk1/parameters/fsck/  
    ↳xfsoption --set <xfs_repair Option>  
• xfs_repair Timeout (sec)
```

Default, 7200 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/disk@disk1/parameters/fsck/  
    ↳xfstimeout --set <Value>
```

#### **xfs\_repair Action When Mount Failed**

- xfs\_repair Action When Mount Failed

xfs_repair Action When Mount Failed	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/disk@disk1/parameters/mount/  
    ↳xfsaction --set <Value>
```

#### **If "Disk type" is set to "raw":**

- Execute Unbind

Execute Unbind	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/disk@disk1/parameters/unbind/  
    ↳execute --set <Value>
```

- Timeout (sec)

Default, 10 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t resource/disk@disk1/parameters/unbind/  
    ↳timeout --set <Value>
```

- Retry Count

Default, 3 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t resource/disk@disk1/parameters/unbind/  
    ↳retry --set <Value>
```

### **Set Up Individually**

Set the following for each server.

- File System

```
clpcfadm.py mod -t resource/disk@disk1/server@<Server name>/  
    ↳parameters/fs --set <Value> --nocheck
```

- Device Name

```
clpcfadm.py mod -t resource/disk@disk1/server@<Server name>/  
    ↳parameters/device --set <Device Name> --nocheck
```

- Raw Device Name

```
clpcfadm.py mod -t resource/disk@disk1/server@<Server name>/  
    ↳parameters/rawdevice --set <Raw Device Name> --nocheck
```

- Mount Point

```
clpcfadm.py mod -t resource/disk@disk1/server@<Server name>/  
    ↳parameters/mount/point --set <Mount Point> --nocheck
```

---

**Note:** To return to the common settings, set the following for each server.

---

```
clpcfadm.py mod -t resource/disk@disk1/server@<Server name> --delete
```

---

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/disk@disk1/start --set <Value>
```

### Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/disk@disk1/preact/use --set <Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/disk@disk1/predeact/use --set  
→<Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/disk@disk1/postact/use --set <Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/disk@disk1/postdeact/use --set  
→<Value>
```

#### **Script Settings**

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/disk@disk1/preact/default --set
  ↵<Value>
clpcfadm.py mod -t resource/disk@disk1/predeact/default --set
  ↵<Value>
clpcfadm.py mod -t resource/disk@disk1/postact/default --set
  ↵<Value>
clpcfadm.py mod -t resource/disk@disk1/postdeact/default
  ↵--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/disk@disk1/preact/path --set
  ↵<File>
clpcfadm.py mod -t resource/disk@disk1/predeact/path --set
  ↵<File>
clpcfadm.py mod -t resource/disk@disk1/postact/path --set
  ↵<File>
clpcfadm.py mod -t resource/disk@disk1/postdeact/path --set
  ↵<File>
```

---

**Note:** Set all <File> fields to the same value.

---

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **rscextent.sh**.

```
clpcfadm.py mod -t resource/disk@disk1/preact/path --set
  ↵rscextent.sh
clpcfadm.py mod -t resource/disk@disk1/predeact/path --set
  ↵rscextent.sh
clpcfadm.py mod -t resource/disk@disk1/postact/path --set
  ↵rscextent.sh
clpcfadm.py mod -t resource/disk@disk1/postdeact/path --set
  ↵rscextent.sh
```

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/disk@disk1/preact/timeout --set
    ↵<Value>
clpcfadm.py mod -t resource/disk@disk1/predeact/timeout --set
    ↵<Value>
clpcfadm.py mod -t resource/disk@disk1/postact/timeout --set
    ↵<Value>
clpcfadm.py mod -t resource/disk@disk1/postdeact/timeout
    ↵--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.8.3 Deleting a disk resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs>
    ↵disk disk1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.9 EXEC resource

---

**Note:**

The command lines in this section use **exec1** as the group resource name.

Change it to suit your environment.

---

### 7.9.1 Adding an EXEC resource

Be sure to set the following items. For details, see "*Setting EXEC resource parameters*".

Item (mandatory)
Group resource name
Start script file
Stop script file

```
clpcfadm.py add rsc <Name of a group to which the resource belongs> exec1
clpcfadm.py mod -t resource/exec@exec1/parameters/act/path --set <Start script file> --nocheck
clpcfadm.py mod -t resource/exec@exec1/parameters/deact/path --set <Stop script file> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.9.2 Setting EXEC resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/exec@exec1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep exec exec1
```

- Set a parent resource

```
clpcfadm.py add rscdep exec exec1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep exec exec1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/exec@exec1/depend@<Parent resource name> --delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/exec@exec1/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/exec@exec1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/exec@exec1/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1

Continued on next page

Table 7.117 – continued from previous page

Execute Script before Final Action	Value
Do not check (default)	0

```
clpcfadm.py mod -t resource/exec@exec1/act/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/exec@exec1/act/preaction/default_
→--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/exec@exec1/act/preaction/path_
→--set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preactaction.sh**.

```
clpcfadm.py mod -t resource/exec@exec1/act/preaction/path_
→--set preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/exec@exec1/act/preaction/timeout_
→--set <Value>
```

#### Recovery Operation at Deactivity Failure Detection

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/exec@exec1/deact/retry --set <Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1
Stop the cluster service and shutdown OS (default)	4

Continued on next page

Table 7.119 – continued from previous page

Final Action	Value
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/exec@exec1/deact/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/exec@exec1/deact/preaction/use --set
↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/exec@exec1/deact/preaction/
↳default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/exec@exec1/deact/preaction/path_
↳--set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/exec@exec1/deact/preaction/path_
↳--set predeactaction.sh
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/exec@exec1/deact/preaction/  
    ↳timeout --set <Value>
```

## Details

- Start script file (Within 1023 bytes)

```
clpcfadm.py mod -t resource/exec@exec1/parameters/act/path --set  
    ↳<Start script file>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **start.sh**.

```
clpcfadm.py mod -t resource/exec@exec1/parameters/act/path --set  
    ↳start.sh
```

- Stop script file (Within 1023 bytes)

```
clpcfadm.py mod -t resource/exec@exec1/parameters/deact/path --set  
    ↳<Stop script file>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **stop.sh**.

```
clpcfadm.py mod -t resource/exec@exec1/parameters/deact/path --set  
    ↳stop.sh
```

## Tuning

### Parameter

#### Start script

- Start script

Start script	Value
Synchronous (default)	1
Asynchronous	0

```
clpcfadm.py mod -t resource/exec@exec1/parameters/act/sync  
    ↳--set <Value>
```

- Timeout (sec)

Default, 1800 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/exec@exec1/parameters/timeout/  
    ↳start --set <Value>
```

---

**Note:** Set as above with "Start script" set to "Synchronous".

---

- Execute on standby server

Execute on standby server	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/exec@exec1/parameters/act/
→postrunothers --set <Value>
- Timeout (sec)
Default, 10 (minimum, 1; maximum, 9999)
clpcfadm.py mod -t resource/exec@exec1/parameters/timeout/
→startothers --set <Value>
```

---

**Note:** Set as above with "Execute on standby server" set to "Execute".

---

#### **Stop script**

- Stop script

Stop script	Value
Synchronous (default)	1
Asynchronous	0

```
clpcfadm.py mod -t resource/exec@exec1/parameters/deact/sync_
→--set <Value>
- Timeout (sec)
Default, 1800 (minimum, 1; maximum, 9999)
clpcfadm.py mod -t resource/exec@exec1/parameters/timeout/
→stop --set <Value>
```

---

**Note:** Set as above with "Stop script" set to "Synchronous".

---

- Execute on standby server

Execute on standby server	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/exec@exec1/parameters/deact/
→prerunothers --set <Value>
- Timeout (sec)
Default, 10 (minimum, 1; maximum, 9999)
clpcfadm.py mod -t resource/exec@exec1/parameters/timeout/
→stopothers --set <Value>
```

---

**Note:** Set as above with "Execute on standby server" set to "Execute".

---

#### **Maintenance**

- Log Output Path (Within 1023 bytes)

```
clpcfadm.py mod -t resource/exec@exec1/parameters/userlog --set  
→<Log Output Path>
```

---

**Note:** Specify it as an absolute path.

---

- Rotate Log

Rotate Log	Value
Set	1
Do not set (default)	0

```
clpcfadm.py mod -t resource/exec@exec1/parameters/logrotate/use  
→--set <Value>
```

- Rotation Size (bytes)

Default, 1000000 (minimum, 1; maximum, 99999999)

```
clpcfadm.py mod -t resource/exec@exec1/parameters/logrotate/size  
→--set <Value>
```

---

**Note:** Set as above with "Rotate Log" set to "Set".

---

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/exec@exec1/start --set <Value>
```

### Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/exec@exec1/preact/use --set <Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/exec@exec1/predeact/use --set
    ↵<Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/exec@exec1/postact/use --set <Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/exec@exec1/postdeact/use --set
    ↵<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/exec@exec1/preact/default --set
    ↵<Value>
clpcfadm.py mod -t resource/exec@exec1/predeact/default --set
    ↵<Value>
clpcfadm.py mod -t resource/exec@exec1/postact/default --set
    ↵<Value>
clpcfadm.py mod -t resource/exec@exec1/postdeact/default
    ↵--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---



---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/exec@exec1/preact/path --set
    ↵<File>
clpcfadm.py mod -t resource/exec@exec1/predeact/path --set
    ↵<File>
clpcfadm.py mod -t resource/exec@exec1/postact/path --set
    ↵<File>
clpcfadm.py mod -t resource/exec@exec1/postdeact/path --set
```

↳ <File>

---

**Note:** Set all <File> fields to the same value.

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **rsextent.sh**.

```
clpcfadm.py mod -t resource/exec@exec1/preact/path --set ↳  
  rsextent.sh  
clpcfadm.py mod -t resource/exec@exec1/predeact/path --set ↳  
  rsextent.sh  
clpcfadm.py mod -t resource/exec@exec1/postact/path --set ↳  
  rsextent.sh  
clpcfadm.py mod -t resource/exec@exec1/postdeact/path --set ↳  
  rsextent.sh
```

---

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/exec@exec1/preact/timeout --set  
  ↳<Value>  
clpcfadm.py mod -t resource/exec@exec1/predeact/timeout --set  
  ↳<Value>  
clpcfadm.py mod -t resource/exec@exec1/postact/timeout --set  
  ↳<Value>  
clpcfadm.py mod -t resource/exec@exec1/postdeact/timeout  
  ↳--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.9.3 Deleting an EXEC resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs> ↳  
  exec exec1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.10 Floating IP resource

---

### Note:

The command lines in this section use **fip1** as the group resource name.  
Change it to suit your environment.

---

### 7.10.1 Adding a floating IP resource

Be sure to set the following items. For details, see "*Setting floating IP resource parameters*".

Item (mandatory)
Group resource name
IP Address

```
clpcfadm.py add rsc <Name of a group to which the resource belongs> fip1
clpcfadm.py mod -t resource/fip@fip1/parameters/ip --set <IP Address>
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.10.2 Setting floating IP resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/fip@fip1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

#### Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep fip fip1
```

- Set a parent resource

```
clpcfadm.py add rscdep fip fip1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep fip fip1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/fip@fip1/depend@<Parent resource name>  
    ↳--delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 5 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/fip@fip1/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/fip@fip1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/fip@fip1/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/fip@fip1/act/paction/use --set  
    ↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/fip@fip1/act/preaction/default
↳--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/fip@fip1/act/preaction/path
↳--set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t resource/fip@fip1/act/preaction/path
↳--set preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/fip@fip1/act/preaction/timeout
↳--set <Value>
```

#### Recovery Operation at Deactivity Failure Detection

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/fip@fip1/deact/retry --set <Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/fip@fip1/deact/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/fip@fip1/deact/preaction/use --set  
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### **Script Settings**

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/fip@fip1/deact/preaction/default  
→--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/fip@fip1/deact/preaction/path  
→--set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/fip@fip1/deact/preaction/path  
→--set predeactaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/fip@fip1/deact/preaction/timeout  
→--set <Value>
```

## **Details**

### **Common**

- IP Address

```
clpcfadm.py mod -t resource/fip@fip1/parameters/ip --set <IP  
→Address>
```

### **Tuning**

#### **Parameter**

### **ifconfig**

- Timeout (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t resource/fip@fip1/parameters/ifconfig/  
  →timeout --set <Value>`

### **ping**

- Interval (sec)  
Default, 1 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t resource/fip@fip1/parameters/ping/  
  →interval --set <Value>`
- Timeout (sec)  
Default, 1 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t resource/fip@fip1/parameters/ping/timeout/  
  →--set <Value>`
- Retry Count  
Default, 0 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t resource/fip@fip1/parameters/ping/retry/  
  →--set <Value>`
- Forced FIP Activation

Forced FIP Activation	Value
Perform forced FIP activation	1
Do not perform forced FIP activation (default)	0

```
clpcfadm.py mod -t resource/fip@fip1/parameters/ping/force/  
  →--set <Value>
```

- ARP Send Count  
Default, 1 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t resource/fip@fip1/parameters/arp/retry/  
  →--set <Value>`
- Judge NIC Link Down as Failure

Judge NIC Link Down as Failure	Value
Yes	1
No (default)	0

```
clpcfadm.py mod -t resource/fip@fip1/parameters/monmii --set  
  →<Value>
```

- Use transmission source change feature

Use transmission source change feature	Value
Use	1
Do not use (default)	0

```
clpcfadm.py mod -t resource/fip@fip1/parameters/srcip/use/  
  →--set <Value>
```

### **Deactivity Check**

- Confirm I/F Deletion

Confirm I/F Deletion	Value
Set (default)	1
Do not set	0

```
clpcfadm.py mod -t resource/fip@fip1/parameters/check/  
    ↳ifconfig/execute --set <Value>
```

- Status at Failure

Resource Startup Attribute	Value
Failure	1
Not Failure (default)	0

```
clpcfadm.py mod -t resource/fip@fip1/parameters/check/  
    ↳ifconfig/error --set <Value>
```

---

**Note:** Set as above with "Confirm I/F Deletion" set to "Set".

---

- Confirm I/F Response

Confirm I/F Deletion	Value
Set (default)	1
Do not set	0

```
clpcfadm.py mod -t resource/fip@fip1/parameters/check/ping/  
    ↳execute --set <Value>
```

- Status at Failure

Status at Failure	Value
Failure	1
Not Failure (default)	0

```
clpcfadm.py mod -t resource/fip@fip1/parameters/check/ping/  
    ↳error --set <Value>
```

---

**Note:** Set as above with "Confirm I/F Response" set to "Set".

---

### **Set Up Individually**

Set the following for each server.

- IP Address

```
clpcfadm.py mod -t resource/fip@fip1/server@<Server name>/  
    ↳parameters/ip --set <IP Address> --nocheck
```

---

**Note:** To return to the common settings, set the following for each server.

```
clpcfadm.py mod -t resource/fip@fip1/server@<Server name> --delete
```

---

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/fip@fip1/start --set <Value>
```

### Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/fip@fip1/preact/use --set <Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/fip@fip1/predeact/use --set <Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/fip@fip1/postact/use --set <Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/fip@fip1/postdeact/use --set <Value>
```

### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/fip@fip1/preact/default --set
↳<Value>
clpcfadm.py mod -t resource/fip@fip1/predeact/default --set
↳<Value>
clpcfadm.py mod -t resource/fip@fip1/postact/default --set
↳<Value>
clpcfadm.py mod -t resource/fip@fip1/postdeact/default --set
↳<Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/fip@fip1/preact/path --set <File>
clpcfadm.py mod -t resource/fip@fip1/predeact/path --set
↳<File>
clpcfadm.py mod -t resource/fip@fip1/postact/path --set <File>
clpcfadm.py mod -t resource/fip@fip1/postdeact/path --set
↳<File>
```

---

**Note:** Set all <File> fields to the same value.

---

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **rscextent.sh**.

```
clpcfadm.py mod -t resource/fip@fip1/preact/path --set
↳rscextent.sh
clpcfadm.py mod -t resource/fip@fip1/predeact/path --set
↳rscextent.sh
clpcfadm.py mod -t resource/fip@fip1/postact/path --set
↳rscextent.sh
clpcfadm.py mod -t resource/fip@fip1/postdeact/path --set
↳rscextent.sh
```

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/fip@fip1/preact/timeout --set
↳<Value>
clpcfadm.py mod -t resource/fip@fip1/predeact/timeout --set
↳<Value>
clpcfadm.py mod -t resource/fip@fip1/postact/timeout --set
↳<Value>
```

```
clpcfadm.py mod -t resource/fip@fip1/postdeact/timeout --set  
  ↳<Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.10.3 Deleting a floating IP resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs> fip  
  ↳fip1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.11 Google Cloud DNS resource

---

**Note:**

The command lines in this section use **gcdns1** as the group resource name.  
Change it to suit your environment.

---

### 7.11.1 Adding a Google Cloud DNS resource

Be sure to set the following items. For details, see "*Setting Google Cloud DNS resource parameters*".

Item (mandatory)
Group resource name
Zone Name
DNS Name
IP Address

```
clpcfadm.py add rsc <Name of a group to which the resource belongs> gcdns_  
↳gcdns1  
clpcfadm.py mod -t resource/gcdns@gcdns1/parameters/zone_name --set <Zone_  
↳Name>  
clpcfadm.py mod -t resource/gcdns@gcdns1/parameters/dns_name --set <DNS_  
↳Name>  
clpcfadm.py mod -t resource/gcdns@gcdns1/parameters/record_ip --set <IP_  
↳Address (Common)>  
clpcfadm.py mod -t resource/gcdns@gcdns1/server@<Server name>/parameters/  
↳record_ip --set <IP Address (Individual)> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.11.2 Setting Google Cloud DNS resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/gcdns@gcdns1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep gcdns gcdns1
```

- Set a parent resource

```
clpcfadm.py add rscdep gcdns gcdns1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep gcdns gcdns1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/gcdns@gcdns1/depend@<Parent resource name>
  ↳ --delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/gcdns@gcdns1/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/gcdns@gcdns1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/gcdns@gcdns1/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1

Continued on next page

Table 7.155 – continued from previous page

Execute Script before Final Action	Value
Do not check (default)	0

```
clpcfadm.py mod -t resource/gcdns@gcdns1/act/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/gcdns@gcdns1/act/preaction/
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/gcdns@gcdns1/act/preaction/path_
→--set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t resource/gcdns@gcdns1/act/preaction/path_
→--set preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/gcdns@gcdns1/act/preaction/
→timeout --set <Value>
```

#### Recovery Operation at Deactivation Failure Detection

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/gcdns@gcdns1/deact/retry --set <Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1
Stop the cluster service and shutdown OS (default)	4

Continued on next page

Table 7.157 – continued from previous page

Final Action	Value
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

`clpcfadm.py mod -t resource/gcdns@gcdns1/deact/action --set <Value>`

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

`clpcfadm.py mod -t resource/gcdns@gcdns1/deact/preaction/use --set  
↳<Value>`

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

`clpcfadm.py mod -t resource/gcdns@gcdns1/deact/preaction/  
↳default --set <Value>`

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

`clpcfadm.py mod -t resource/gcdns@gcdns1/deact/preaction/  
↳path --set <File>`

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

`clpcfadm.py mod -t resource/gcdns@gcdns1/deact/preaction/  
↳path --set predeactaction.sh`

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/gcdns@gcdns1/deact/preaction/  
    ↳timeout --set <Value>
```

## Details

### Common

- Zone Name (Within 63 bytes)

```
clpcfadm.py mod -t resource/gcdns@gcdns1/parameters/zone_name  
    ↳--set <Zone Name>
```

- DNS Name (Within 253 bytes)

```
clpcfadm.py mod -t resource/gcdns@gcdns1/parameters/dns_name --set  
    ↳<DNS Name>
```

- IP Address

```
clpcfadm.py mod -t resource/gcdns@gcdns1/parameters/record_ip  
    ↳--set <IP Address>
```

- TTL (sec)

Default, 300 (minimum, 0; maximum, 2147483647)

```
clpcfadm.py mod -t resource/gcdns@gcdns1/parameters/record_ttl  
    ↳--set <Value>
```

- Delete the record at deactivation

Delete the record at deactivation	Value
Delete (default)	1
Do not delete	0

```
clpcfadm.py mod -t resource/gcdns@gcdns1/parameters/delete --set  
    ↳<Value>
```

### Set Up Individually

Set the following for each server.

- IP Address

```
clpcfadm.py mod -t resource/gcdns@gcdns1/server@<Server name>/  
    ↳parameters/record_ip --set <IP Address> --nocheck
```

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/gcdns@gcdns1/start --set <Value>
```

### Execute Script before or after Activation or Deactivation

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/gcdns@gcdns1/preact/use --set
    ↵<Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/gcdns@gcdns1/predeact/use --set
    ↵<Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/gcdns@gcdns1/postact/use --set
    ↵<Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/gcdns@gcdns1/postdeact/use --set
    ↵<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/gcdns@gcdns1/preact/default --set
    ↵<Value>
clpcfadm.py mod -t resource/gcdns@gcdns1/predeact/default_
    ↵--set <Value>
clpcfadm.py mod -t resource/gcdns@gcdns1/postact/default_
    ↵--set <Value>
```

```
clpcfadm.py mod -t resource/gcdns@gcdns1/postdeact/default  
  ↳--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/gcdns@gcdns1/preact/path --set  
  ↳<File>  
clpcfadm.py mod -t resource/gcdns@gcdns1/predeact/path --set  
  ↳<File>  
clpcfadm.py mod -t resource/gcdns@gcdns1/postact/path --set  
  ↳<File>  
clpcfadm.py mod -t resource/gcdns@gcdns1/postdeact/path --set  
  ↳<File>
```

---

**Note:** Set all <File> fields to the same value.

---

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **rscextent.sh**.

```
clpcfadm.py mod -t resource/gcdns@gcdns1/preact/path --set  
  ↳rscextent.sh  
clpcfadm.py mod -t resource/gcdns@gcdns1/predeact/path --set  
  ↳rscextent.sh  
clpcfadm.py mod -t resource/gcdns@gcdns1/postact/path --set  
  ↳rscextent.sh  
clpcfadm.py mod -t resource/gcdns@gcdns1/postdeact/path --set  
  ↳rscextent.sh
```

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/gcdns@gcdns1/preact/timeout --set  
  ↳<Value>  
clpcfadm.py mod -t resource/gcdns@gcdns1/predeact/timeout  
  ↳--set <Value>  
clpcfadm.py mod -t resource/gcdns@gcdns1/postact/timeout  
  ↳--set <Value>  
clpcfadm.py mod -t resource/gcdns@gcdns1/postdeact/timeout  
  ↳--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.11.3 Deleting a Google Cloud DNS resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs>  
→gcdns gcdns1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.12 Google Cloud Virtual IP resource

---

**Note:**

The command lines in this section use **gcvip1** as the group resource name.  
Change it to suit your environment.

---

### 7.12.1 Adding a Google Cloud Virtual IP resource

Be sure to set the following items. For details, see "*Setting Google Cloud Virtual IP resource parameters*".

Item (mandatory)
Group resource name
Port Number

```
clpcfadm.py add rsc <Name of a group to which the resource belongs> gcvip_  
↳gcvip1  
clpcfadm.py mod -t resource/gcvip@gcvip1/parameters/probeport --set <Port_  
↳Number>
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.12.2 Setting Google Cloud Virtual IP resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/gcvip@gcvip1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep gcvip gcvip1
```

- Set a parent resource

```
clpcfadm.py add rscdep gcvip gcvip1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep gcvip gcvip1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/gcvip@gcvip1/depend@<Parent resource name>
    ↳ --delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 5 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/gcvip@gcvip1/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/gcvip@gcvip1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/gcvip@gcvip1/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1

Continued on next page

Table 7.169 – continued from previous page

Execute Script before Final Action	Value
Do not check (default)	0

```
clpcfadm.py mod -t resource/gcvip@gcvip1/act/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/gcvip@gcvip1/act/preaction/
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/gcvip@gcvip1/act/preaction/path_
→--set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preactaction.sh**.

```
clpcfadm.py mod -t resource/gcvip@gcvip1/act/preaction/path_
→--set preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/gcvip@gcvip1/act/preaction/
→timeout --set <Value>
```

#### Recovery Operation at Deactivity Failure Detection

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/gcvip@gcvip1/deact/retry --set <Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1
Stop the cluster service and shutdown OS (default)	4

Continued on next page

Table 7.171 – continued from previous page

Final Action	Value
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/gcvip@gcvip1/deact/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/gcvip@gcvip1/deact/preaction/use --set
↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/gcvip@gcvip1/deact/preaction/
↳default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/gcvip@gcvip1/deact/preaction/
↳path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/gcvip@gcvip1/deact/preaction/
↳path --set predeactaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/gcvip@gcvip1/deact/preaction/  
    ↳timeout --set <Value>
```

## Details

- Port Number

Default, None (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t resource/gcvip@gcvip1/parameters/probeport --set  
    ↳<Value>
```

## Tuning

- Health Check Timeout (sec)

Default, 30 (minimum, 5; maximum, 999999999)

```
clpcfadm.py mod -t resource/gcvip@gcvip1/parameters/probetimeout  
    ↳--set <Value>
```

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/gcvip@gcvip1/start --set <Value>
```

## Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/gcvip@gcvip1/preact/use --set  
    ↳<Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/gcvip@gcvip1/predeact/use --set  
    ↳<Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/gcvip@gcvip1/postact/use --set
    ↵<Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/gcvip@gcvip1/postdeact/use --set
    ↵<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/gcvip@gcvip1/preact/default --set
    ↵<Value>
clpcfadm.py mod -t resource/gcvip@gcvip1/predeact/default ↵
    --set <Value>
clpcfadm.py mod -t resource/gcvip@gcvip1/postact/default ↵
    --set <Value>
clpcfadm.py mod -t resource/gcvip@gcvip1/postdeact/default ↵
    --set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---



---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/gcvip@gcvip1/preact/path --set
    ↵<File>
clpcfadm.py mod -t resource/gcvip@gcvip1/predeact/path --set
    ↵<File>
clpcfadm.py mod -t resource/gcvip@gcvip1/postact/path --set
    ↵<File>
clpcfadm.py mod -t resource/gcvip@gcvip1/postdeact/path --set
    ↵<File>
```

---

**Note:** Set all <File> fields to the same value.

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **rscextent.sh**.

```
clpcfadm.py mod -t resource/gcvip@gcvip1/preact/path --set_
↳ rscextent.sh
clpcfadm.py mod -t resource/gcvip@gcvip1/predeact/path --set_
↳ rscextent.sh
clpcfadm.py mod -t resource/gcvip@gcvip1/postact/path --set_
↳ rscextent.sh
clpcfadm.py mod -t resource/gcvip@gcvip1/postdeact/path --set_
↳ rscextent.sh
```

---

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/gcvip@gcvip1/preact/timeout --set
↳ <Value>
clpcfadm.py mod -t resource/gcvip@gcvip1/predeact/timeout --
--set <Value>
clpcfadm.py mod -t resource/gcvip@gcvip1/postact/timeout --
--set <Value>
clpcfadm.py mod -t resource/gcvip@gcvip1/postdeact/timeout --
--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.12.3 Deleting a Google Cloud Virtual IP resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs>_
↳ gcvip gcvip1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.13 Hybrid disk resource

---

### Note:

The command lines in this section use **hd1** as the group resource name.  
Change it to suit your environment.

---

### 7.13.1 Adding a hybrid disk resource

Be sure to set the following items. For details, see "*Setting hybrid disk resource parameters*".

Item (mandatory)
Group resource name
Mount Point
Data Partition Device Name
Cluster Partition Device Name
Mirror Disk Connect

```
clpcfadm.py add rsc <Name of a group to which the resource belongs> hd hd1
clpcfadm.py mod -t resource/hd@hd1/parameters/mount/point --set <Mount_
→Point>
clpcfadm.py mod -t resource/hd@hd1/parameters/diskdev/dppath --set <Data_
→Partition Device Name> --nocheck
clpcfadm.py mod -t resource/hd@hd1/parameters/diskdev/cppath --set
→<Cluster Partition Device Name> --nocheck
clpcfadm.py mod -t resource/hd@hd1/parameters/netdev@<ID>/device --set
→<Mirror Disk Connect (Device ID)> --nocheck
clpcfadm.py mod -t resource/hd@hd1/parameters/netdev@<ID>/mdcname --set
→<Mirror Disk Connect (Name)> --nocheck
clpcfadm.py mod -t resource/hd@hd1/parameters/netdev@<ID>/priority --set
→<Mirror Disk Connect (Priority)> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.13.2 Setting hybrid disk resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/hd@hd1/comment --set <Comment>
```

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep hd hd1
```

- Set a parent resource

```
clpcfadm.py add rscdep hd hd1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep hd hd1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/hd@hd1/depend@<Parent resource name>  
    ↳--delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/hd@hd1/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/hd@hd1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/hd@hd1/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/hd@hd1/act/preaction/use --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/hd@hd1/act/preaction/default
↳--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/hd@hd1/act/preaction/path --set
↳<File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preactaction.sh**.

```
clpcfadm.py mod -t resource/hd@hd1/act/preaction/path --set
↳preataction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/hd@hd1/act/preaction/timeout
↳--set <Value>
```

#### Recovery Operation at Deactivity Failure Detection

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/hd@hd1/deact/retry --set <Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1
Stop the cluster service and shutdown OS (default)	4

Continued on next page

Table 7.184 – continued from previous page

Final Action	Value
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/hd@hd1/deact/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/hd@hd1/deact/preaction/use --set
↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### **Script Settings**

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/hd@hd1/deact/preaction/default_
↳--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/hd@hd1/deact/preaction/path_
↳--set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/hd@hd1/deact/preaction/path_
↳--set predeactaction.sh
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/hd@hd1/deact/preaction/timeout
    ↳--set <Value>
```

## Details

### Common

- Mirror Partition Device Name

Value
/dev/NMP1 (default)
/dev/NMP2
/dev/NMP3
/dev/NMP4
/dev/NMP5
/dev/NMP6
/dev/NMP7
/dev/NMP8
/dev/NMP9
/dev/NMP10
/dev/NMP11
/dev/NMP12
/dev/NMP13
/dev/NMP14
/dev/NMP15
/dev/NMP16
/dev/NMP17
/dev/NMP18
/dev/NMP19
/dev/NMP20
/dev/NMP21
/dev/NMP22
/dev/NMP23
/dev/NMP24
/dev/NMP25
/dev/NMP26
/dev/NMP27
/dev/NMP28
/dev/NMP29
/dev/NMP30
/dev/NMP31
/dev/NMP32

```
clpcfadm.py mod -t resource/hd@hd1/parameters/nmppath --set <Value>
```

- Mount Point (Within 1023 bytes)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mount/point --set
    ↳<Mount Point>
```

- Data Partition Device Name (Within 1023 bytes)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/diskdev/dppath --set
    ↳<Data Partition Device Name> --nocheck
```

- Cluster Partition Device Name (Within 1023 bytes)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/diskdev/cppath --set  
→<Cluster Partition Device Name> --nocheck
```

- File System (Within 15 bytes)

File System
ext2
ext3 (default)
ext4
xfs
jfs
reiserfs
none

```
clpcfadm.py mod -t resource/hd@hd1/parameters/fs --set <File  
→System>
```

- Mirror Disk Connect

Value (Mirror Disk Connect [Name])	Value (Mirror Disk Connect [Device ID])
mdc1	400
mdc2	401
mdc3	402
mdc4	403
mdc5	404
mdc6	405
mdc7	406
mdc8	407
mdc9	408
mdc10	409
mdc11	410
mdc12	411
mdc13	412
mdc14	413
mdc15	414
mdc16	415

```
clpcfadm.py mod -t resource/hd@hd1/parameters/netdev@<ID>/device  
→--set <Value (Mirror Disk Connect [Device ID])> --nocheck  
clpcfadm.py mod -t resource/hd@hd1/parameters/netdev@<ID>/mdcname  
→--set <Value (Mirror Disk Connect [Name])> --nocheck  
clpcfadm.py mod -t resource/hd@hd1/parameters/netdev@<ID>/priority  
→--set <Mirror Disk Connect (Priority)> --nocheck
```

---

**Note:**

With only one Mirror Disk Connect, specify 0 for ID.

With more than one Mirror Disk Connect, specify consecutive numbers (e.g., 0, 1, 2...).

---

---

**Note:**

With only one Mirror Disk Connect, specify 0 for Priority.

With more than one Mirror Disk Connect, specify consecutive numbers (e.g., 0, 1, 2...) in order of priority.

---

## Tuning

### Mount

- Mount Option (Within 1023 bytes)

Default: rw

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mount/option
  ↳--set <Mount Option>
```

- Timeout (sec)

Default, 120 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mount/timeout
  ↳--set <Value>
```

- Retry Count

Default, 3 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mount/retry
  ↳--set <Value>
```

### Unmount

- Timeout (sec)

Default, 300 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/umount/timeout
  ↳--set <Value>
```

- Retry Count

Default, 3 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/umount/retry
  ↳--set <Value>
```

- Retry Interval (sec)

Default, 5 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/umount/interval
  ↳--set <Value>
```

- Forced operation when failure is detected

Forced operation when failure is detected	Value
Kill (default)	kill
Do nothing	none

```
clpcfadm.py mod -t resource/hd@hd1/parameters/umount/action
  ↳--set <Value>
```

## fsck

---

**Note:** To set the following items, set "File System" to a value other than "xfs" in advance.

---

- fsck Option (Within 1023 bytes)

Default: -y

```
clpcfadm.py mod -t resource/hd@hd1/parameters/fsck/option
  ↳--set <fsck Option>
```

- fsck Timeout (sec)

Default, 7200 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/fsck/timeout  
↳--set <Value>
```

#### **fsck Action Before Mount**

- fsck Action Before Mount

fsck Action Before Mount	Value
Always Execute	1
Execute at Specified Count (default)	2
Do not execute	0

```
clpcfadm.py mod -t resource/hd@hd1/parameters/fsck/timing  
↳--set <Value>
```

##### - Count

Default, 10 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/fsck/  
↳interval --set <Value>
```

---

**Note:** Set as above with "fsck Action Before Mount" set to "Execute at Specified Count".

---

#### **fsck Action When Mount Failed**

- fsck Action When Mount Failed

fsck Action When Mount Failed	Value
Execute (default)	1
Do not execute	0

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mount/action  
↳--set <Value>
```

#### **Rebuilding of reiserfs**

- Rebuilding of reiserfs

Rebuilding of reiserfs	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/hd@hd1/parameters/fsck/fixopt  
↳--set <Value>
```

#### **xfs\_repair**

---

**Note:** To set the following items, set "File System" to "xfs" in advance.

---

- xfs\_repair Option (Within 1023 bytes)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/fsck/xfsoption  
↳--set <xfs_repair Option>
```

- xfs\_repair Timeout (sec)

Default, 7200 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/fsck/xfstimeout  
↳--set <Value>
```

**xfs\_repair Action When Mount Failed**

- xfs\_repair Action When Mount Failed

xfs_repair Action When Mount Failed	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mount/
    ↳xfsaction --set <Value>
```

**Mirror**

- Execute the initial mirror construction

Execute the initial mirror construction	Value
Yes (default)	1
No	0

```
clpcfadm.py mod -t resource/hd@hd1/parameters/fullcopy --set
    ↳<Value>
```

- Perform Data Synchronization

Perform Data Synchronization	Value
Synchronize (default)	1
Do not synchronize	0

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/sync_
    ↳--set <Value>
```

**Mode**

- Mode

Mode	Value
Synchronous (default)	1
Asynchronous	0

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/
    ↳syncmode --set <Value>
```

---

**Note:** To set the following items, set "Mode" to "Asynchronous" in advance.

---

- Number of Queues

Default, 2048 (minimum, 1; maximum, 999999)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/
    ↳sendqueuesize --set <Value>
```

---

**Note:** If you do not limit the size, specify 0.

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/
    ↳sendqueuesize --set 0
```

---

- Limit rate of Mirror Connect

Limit rate of Mirror Connect	Value
Limit	1

Continued on next page

Table 7.198 – continued from previous page

Limit rate of Mirror Connect	Value
Do not limit (default)	0

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/
    ↳bandlimit/mode --set <Value>
```

- Rate Limit (KB/sec)

Default, 0 (minimum, 1; maximum, 999999)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/
    ↳bandlimit/limit --set <Value>
```

- History Files Store Directory (Within 999 bytes)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/
    ↳historydir --set <History Files Store Directory>
```

---

**Note:** Specify it as an absolute path.

---

- Limit size of History File

- Size Limit (MB)

Default, 0 (minimum, 1; maximum, 999999999)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/
    ↳historymax --set <Value>
```

---

**Note:** If you do not limit the history file size, specify 0.

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/
    ↳historymax --set 0
```

---

- Compress Data

Compress Data	Value
Compress data in normal operation	1
Compress data in recovery operation	2
Compress data in normal and recovery operation	3
Do not compress (default)	0

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/
    ↳compress --set <Value>
```

---

**Important:** You cannot specify "Compress data in normal operation" or "Compress data in normal and recovery operation", with "Synchronize data" set to "Synchronize".

---

#### Recovery Method

- Compress Data When Recovering

Compress Data When Recovering	Value
Compress data in normal operation	1
Compress data in recovery operation	2
Compress data in normal and recovery operation	3
Do not compress (default)	0

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/
    ↳compress --set <Value>
```

**Important:** You cannot specify "Compress data in normal operation" or "Compress data in normal and recovery operation", with "Synchronize data" set to "Synchronize".

---

#### Mirror Communication Encryption

- Encrypt mirror communication

Encrypt mirror communication	Value
Encrypt	1
Do not encrypt (default)	0

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/  
    ↳crypto/use --set <Value>
```

- Key File Path (Within 1023 bytes)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/  
    ↳crypto/keyfile --set <Key File Path>
```

---

**Note:** Set as above with "Encrypt mirror communication" set to "Encrypt".

---

#### Mirror Driver

- Mirror Data Port Number

Default, 29051 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/port  
    ↳--set <Value>
```

- Heartbeat Port Number

Default, 29031 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/hbport  
    ↳--set <Value>
```

- ACK2 Port Number

Default, 29071 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/  
    ↳ack2port --set <Value>
```

- Send Timeout

Default, 30 (minimum, 10; maximum, 99)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/  
    ↳sendtimeout --set <Value>
```

- Connection Timeout

Default, 10 (minimum, 5; maximum, 99)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/  
    ↳connecttimeout --set <Value>
```

- Ack Timeout

Default, 100 (minimum, 1; maximum, 600)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/  
    ↳acktimeout --set <Value>
```

- Receive Timeout

Default, 100 (minimum, 1; maximum, 600)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/  
    ↳recvnormaltimeout --set <Value>
```

#### Mirror Disk Connect

- Heartbeat Interval

Default, 10 (minimum, 1; maximum, 600)

```
clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/  
    ↳hbinterval --set <Value>  
• ICMP Echo Reply Receive Timeout  
    Default, 2 (minimum, 1; maximum, 100)  
    clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/  
        ↳pingtimeout --set <Value>  
• ICMP Echo Request Retry Count  
    Default, 8 (minimum, 1; maximum, 50)  
    clpcfadm.py mod -t resource/hd@hd1/parameters/mddriver/  
        ↳pingretry --set <Value>
```

### **Set Up Individually**

Set the following for each server.

- Mount Point (Within 1023 bytes)

```
clpcfadm.py mod -t resource/hd@hd1/server@<Server name>/parameters/  
    ↳mount/point --set <Mount Point> --nocheck
```

- Data Partition Device Name (Within 1023 bytes)

```
clpcfadm.py mod -t resource/hd@hd1/server@<Server name>/parameters/  
    ↳diskdev/dppath --set <Data Partition Device Name> --nocheck
```

- Cluster Partition Device Name (Within 1023 bytes)

```
clpcfadm.py mod -t resource/hd@hd1/server@<Server name>/parameters/  
    ↳diskdev/cppath --set <Cluster Partition Device Name> --nocheck
```

---

**Note:** To return to the common settings, set the following for each server.

```
clpcfadm.py mod -t resource/hd@hd1/server@<Server name> --delete
```

---

### **Extension**

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/hd@hd1/start --set <Value>
```

### **Execute Script before or after Activation or Deactivation**

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/hd@hd1/preact/use --set <Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/hd@hd1/predeact/use --set <Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/hd@hd1/postact/use --set <Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/hd@hd1/postdeact/use --set <Value>
```

#### **Script Settings**

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/hd@hd1/preact/default --set
  ↵<Value>
clpcfadm.py mod -t resource/hd@hd1/predeact/default --set
  ↵<Value>
clpcfadm.py mod -t resource/hd@hd1/postact/default --set
  ↵<Value>
clpcfadm.py mod -t resource/hd@hd1/postdeact/default --set
  ↵<Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---



---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/hd@hd1/preact/path --set <File>
clpcfadm.py mod -t resource/hd@hd1/predeact/path --set <File>
clpcfadm.py mod -t resource/hd@hd1/postact/path --set <File>
clpcfadm.py mod -t resource/hd@hd1/postdeact/path --set <File>
```

---

**Note:** Set all <File> fields to the same value.

---

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **rscextent.sh**.

```
clpcfadm.py mod -t resource/hd@hd1/preact/path --set
  ↵rscextent.sh
clpcfadm.py mod -t resource/hd@hd1/predeact/path --set
  ↵rscextent.sh
clpcfadm.py mod -t resource/hd@hd1/postact/path --set
  ↵rscextent.sh
clpcfadm.py mod -t resource/hd@hd1/postdeact/path --set
  ↵rscextent.sh
```

---

- **Timeout (sec)**

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/hd@hd1/preact/timeout --set
  ↵<Value>
clpcfadm.py mod -t resource/hd@hd1/predeact/timeout --set
  ↵<Value>
clpcfadm.py mod -t resource/hd@hd1/postact/timeout --set
  ↵<Value>
clpcfadm.py mod -t resource/hd@hd1/postdeact/timeout --set
  ↵<Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.13.3 Deleting a hybrid disk resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs> hd
  ↵hd1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.14 Mirror disk resource

---

### Note:

The command lines in this section use **md1** as the group resource name.

Change it to suit your environment.

---

### 7.14.1 Adding a mirror disk resource

Be sure to set the following items. For details, see "*Setting mirror disk resource parameters*".

Item (mandatory)
Group resource name
Mount Point
Data Partition Device Name
Cluster Partition Device Name
Mirror Disk Connect

```
clpcfadm.py add rsc <Name of a group to which the resource belongs> md md1
clpcfadm.py mod -t resource/md@md1/parameters/mount/point --set <Mount_
→Point>
clpcfadm.py mod -t resource/md@md1/parameters/diskdev/dppath --set <Data_
→Partition Device Name> --nocheck
clpcfadm.py mod -t resource/md@md1/parameters/diskdev/cppath --set
→<Cluster Partition Device Name> --nocheck
clpcfadm.py mod -t resource/md@md1/parameters/netdev@<ID>/device --set
→<Mirror Disk Connect (Device ID)> --nocheck
clpcfadm.py mod -t resource/md@md1/parameters/netdev@<ID>/mdcname --set
→<Mirror Disk Connect (Name)> --nocheck
clpcfadm.py mod -t resource/md@md1/parameters/netdev@<ID>/priority --set
→<Mirror Disk Connect (Priority)> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.14.2 Setting mirror disk resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/md@md1/comment --set <Comment>
```

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep md md1
```

- Set a parent resource

```
clpcfadm.py add rscdep md md1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep md md1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/md@md1/depend@<Parent resource name>  
    ↳--delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/md@md1/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/md@md1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/md@md1/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/md@md1/act/preaction/use --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/md@md1/act/preaction/default
↳--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/md@md1/act/preaction/path --set
↳<File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t resource/md@md1/act/preaction/path --set
↳preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/md@md1/act/preaction/timeout
↳--set <Value>
```

#### Recovery Operation at Deactivity Failure Detection

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/md@md1/deact/retry --set <Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1
Stop the cluster service and shutdown OS (default)	4

Continued on next page

Table 7.212 – continued from previous page

Final Action	Value
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/md@md1/deact/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/md@md1/deact/preaction/use --set
↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/md@md1/deact/preaction/default_
↳--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/md@md1/deact/preaction/path_
↳--set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/md@md1/deact/preaction/path_
↳--set predeactaction.sh
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/md@md1/deact/preaction/timeout
    ↳--set <Value>
```

## Details

### Common

- Mirror Partition Device Name

Value
/dev/NMP1 (default)
/dev/NMP2
/dev/NMP3
/dev/NMP4
/dev/NMP5
/dev/NMP6
/dev/NMP7
/dev/NMP8
/dev/NMP9
/dev/NMP10
/dev/NMP11
/dev/NMP12
/dev/NMP13
/dev/NMP14
/dev/NMP15
/dev/NMP16
/dev/NMP17
/dev/NMP18
/dev/NMP19
/dev/NMP20
/dev/NMP21
/dev/NMP22
/dev/NMP23
/dev/NMP24
/dev/NMP25
/dev/NMP26
/dev/NMP27
/dev/NMP28
/dev/NMP29
/dev/NMP30
/dev/NMP31
/dev/NMP32

```
clpcfadm.py mod -t resource/md@md1/parameters/nmppath --set <Value>
    ↳ --nocheck
```

- Mount Point (Within 1023 bytes)

```
clpcfadm.py mod -t resource/md@md1/parameters/mount/point --set
    ↳<Mount Point>
```

---

**Note:** Specify it as an absolute path.

---

- Data Partition Device Name (Within 1023 bytes)

```
clpcfadm.py mod -t resource/md@md1/parameters/diskdev/dppath --set  
→<Data Partition Device Name> --nocheck
```

---

**Note:** Specify it as an absolute path.

---

- Cluster Partition Device Name (Within 1023 bytes)

```
clpcfadm.py mod -t resource/md@md1/parameters/diskdev/cppath --set  
→<Cluster Partition Device Name> --nocheck
```

---

**Note:** Specify it as an absolute path.

---

- File System (Within 15 bytes)

File System
ext2
ext3 (default)
ext4
xfs
jfs
reiserfs
none

```
clpcfadm.py mod -t resource/md@md1/parameters/fs --set <File  
→System>
```

- Mirror Disk Connect

Value (Mirror Disk Connect [Name])	Value (Mirror Disk Connect [Device ID])
mdc1	400
mdc2	401
mdc3	402
mdc4	403
mdc5	404
mdc6	405
mdc7	406
mdc8	407
mdc9	408
mdc10	409
mdc11	410
mdc12	411
mdc13	412
mdc14	413
mdc15	414
mdc16	415

```
clpcfadm.py mod -t resource/md@md1/parameters/netdev@<ID>/device  
→--set <Value (Mirror Disk Connect [Device ID])> --nocheck  
clpcfadm.py mod -t resource/md@md1/parameters/netdev@<ID>/mdcname  
→--set <Value (Mirror Disk Connect [Name])> --nocheck
```

```
clpcfadm.py mod -t resource/md@md1/parameters/netdev@<ID>/priority
    ↳--set <Mirror Disk Connect (Priority)> --nocheck
```

---

**Note:**

With only one Mirror Disk Connect, specify 0 for ID.

With more than one Mirror Disk Connect, specify consecutive numbers (e.g., 0, 1, 2...).

---

**Note:**

With only one Mirror Disk Connect, specify 0 for Priority.

With more than one Mirror Disk Connect, specify consecutive numbers (e.g., 0, 1, 2...) in order of priority.

---

## Tuning

### Mount

- Mount Option (Within 1023 bytes)

Default: rw

```
clpcfadm.py mod -t resource/md@md1/parameters/mount/option
    ↳--set <Mount Option>
```

- Timeout (sec)

Default, 120 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t resource/md@md1/parameters/mount/timeout
    ↳--set <Value>
```

- Retry Count

Default, 3 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t resource/md@md1/parameters/mount/retry
    ↳--set <Value>
```

### Unmount

- Timeout (sec)

Default, 300 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t resource/md@md1/parameters/umount/timeout
    ↳--set <Value>
```

- Retry Count

Default, 3 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t resource/md@md1/parameters/umount/retry
    ↳--set <Value>
```

- Retry Interval (sec)

Default, 5 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t resource/md@md1/parameters/umount/interval
    ↳--set <Value>
```

- Forced operation when failure is detected

Forced operation when failure is detected	Value
Kill (default)	kill
Do nothing	none

```
clpcfadm.py mod -t resource/md@md1/parameters/umount/action
    ↳--set <Value>
```

## fsck

**Note:** To set the following items, set "File System" to a value other than "xfs" in advance.

---

- fsck Option (Within 1023 bytes)

Default: -y

```
clpcfadm.py mod -t resource/md@md1/parameters/fsck/option  
  --set <fsck Option>
```

- fsck Timeout (sec)

Default, 7200 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/md@md1/parameters/fsck/timeout  
  --set <Value>
```

#### **fsck Action Before Mount**

- fsck Action Before Mount

fsck Action Before Mount	Value
Always Execute	1
Execute at Specified Count (default)	2
Do not execute	0

```
clpcfadm.py mod -t resource/md@md1/parameters/fsck/timing  
  --set <Value>
```

- Count

Default, 10 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t resource/md@md1/parameters/fsck/  
  interval --set <Value>
```

**Note:** Set as above with "fsck Action Before Mount" set to "Execute at Specified Count".

---

#### **fsck Action When Mount Failed**

- fsck Action When Mount Failed

fsck Action When Mount Failed	Value
Execute (default)	1
Do not execute	0

```
clpcfadm.py mod -t resource/md@md1/parameters/mount/action  
  --set <Value>
```

#### **Rebuilding of reiserfs**

- Rebuilding of reiserfs

Rebuilding of reiserfs	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/md@md1/parameters/fsck/fixopt  
  --set <Value>
```

#### **xfs\_repair**

**Note:** To set the following items, set "File System" to "xfs" in advance.

---

- xfs\_repair Option (Within 1023 bytes)

```
clpcfadm.py mod -t resource/md@md1/parameters/fsck/xfsoption
    ↵--set <xfs_repair Option>
```

- xfs\_repair Timeout (sec)

Default, 7200 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/md@md1/parameters/fsck/xfstimeout
    ↵--set <Value>
```

#### **xfs\_repair Action When Mount Failed**

- xfs\_repair Action When Mount Failed

xfs_repair Action When Mount Failed	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/md@md1/parameters/mount/
    ↵xfsaction --set <Value>
```

#### **Mirror**

- Execute the initial mirror construction

Execute the initial mirror construction	Value
Yes (default)	1
No	0

```
clpcfadm.py mod -t resource/md@md1/parameters/fullcopy --set
    ↵<Value>
```

- Execute initial mkfs

Execute initial mkfs	Value
Execute initial mkfs	1
Do not execute initial mkfs (default)	0

```
clpcfadm.py mod -t resource/md@md1/parameters/mkfs --set
    ↵<Value>
```

- Perform Data Synchronization

Synchronize	Value
Synchronize (default)	1
Do not synchronize	0

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/sync_
    ↵--set <Value>
```

#### **Mode**

- Mode

Mode	Value
Synchronous (default)	1
Asynchronous	0

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
    ↳syncmode --set <Value>
```

---

**Note:** To set the following items, set "Mode" to "Asynchronous" in advance.

---

- Number of Queues

Default, 2048 (minimum, 1; maximum, 999999)

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
    ↳sendqueuesize --set <Value>
```

---

**Note:** If you do not limit the size, specify 0.

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
    ↳sendqueuesize --set 0
```

- Limit rate of Mirror Connect

Limit rate of Mirror Connect	Value
Limit	1
Do not limit (default)	0

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
    ↳bandlimit/mode --set <Value>
```

- Rate Limit (KB/sec)

Default, 0 (minimum, 1; maximum, 999999)

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
    ↳bandlimit/limit --set <Value>
```

- History Files Store Directory (Within 999 bytes)

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
    ↳historydir --set <History Files Store Directory>
```

---

**Note:** Specify it as an absolute path.

---

- Limit size of History File

- Size Limit (MB)

Default, 0 (minimum, 1; maximum, 999999999)

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
    ↳historymax --set <Value>
```

---

**Note:** If you do not limit the history file size, specify 0.

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
    ↳historymax --set 0
```

- Compress Data

Compress Data	Value
Compress data in normal operation	1
Compress data in recovery operation	2
Compress data in normal and recovery operation	3
Do not compress (default)	0

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
    ↳compress --set <Value>
```

**Important:** You cannot specify "Compress data in normal operation" or "Compress data in normal and recovery operation", with "Synchronize data" set to "Synchronize".

---

#### Recovery Method

- Compress Data When Recovering

Compress Data When Recovering	Value
Compress data in normal operation	1
Compress data in recovery operation	2
Compress data in normal and recovery operation	3
Do not compress (default)	0

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/
→compress --set <Value>
```

**Important:** You cannot specify "Compress data in normal operation" or "Compress data in normal and recovery operation", with "Synchronize data" set to "Synchronize".

---

#### Mirror Communication Encryption

- Encrypt mirror communication

Encrypt mirror communication	Value
Encrypt	1
Do not encrypt (default)	0

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/
→crypto/use --set <Value>
```

- Key File Path (Within 1023 bytes)

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/
→crypto/keyfile --set <Key File Path>
```

---

**Note:** Set as above with "Encrypt mirror communication" set to "Encrypt".

---

#### Mirror Driver

- Mirror Data Port Number

Default, 29051 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/port_
→--set <Value>
```

- Heartbeat Port Number

Default, 29031 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/hbport_
→--set <Value>
```

- ACK2 Port Number

Default, 29071 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/
→ack2port --set <Value>
```

- Send Timeout

Default, 30 (minimum, 10; maximum, 99)

```
clpcfadm.py mod -t resource/md@md1/parameters/mddriver/
→sendtimeout --set <Value>
```

- Connection Timeout  
Default, 10 (minimum, 5; maximum, 99)  
`clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
  ↳connecttimeout --set <Value>`
- Ack Timeout  
Default, 100 (minimum, 1; maximum, 600)  
`clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
  ↳acktimeout --set <Value>`
- Receive Timeout  
Default, 100 (minimum, 1; maximum, 600)  
`clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
  ↳recvnormaltimeout --set <Value>`

#### **Mirror Disk Connect**

- Heartbeat Interval  
Default, 10 (minimum, 1; maximum, 600)  
`clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
  ↳hbinterval --set <Value>`
- ICMP Echo Reply Receive Timeout  
Default, 2 (minimum, 1; maximum, 100)  
`clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
  ↳pingtimeout --set <Value>`
- ICMP Echo Request Retry Count  
Default, 8 (minimum, 1; maximum, 50)  
`clpcfadm.py mod -t resource/md@md1/parameters/mddriver/  
  ↳pingretry --set <Value>`

#### **Set Up Individually**

Set the following for each server.

- Mount Point (Within 1023 bytes)

```
clpcfadm.py mod -t resource/md@md1/server@<Server name>/parameters/  
  ↳mount/point --set <Mount Point> --nocheck
```

- Data Partition Device Name (Within 1023 bytes)

```
clpcfadm.py mod -t resource/md@md1/server@<Server name>/parameters/  
  ↳diskdev/dppath --set <Data Partition Device Name> --nocheck
```

- Cluster Partition Device Name (Within 1023 bytes)

```
clpcfadm.py mod -t resource/md@md1/server@<Server name>/parameters/  
  ↳diskdev/cppath --set <Cluster Partition Device Name> --nocheck
```

---

**Note:** To return to the common settings, set the following for each server.

```
clpcfadm.py mod -t resource/md@md1/server@<Server name> --delete
```

---

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/md@md1/start --set <Value>
```

### Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/md@md1/preact/use --set <Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/md@md1/predeact/use --set <Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/md@md1/postact/use --set <Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/md@md1/postdeact/use --set <Value>
```

### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/md@md1/preact/default --set
↳<Value>
clpcfadm.py mod -t resource/md@md1/predeact/default --set
↳<Value>
clpcfadm.py mod -t resource/md@md1/postact/default --set
↳<Value>
clpcfadm.py mod -t resource/md@md1/postdeact/default --set
↳<Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/md@md1/preact/path --set <File>
clpcfadm.py mod -t resource/md@md1/predeact/path --set <File>
clpcfadm.py mod -t resource/md@md1/postact/path --set <File>
clpcfadm.py mod -t resource/md@md1/postdeact/path --set <File>
```

---

**Note:** Set all <File> fields to the same value.

---

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **rsextent.sh**.

```
clpcfadm.py mod -t resource/md@md1/preact/path --set ↳
↳ rsextent.sh
clpcfadm.py mod -t resource/md@md1/predeact/path --set ↳
↳ rsextent.sh
clpcfadm.py mod -t resource/md@md1/postact/path --set ↳
↳ rsextent.sh
clpcfadm.py mod -t resource/md@md1/postdeact/path --set ↳
↳ rsextent.sh
```

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/md@md1/preact/timeout --set
↳<Value>
clpcfadm.py mod -t resource/md@md1/predeact/timeout --set
↳<Value>
clpcfadm.py mod -t resource/md@md1/postact/timeout --set
↳<Value>
clpcfadm.py mod -t resource/md@md1/postdeact/timeout --set
↳<Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.14.3 Deleting a mirror disk resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs>  
→<Name of the group to which the resource belongs> md md1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.15 Oracle Cloud Virtual IP resource

---

**Note:**

The command lines in this section use **ocvip1** as the group resource name.  
Change it to suit your environment.

---

### 7.15.1 Adding an Oracle Cloud Virtual IP resource

Be sure to set the following items. For details, see "*Setting Oracle Cloud Virtual IP resource parameters*".

Item (mandatory)
Group resource name
Port Number

```
clpcfadm.py add rsc <Name of a group to which the resource belongs> ocvip_  
↪ocvip1  
clpcfadm.py mod -t resource/ocvip@ocvip1/parameters/probeport --set <Port_  
↪Number>
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.15.2 Setting Oracle Cloud Virtual IP resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/ocvip@ocvip1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep ocvip ocvip1
```

- Set a parent resource

```
clpcfadm.py add rscdep ocvip ocvip1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep ocvip ocvip1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/ocvip@ocvip1/depend@<Parent resource name>
    ↳ --delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 5 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/ocvip@ocvip1/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/ocvip@ocvip1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/ocvip@ocvip1/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1

Continued on next page

Table 7.239 – continued from previous page

Execute Script before Final Action	Value
Do not check (default)	0

```
clpcfadm.py mod -t resource/ocvip@ocvip1/act/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/ocvip@ocvip1/act/preaction/
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/ocvip@ocvip1/act/preaction/path_
→--set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preactaction.sh**.

```
clpcfadm.py mod -t resource/ocvip@ocvip1/act/preaction/path_
→--set preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/ocvip@ocvip1/act/preaction/
→timeout --set <Value>
```

#### Recovery Operation at Deactivity Failure Detection

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/ocvip@ocvip1/deact/retry --set <Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1
Stop the cluster service and shutdown OS (default)	4

Continued on next page

Table 7.241 – continued from previous page

Final Action	Value
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/ocvip@ocvip1/deact/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/ocvip@ocvip1/deact/preaction/use --set
↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/ocvip@ocvip1/deact/preaction/
↳default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/ocvip@ocvip1/deact/preaction/
↳path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/ocvip@ocvip1/deact/preaction/
↳path --set predeactaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/ocvip@ocvip1/deact/preaction/  
    ↳timeout --set <Value>
```

## Details

- Port Number

Default, None (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t resource/ocvip@ocvip1/parameters/probeport --set  
    ↳<Value>
```

## Tuning

- Health Check Timeout (sec)

Default, 30 (minimum, 5; maximum, 999999999)

```
clpcfadm.py mod -t resource/ocvip@ocvip1/parameters/probetimeout  
    ↳--set <Value>
```

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/ocvip@ocvip1/start --set <Value>
```

## Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/ocvip@ocvip1/preact/use --set  
    ↳<Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/ocvip@ocvip1/predeact/use --set  
    ↳<Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/ocvip@ocvip1/postact/use --set
    ↵<Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/ocvip@ocvip1/postdeact/use --set
    ↵<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/ocvip@ocvip1/preact/default --set
    ↵<Value>
clpcfadm.py mod -t resource/ocvip@ocvip1/predeact/default ↴
    ↵--set <Value>
clpcfadm.py mod -t resource/ocvip@ocvip1/postact/default ↴
    ↵--set <Value>
clpcfadm.py mod -t resource/ocvip@ocvip1/postdeact/default ↴
    ↵--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---



---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/ocvip@ocvip1/preact/path --set
    ↵<File>
clpcfadm.py mod -t resource/ocvip@ocvip1/predeact/path --set
    ↵<File>
clpcfadm.py mod -t resource/ocvip@ocvip1/postact/path --set
    ↵<File>
clpcfadm.py mod -t resource/ocvip@ocvip1/postdeact/path --set
    ↵<File>
```

---

**Note:** Set all <File> fields to the same value.

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **rscextent.sh**.

```
clpcfadm.py mod -t resource/ocvip@ocvip1/preact/path --set_
↳ rscextent.sh
clpcfadm.py mod -t resource/ocvip@ocvip1/predeact/path --set_
↳ rscextent.sh
clpcfadm.py mod -t resource/ocvip@ocvip1/postact/path --set_
↳ rscextent.sh
clpcfadm.py mod -t resource/ocvip@ocvip1/postdeact/path --set_
↳ rscextent.sh
```

---

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/ocvip@ocvip1/preact/timeout --set
↳ <Value>
clpcfadm.py mod -t resource/ocvip@ocvip1/predeact/timeout --
--set <Value>
clpcfadm.py mod -t resource/ocvip@ocvip1/postact/timeout --
--set <Value>
clpcfadm.py mod -t resource/ocvip@ocvip1/postdeact/timeout --
--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.15.3 Deleting an Oracle Cloud Virtual IP resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs>
↳ <Name of the group to which the resource belongs> ocvip ocvip1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.16 Virtual IP resource

---

### Note:

The command lines in this section use **vip1** as the group resource name.

Change it to suit your environment.

---

### 7.16.1 Adding a Virtual IP resource

Be sure to set the following items. For details, see "*Setting Virtual IP resource parameters*".

Item (mandatory)
Group resource name
IP Address
NIC Alias Name
Destination IP Address
Source IP Address
Routing Protocol

```
clpcfadm.py add rsc <Name of a group to which the resource belongs> vip1
clpcfadm.py mod -t resource/vip@vip1/parameters/ip --set <IP Address (Common)>
clpcfadm.py mod -t resource/vip@vip1/server@<Server name>/parameters/ip
--set <IP Address (Individual)> --nocheck
clpcfadm.py mod -t resource/vip@vip1/parameters/iface --set <NIC alias
name (common)>
clpcfadm.py mod -t resource/vip@vip1/server@<Server name>/parameters/
--set <NIC alias name (individual)> --nocheck
clpcfadm.py mod -t resource/vip@vip1/parameters/multicast/dstaddr --set
<Destination IP Address (Common)>
clpcfadm.py mod -t resource/vip@vip1/server@<Server name>/parameters/
--multicast/dstaddr --set <Destination IP Address (Individual)> --nocheck
clpcfadm.py mod -t resource/vip@vip1/parameters/multicast/srcaddr --set
<Source IP Address (Common)>
clpcfadm.py mod -t resource/vip@vip1/server@<Server name>/parameters/
--multicast/srcaddr --set <Source IP Address (Individual)> --nocheck
clpcfadm.py mod -t resource/vip@vip1/parameters/protocol --set <Routing
Protocol (Common)>
clpcfadm.py mod -t resource/vip@vip1/server@<Server name>/parameters/
--protocol --set <Routing Protocol (Individual)> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

## 7.16.2 Setting Virtual IP resource parameters

### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/vip@vip1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

### Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep vip vip1
```

- Set a parent resource

```
clpcfadm.py add rscdep vip vip1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep vip vip1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/vip@vip1/depend@<Parent resource name>   
    ↳--delete
```

### Recovery Operation

#### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/vip@vip1/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/vip@vip1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4

Continued on next page

Table 7.251 – continued from previous page

Final Action	Value
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/vip@vip1/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/vip@vip1/act/preaction/use --set
↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/vip@vip1/act/preaction/default_
↳--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/vip@vip1/act/preaction/path_
↳--set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **preactaction.sh**.

```
clpcfadm.py mod -t resource/vip@vip1/act/preaction/path_
↳--set preactaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/vip@vip1/act/preaction/timeout  
↳--set <Value>
```

#### **Recovery Operation at Deactivation Failure Detection**

- Retry Count at Deactivation Failure

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/vip@vip1/deact/retry --set <Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/vip@vip1/deact/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/vip@vip1/deact/preaction/use --set  
↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### **Script Settings**

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/vip@vip1/deact/preaction/default  
↳--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/vip@vip1/deact/preaction/path
```

`↳--set <File>`

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.  
`clpcfadm.py mod -t resource/vip@vip1/deact/preaction/path`  
`↳--set predeactaction.sh`

---

– Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

`clpcfadm.py mod -t resource/vip@vip1/deact/preaction/timeout`  
`↳--set <Value>`

## Details

### Common

- IP Address

`clpcfadm.py mod -t resource/vip@vip1/parameters/ip --set <IP`  
`↳Address>`

- NIC Alias Name (Within 15 bytes)

`clpcfadm.py mod -t resource/vip@vip1/parameters/iframe --set <NIC`  
`↳Alias Name>`

- Destination IP Address

`clpcfadm.py mod -t resource/vip@vip1/parameters/multicast/dstaddr`  
`↳--set <Destination IP Address>`

- Source IP Address

`clpcfadm.py mod -t resource/vip@vip1/parameters/multicast/srcaddr`  
`↳--set <Source IP Address>`

- Send Interval (sec)

Default, 10 (minimum, 1; maximum, 30)

`clpcfadm.py mod -t resource/vip@vip1/parameters/multicast/interval`  
`↳--set <Value>`

- Routing Protocol

Value
RIPngver1
RIPngver2
RIPngver3
RIPver1
RIPver2

`clpcfadm.py mod -t resource/vip@vip1/parameters/protocol --set`  
`↳<Value>`

**Note:** If you use two or more routing protocols, put commas (,) to separate them.

```
clpcfadm.py mod -t resource/vip@vip1/parameters/protocol --set  
→ "RIPNgver3,RIPver2"
```

---

## Tuning

### Parameter

#### **ifconfig**

- Timeout (sec)  
Default, 60 (minimum, 1; maximum, 999)  
clpcfadm.py mod -t resource/vip@vip1/parameters/ifconfig/  
→ timeout --set <Value>

#### **ping**

- Interval (sec)  
Default, 1 (minimum, 0; maximum, 999)  
clpcfadm.py mod -t resource/vip@vip1/parameters/ping/  
→ interval --set <Value>
- Timeout (sec)  
Default, 1 (minimum, 0; maximum, 999)  
clpcfadm.py mod -t resource/vip@vip1/parameters/ping/timeout  
→ --set <Value>
- Retry Count  
Default, 0 (minimum, 0; maximum, 999)  
clpcfadm.py mod -t resource/vip@vip1/parameters/ping/retry  
→ --set <Value>
- Forced VIP Activation

Forced VIP Activation	Value
Perform forced VIP activation	1
Do not perform forced VIP activation (default)	0

```
clpcfadm.py mod -t resource/vip@vip1/parameters/ping/force  
→ --set <Value>
```

- ARP Send Count  
Default, 1 (minimum, 0; maximum, 999)  
clpcfadm.py mod -t resource/vip@vip1/parameters/arp/retry  
→ --set <Value>
- Judge NIC Link Down as Failure

Judge NIC Link Down as Failure	Value
Yes	1
No (default)	0

```
clpcfadm.py mod -t resource/vip@vip1/parameters/monmii --set  
→ <Value>
```

#### **Deactivity Check**

- Confirm I/F Deletion

Confirm I/F Deletion	Value
Set (default)	1
Do not set	0

```
clpcfadm.py mod -t resource/vip@vip1/parameters/check/
    ↳ifconfig/execute --set <Value>
```

- Status at Failure

Resource Startup Attribute	Value
Failure	1
Not Failure (default)	0

```
clpcfadm.py mod -t resource/vip@vip1/parameters/check/
    ↳ifconfig/error --set <Value>
```

---

**Note:** Set as above with "Confirm I/F Deletion" set to "Set".

---

- Confirm I/F Response

Confirm I/F Deletion	Value
Set (default)	1
Do not set	0

```
clpcfadm.py mod -t resource/vip@vip1/parameters/check/ping/
    ↳execute --set <Value>
```

- Status at Failure

Status at Failure	Value
Failure	1
Not Failure (default)	0

```
clpcfadm.py mod -t resource/vip@vip1/parameters/check/ping/
    ↳error --set <Value>
```

---

**Note:** Set as above with "Confirm I/F Response" set to "Set".

---

#### RIP

- Metric
 

Default, 1 (minimum, 1; maximum, 15)  
`clpcfadm.py mod -t resource/vip@vip1/parameters/protocols/rip/
 ↳metric --set <Value>`

#### Port

- Port
 

Default, 520 (minimum, 1; maximum, 65535)

#### Add

```
clpcfadm.py mod -t resource/vip@vip1/parameters/protocols/
    ↳rip/port --set <Value>
```

---

**Note:** If you set two or more ports, put commas (,) to separate them.

```
clpcfadm.py mod -t resource/vip@vip1/parameters/protocols/
    ↳rip/port --set "12345,520"
```

**Delete (initializing the value to the default value)**  
clpcfadm.py mod -t resource/vip@vip1/parameters/protocols/  
    ↪ripng/port --set 520

#### RIPng

- Metric

Default, 1 (minimum, 1; maximum, 15)

clpcfadm.py mod -t resource/vip@vip1/parameters/protocols/  
    ↪ripng/metric --set <Value>

- Port

Default, 521 (minimum, 1; maximum, 65535)

#### Add

clpcfadm.py mod -t resource/vip@vip1/parameters/  
    ↪protocols/ripng/port --set <Value>

**Note:** If you set two or more ports, put commas (,) to separate them.

clpcfadm.py mod -t resource/vip@vip1/parameters/  
    ↪protocols/ripng/port --set "12345,521"

---

**Delete (initializing the value to the default value)**

clpcfadm.py mod -t resource/vip@vip1/parameters/  
    ↪protocols/ripng/port --set 521

#### Set Up Individually

Set the following for each server.

- IP Address

clpcfadm.py mod -t resource/vip@vip1/server@<Server name>/  
    ↪parameters/ip --set <IP Address> --nocheck

- NIC Alias Name (Within 15 bytes)

clpcfadm.py mod -t resource/vip@vip1/server@<Server name>/  
    ↪parameters/hostname --set <NIC Alias Name> --nocheck

- Destination IP Address

clpcfadm.py mod -t resource/vip@vip1/server@<Server name>/  
    ↪parameters/multicast/dstaddr --set <Destination IP Address>  
    ↪--nocheck

- Source IP Address

clpcfadm.py mod -t resource/vip@vip1/server@<Server name>/  
    ↪parameters/multicast/srcaddr --set <Source IP Address> --nocheck

- Send Interval (sec)

clpcfadm.py mod -t resource/vip@vip1/server@<Server name>/  
    ↪parameters/multicast/interval --set <Send Interval> --nocheck

- Routing Protocol

clpcfadm.py mod -t resource/vip@vip1/server@<Server name>/  
    ↪parameters/protocol --set <Routing Protocol> --nocheck

## Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/vip@vip1/start --set <Value>
```

### Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/vip@vip1/preact/use --set <Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/vip@vip1/predeact/use --set <Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/vip@vip1/postact/use --set <Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/vip@vip1/postdeact/use --set <Value>
```

### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/vip@vip1/preact/default --set
↳<Value>
clpcfadm.py mod -t resource/vip@vip1/predeact/default --set
↳<Value>
clpcfadm.py mod -t resource/vip@vip1/postact/default --set
↳<Value>
clpcfadm.py mod -t resource/vip@vip1/postdeact/default --set
↳<Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/vip@vip1/preact/path --set <File>
clpcfadm.py mod -t resource/vip@vip1/predeact/path --set
↳<File>
clpcfadm.py mod -t resource/vip@vip1/postact/path --set <File>
clpcfadm.py mod -t resource/vip@vip1/postdeact/path --set
↳<File>
```

---

**Note:** Set all <File> fields to the same value.

---

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **rscextent.sh**.

```
clpcfadm.py mod -t resource/vip@vip1/preact/path --set
↳rscextent.sh
clpcfadm.py mod -t resource/vip@vip1/predeact/path --set
↳rscextent.sh
clpcfadm.py mod -t resource/vip@vip1/postact/path --set
↳rscextent.sh
clpcfadm.py mod -t resource/vip@vip1/postdeact/path --set
↳rscextent.sh
```

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/vip@vip1/preact/timeout --set
↳<Value>
clpcfadm.py mod -t resource/vip@vip1/predeact/timeout --set
↳<Value>
clpcfadm.py mod -t resource/vip@vip1/postact/timeout --set
↳<Value>
```

```
clpcfadm.py mod -t resource/vip@vip1/postdeact/timeout --set  
→<Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.16.3 Deleting a Virtual IP resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs>  
→<Name of the group to which the resource belongs> vip vip1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## 7.17 Volume manager resource

---

### Note:

The command lines in this section use **volmgr1** as the group resource name.  
Change it to suit your environment.

---

### 7.17.1 Adding a volume manager resource

Be sure to set the following items. For details, see "*Setting volume manager resource parameters*".

Item (mandatory)
Group resource name
Volume Manager
Target Name

```
clpcfadm.py add rsc <Name of a group to which the resource belongs>  
→ volmgr volmgr1  
clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/type --set <Volume  
→ Manager>  
clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/devname --set  
→ <Target Name>
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 7.17.2 Setting volume manager resource parameters

#### Basic information

- Group resource name (Within 31 bytes)

**This is set when the resource is added. To change the group resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t resource/volmgr@volmgr1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Dependency

- Follow the default dependency (default)

```
clpcfadm.py del rscdep volmgr volmgr1
```

- Set a parent resource

```
clpcfadm.py add rscdep volmgr volmgr1 <Parent resource name>
```

- No parent resource

```
clpcfadm.py add rscdep volmgr volmgr1 ""
```

- Delete a parent resource

```
clpcfadm.py mod -t resource/volmgr@volmgr1/depend@<Parent resource_<br/>name> --delete
```

## Recovery Operation

### Recovery Operation at Activity Failure Detection

- Retry Count

Default, 5 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/volmgr@volmgr1/act/retry --set <Value>
```

- Failover Threshold

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/volmgr@volmgr1/act/fo --set <Value>
```

- Final Action

Final Action	Value
No operation (activate next resource)	0
No operation (not activate next resource) (default)	1
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/volmgr@volmgr1/act/action --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1

Continued on next page

Table 7.272 – continued from previous page

Execute Script before Final Action	Value
Do not check (default)	0

```
clpcfadm.py mod -t resource/volmgr@volmgr1/act/preaction/use --set  
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/volmgr@volmgr1/act/preaction/  
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/volmgr@volmgr1/act/preaction/  
→path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preactaction.sh**.

```
clpcfadm.py mod -t resource/volmgr@volmgr1/act/preaction/  
→path --set preaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/volmgr@volmgr1/act/preaction/  
→timeout --set <Value>
```

#### Recovery Operation at Deactivity Failure Detection

- Retry Count at Deactivation Failure

Default, 5 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t resource/volmgr@volmgr1/deact/retry --set  
→<Value>
```

- Final Action

Final Action	Value
No operation (deactivate next resource)	0
No operation (not deactivate next resource)	1

Continued on next page

Table 7.274 – continued from previous page

Final Action	Value
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t resource/volmgr@volmgr1/deact/action --set
    ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/volmgr@volmgr1/deact/preaction/use_
    ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/volmgr@volmgr1/deact/preaction/
    ↳default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/volmgr@volmgr1/deact/preaction/
    ↳path --set <File>
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **predeactaction.sh**.

```
clpcfadm.py mod -t resource/volmgr@volmgr1/deact/preaction/
    ↳path --set predeactaction.sh
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)  
clpcfadm.py mod -t resource/volmgr@volmgr1/deact/preaction/  
  ↳timeout --set <Value>

## Details

- Volume Manager

Value
lvm
zfspool

clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/type --set  
  ↳<Value>

- Target Name (Within 1023 bytes)

clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/devname --set  
  ↳<Target Name>

## Tuning

### Import

**If "Volume manager" is set to "lvm":**

- Import Timeout (sec)  
Default, 300 (minimum, 1; maximum, 9999)  
clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/import/  
  ↳timeout --set <Value>
- Start Volume Timeout (sec)  
Default, 60 (minimum, 1; maximum, 9999)  
clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/import/  
  ↳timeout2 --set <Value>
- Volume Status Check Timeout (sec)  
Default, 60 (minimum, 1; maximum, 999)  
clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/import/  
  ↳vgsto --set <Value>

**If "Volume manager" is set to "zfspool":**

- Import Timeout (sec)  
Default, 300 (minimum, 1; maximum, 9999)  
clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/import/  
  ↳timeout --set <Value>
- Force Option at Import

Force Option at Import	Value
Enable (default)	1
Do not enable	0

clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/import/  
  ↳force --set <Value>

- Execute Ping Check

Execute Ping Check	Value
Enable (default)	1
Do not enable	0

```
clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/zpool/
    ↳pingchk --set <Value>
```

### Export

**If "Volume manager" is set to "lvm":**

- Stop Volume Timeout (sec)  
Default, 60 (minimum, 1; maximum, 9999)  
clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/export/
 ↳timeout3 --set <Value>
- Export Timeout (sec)  
Default, 300 (minimum, 1; maximum, 999)  
clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/export/
 ↳timeout --set <Value>
- Volume Status Check Timeout (sec)  
Default, 60 (minimum, 1; maximum, 999)  
clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/export/
 ↳vgsto --set <Value>

**If "Volume manager" is set to "zfspool":**

- Export Timeout (sec)  
Default, 300 (minimum, 1; maximum, 999)  
clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/export/
 ↳timeout --set <Value>
- Forced Export

Forced Export	Value
Enable (default)	1
Do not enable	0

```
clpcfadm.py mod -t resource/volmgr@volmgr1/parameters/export/
    ↳force --set <Value>
```

### Extension

- Resource Startup Attribute

Resource Startup Attribute	Value
Automatic startup (default)	1
Manual startup	0

```
clpcfadm.py mod -t resource/volmgr@volmgr1/start --set <Value>
```

### Execute Script before or after Activation or Deactivation

---

**Note:** If "Execute" is set for a script, specify the file. (See "Script Settings" -> "File".)

---

- Execute Script before Activation

Execute Script before Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/volmgr@volmgr1/preact/use --set  
  ↳<Value>
```

- Execute Script after Activation

Execute Script after Activation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/volmgr@volmgr1/predeact/use --set  
  ↳<Value>
```

- Execute Script before Deactivation

Execute Script before Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/volmgr@volmgr1/postact/use --set  
  ↳<Value>
```

- Execute Script after Deactivation

Execute Script after Deactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t resource/volmgr@volmgr1/postdeact/use --set  
  ↳<Value>
```

#### **Script Settings**

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t resource/volmgr@volmgr1/preact/default  
  ↳--set <Value>  
clpcfadm.py mod -t resource/volmgr@volmgr1/predeact/default  
  ↳--set <Value>  
clpcfadm.py mod -t resource/volmgr@volmgr1/postact/default  
  ↳--set <Value>  
clpcfadm.py mod -t resource/volmgr@volmgr1/postdeact/default  
  ↳--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t resource/volmgr@volmgr1/preact/path --set
  ↵<File>
clpcfadm.py mod -t resource/volmgr@volmgr1/predeact/path_
  ↵--set <File>
clpcfadm.py mod -t resource/volmgr@volmgr1/postact/path --set
  ↵<File>
clpcfadm.py mod -t resource/volmgr@volmgr1/postdeact/path_
  ↵--set <File>
```

---

**Note:** Set all <File> fields to the same value.

---

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **rscextent.sh**.

```
clpcfadm.py mod -t resource/volmgr@volmgr1/preact/path --set_
  ↵rscextent.sh
clpcfadm.py mod -t resource/volmgr@volmgr1/predeact/path_
  ↵--set rscextent.sh
clpcfadm.py mod -t resource/volmgr@volmgr1/postact/path --set_
  ↵rscextent.sh
clpcfadm.py mod -t resource/volmgr@volmgr1/postdeact/path_
  ↵--set rscextent.sh
```

- Timeout (sec)

Default, 30 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t resource/volmgr@volmgr1/preact/timeout_
  ↵--set <Value>
clpcfadm.py mod -t resource/volmgr@volmgr1/predeact/timeout_
  ↵--set <Value>
clpcfadm.py mod -t resource/volmgr@volmgr1/postact/timeout_
  ↵--set <Value>
clpcfadm.py mod -t resource/volmgr@volmgr1/postdeact/timeout_
  ↵--set <Value>
```

---

**Note:** Set each of the <Value> fields to the same value.

---

### 7.17.3 Deleting a volume manager resource

Delete a resource by specifying the group resource type and group resource name.

```
clpcfadm.py del rsc <Name of the group to which the resource belongs>  
→<Name of the group to which the resource belongs> volmgr volmgr1
```

---

**Important:** Resources associated with the group resource that you delete, such as monitor resources, are not deleted together.

---

## CONFIGURING MONITOR RESOURCES

### 8.1 ARP monitor resource

---

**Note:**

The command lines in this section use **arpw1** as the monitor resource name.  
Change it to suit your environment.

---

#### 8.1.1 Adding an ARP monitor resource

Be sure to set the following items. For details, see "*Setting ARP monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Target Resource
Recovery target
Recovery target type

```
clpcfadm.py add mon arpw arpwl
clpcfadm.py mod -t monitor/arpw@arpwl/target --set <Target Resource
  ↳ (monitored when active)>
clpcfadm.py mod -t monitor/arpw@arpwl/parameters/object --set <Target
  ↳ Resource>
clpcfadm.py mod -t monitor/arpw@arpwl/relation/name --set <Recovery
  ↳ target> --nocheck
clpcfadm.py mod -t monitor/arpw@arpwl/relation/type --set <Recovery
  ↳ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

## 8.1.2 Setting ARP monitor resource parameters

### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/arpw@arpwl/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

### Monitor (common)

- Interval (sec)

Default, 30 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/arpw@arpwl/polling/interval --set <Value>
```

- Timeout (sec)

Default, 180 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/arpw@arpwl/polling/timeout --set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/timeout/
↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/timeout/notrecovery/
↳use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/arpw@arpwl/polling/reconfirmation --set
    ↳<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/arpw@arpwl/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/arpw@arpwl/target --set <Target Resource>
    ↳ (monitored when active)>
```

---

**Note:** You can specify only a virtual or floating IP resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/arpw@arpwl/proctrl/priority --set <Value>
```

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/arpw@arpwl/perf/metrics/use --set <Value>
```

## Monitor (special)

- Target Resource

```
clpcfadm.py mod -t monitor/arpw@arpwl/parameters/object --set <Target Resource>
```

---

**Note:** You can specify only a virtual or floating IP resource.

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/arpw@arpwl/relation/name --set <Recovery target>
    ↳ --nocheck
```

```
clpcfadm.py mod -t monitor/arpw@arpwl/relation/type --set <Recovery target type>
    ↳ --nocheck
```

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/threshold/restart  
    ↳--set 0  
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/threshold/fo --set  
    ↳0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/threshold/restart  
    ↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/threshold/script  
    ↳--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/preaction/userrestart  
    ↳--set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/threshold/restart  
    ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1

Continued on next page

Table 8.7 – continued from previous page

Execute Script before Failover	Value
Do not check (default)	0

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/preaction/usefailover
    ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/threshold/fo --set
    ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/preaction/use --set
    ↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>4</sup>	16
Stop group <sup>5</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/action --set <Value>
```

#### Script Settings

<sup>4</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>5</sup> Cannot be specified with "Recovery target type" set to "cls".

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/preaction/default  
↳--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/preaction/path  
↳--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/preaction/path  
↳--set preaction.sh --nocheck
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/arpw@arpwl/emergency/preaction/timeout  
↳--set <Value>
```

### 8.1.3 Deleting an ARP monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon arpw arpwl
```

## 8.2 AWS AZ monitor resource

---

### Note:

The command lines in this section use **awsazw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.2.1 Adding an AWS AZ monitor resource

Be sure to set the following items. For details, see "*Setting AWS AZ monitor resource parameters*".

Item (mandatory)
Monitor resource name
Availability Zone
Recovery target
Recovery target type

```
clpcfadm.py add mon awsazw awsazw1
clpcfadm.py mod -t monitor/awsazw@awsazw1/parameters/availabilityzone
    --set <Availability Zone>
clpcfadm.py mod -t monitor/awsazw@awsazw1/relation/name --set <Recovery_
    target> --nocheck
clpcfadm.py mod -t monitor/awsazw@awsazw1/relation/type --set <Recovery_
    target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.2.2 Setting AWS AZ monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/polling/interval --set  
→<Value>
```

- Timeout (sec)

Default, 180 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/polling/timeout --set  
→<Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/dumpcollect/use  
→--set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/timeout/  
→notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/timeout/  
→notrecovery/use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 1 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/polling/reconfirmation  
→--set <Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/awsazw@awsazwl/firstmonwait --set <Value>
```

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/awsazw@awsazwl/proctrl/priority --set
  ↳<Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/awsazw@awsazwl/polling/servers@<ID>/name
  ↳--set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/awsazw@awsazwl/perf/metrics/use --set
  ↳<Value>
```

## Monitor (special)

### Common

- Availability Zone (Within 45 bytes)

```
clpcfadm.py mod -t monitor/awsazw@awsazwl/parameters/
  ↳availabilityzone --set <Availability Zone>
```

- Action when AWS CLI command failed to receive response

Action when AWS CLI command failed to receive response	Value
Disable recovery action(Do nothing) (default)	0
Disable recovery action(Display warning)	1
Recover	2

```
clpcfadm.py mod -t monitor/awsazw@awsazwl/parameters	mode --set
  ↳<Value>
```

### Set Up Individually

Set the following for each server.

- Availability Zone (Within 45 bytes)

```
clpcfadm.py mod -t monitor/awsazw@awsazwl/server@<Server name>/
  ↳parameters/availabilityzone --set <Value> --nocheck
```

---

**Note:** To return to the common settings, set the following for each server.

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/server@<Server name> --delete
```

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/relation/name --set
  ↳<Recovery target> --nocheck
clpcfadm.py mod -t monitor/awsazw@awsazw1/relation/type --set
  ↳<Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/threshold/
  ↳restart --set 0
  clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/threshold/fo_
    ↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/threshold/
  ↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/threshold/script_
  ↳--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/preaction/
    ↳ userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/threshold/restart
    ↳ --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/preaction/
    ↳ usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/threshold/fo
    ↳ --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/preaction/use
    ↳ --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1

Continued on next page

Table 8.21 – continued from previous page

Final Action	Value
Stop resource <sup>6</sup>	16
Stop group <sup>7</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/action --set
→<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/preaction/
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/preaction/path_
→--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

---

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/preaction/path_
→--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

---

<sup>6</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>7</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/awsazw@awsazw1/emergency/preaction/  
->timeout --set <Value>
```

### **8.2.3 Deleting an AWS AZ monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon awsazw awsazw1
```

## 8.3 AWS DNS monitor resource

---

**Note:**

The command lines in this section use **awsdns1** as the monitor resource name.

Change it to suit your environment.

---

### 8.3.1 Adding an AWS DNS monitor resource

Be sure to set the following items. For details, see "*Setting AWS DNS monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon awsdns1
clpcfadm.py mod -t monitor/awsdns1/target --set <Target Resource
    ↪ (monitored when active)>
clpcfadm.py mod -t monitor/awsdns1/relation/name --set <Recovery
    ↪ target> --nocheck
clpcfadm.py mod -t monitor/awsdns1/relation/type --set <Recovery
    ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.3.2 Setting AWS DNS monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/awsdns1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

### Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/polling/interval --set
    ↳<Value>
```

- Timeout (sec)

Default, 180 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/polling/timeout --set
    ↳<Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/dumpcollect/use
    ↳--set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/timeout/
    ↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/timeout/
    ↳notrecovery/use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 1 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/polling/reconfirmation
    ↳--set <Value>
```

- Wait Time to Start Monitoring (sec)

Default, 300 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/target --set <Target  
→Resource (monitored when active)>
```

---

**Note:** You can specify only an AWS DNS resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/proctrl/priority --set  
→<Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/polling/servers@<ID>/name  
→--set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/perf/metrics/use --set  
→<Value>
```

## Monitor (special)

- Action when AWS CLI command failed to receive response

Action when AWS CLI command failed to receive response	Value
Disable recovery action(Do nothing) (default)	0
Disable recovery action(Display warning)	1
Recover	2

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/parameters	mode --set  
→<Value>
```

- Check Name Resolution

Check Name Resolution	Value
Check Name Resolution (default)	1
Do not check name resolution	0

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/parameters/dnscheck --set
→<Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/relation/name --set
→<Recovery target> --nocheck
clpcfadm.py mod -t monitor/awsdns@awsdns1/relation/type --set
→<Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/threshold/
→restart --set 0
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/threshold/fo_
→--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/action --set_
→1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/threshold/
→restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/action --set_
→1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/threshold/
→script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awsdnsw@awsdnsw1/emergency/preaction/  
    ↳ userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awsdnsw@awsdnsw1/emergency/threshold/  
    ↳ restart --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awsdnsw@awsdnsw1/emergency/preaction/  
    ↳ usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awsdnsw@awsdnsw1/emergency/threshold/fo  
    ↳ --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awsdnsw@awsdnsw1/emergency/preaction/use  
    ↳ --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1

Continued on next page

Table 8.34 – continued from previous page

Final Action	Value
Stop resource <sup>8</sup>	16
Stop group <sup>9</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/action --set
→<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/preaction/
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/preaction/
→path --set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

---

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/preaction/
→path --set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

---

<sup>8</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>9</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/awsdns@awsdns1/emergency/preaction/  
    ↪timeout --set <Value>
```

### 8.3.3 Deleting an AWS DNS monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon awsdns awsdns1
```

## 8.4 AWS Elastic IP monitor resource

---

### Note:

The command lines in this section use **awseipw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.4.1 Adding an AWS Elastic IP monitor resource

Be sure to set the following items. For details, see "*Setting AWS Elastic IP monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon awseipw awseipw1
clpcfadm.py mod -t monitor/awseipw@awseipw1/target --set <Target Resource_
    ↪ (monitored when active)>
clpcfadm.py mod -t monitor/awseipw@awseipw1/relation/name --set <Recovery_
    ↪ target> --nocheck
clpcfadm.py mod -t monitor/awseipw@awseipw1/relation/type --set <Recovery_
    ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.4.2 Setting AWS Elastic IP monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/awseipw@awseipw1/polling/interval --set  
→<Value>`
- Timeout (sec)  
Default, 180 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/awseipw@awseipw1/polling/timeout --set  
→<Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/dumpcollect/use  
→--set <Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

`clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/timeout/  
→notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/timeout/  
→notrecovery/use --set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count  
Default, 1 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t monitor/awseipw@awseipw1/polling/reconfirmation  
→--set <Value>`
- Wait Time to Start Monitoring (sec)  
Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/target --set <Target  
→Resource (monitored when active)>
```

---

**Note:** You can specify only an AWS Elastic IP resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/proctrl/priority --set  
→<Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/polling/servers@<ID>/name  
→--set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/perf/metrics/use --set  
→<Value>
```

## Monitor (special)

- Action when AWS CLI command failed to receive response

Action when AWS CLI command failed to receive response	Value
Disable recovery action(Do nothing) (default)	0
Disable recovery action(Display warning)	1
Recover	2

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/parameters	mode --set  
→<Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/relation/name --set  
→<Recovery target> --nocheck  
clpcfadm.py mod -t monitor/awseipw@awseipw1/relation/type --set  
→<Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/threshold/  
→restart --set 0  
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/threshold/fo  
→--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/action --set  
→1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/threshold/  
→restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/action --set  
→1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/threshold/  
→script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/preaction/
    ↳userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/threshold/
    ↳restart --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/preaction/
    ↳usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/threshold/fo_
    ↳--set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/preaction/use_
    ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>10</sup>	16
Stop group <sup>11</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4

Continued on next page

Table 8.46 – continued from previous page

Final Action	Value
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/action --set
→<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/preaction/
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/preaction/
→path --set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/preaction/
→path --set preaction.sh --nocheck
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/awseipw@awseipw1/emergency/preaction/
→timeout --set <Value>
```

<sup>10</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>11</sup> Cannot be specified with "Recovery target type" set to "cls".

### 8.4.3 Deleting an AWS Elastic IP monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon awseipw awseipwl
```

## 8.5 AWS Secondary IP monitor resource

---

**Note:**

The command lines in this section use **awssipw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.5.1 Adding an AWS Secondary IP monitor resource

Be sure to set the following items. For details, see "*Setting AWS Secondary IP monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon awssipw awssipw1
clpcfadm.py mod -t monitor/awssipw@awssipw1/target --set <Target Resource_
    ↪ (monitored when active)>
clpcfadm.py mod -t monitor/awssipw@awssipw1/relation/name --set <Recovery_
    ↪ target> --nocheck
clpcfadm.py mod -t monitor/awssipw@awssipw1/relation/type --set <Recovery_
    ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.5.2 Setting AWS Secondary IP monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/polling/interval --set
    ↳<Value>
```

- Timeout (sec)

Default, 120 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/polling/timeout --set
    ↳<Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/timeout/
    ↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/timeout/
    ↳notrecovery/use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 1 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/polling/reconfirmation_
    ↳--set <Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/target --set <Target_
    ↳Resource (monitored when active)>
```

---

**Note:** You can specify only an AWS secondary IP resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/proctrl/priority --set  
→<Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/polling/servers@<ID>/name  
→--set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/perf/metrics/use --set  
→<Value>
```

## Monitor (special)

- Action when AWS CLI command failed to receive response

Action when AWS CLI command failed to receive response	Value
Disable recovery action(Do nothing) (default)	0
Disable recovery action(Display warning)	1
Recover	2

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/parameters	mode --set  
→<Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/relation/name --set  
→<Recovery target> --nocheck
```

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/relation/type --set  
→<Recovery target type> --nocheck
```

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/threshold/
    ↳restart --set 0
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/threshold/fo_
    ↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/action --set_
    ↳1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/threshold/
    ↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/action --set_
    ↳1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/threshold/
    ↳script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/preaction/
    ↳userrestart --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File").

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/threshold/
    ↳restart --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/preaction/  
→usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/threshold/fo  
→--set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/preaction/use  
→--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>12</sup>	16
Stop group <sup>13</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/action --set  
→<Value>
```

#### Script Settings

<sup>12</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>13</sup> Cannot be specified with "Recovery target type" set to "cls".

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/preaction/  
↳ default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/preaction/  
↳ path --set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/preaction/  
↳ path --set preaction.sh --nocheck
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/awssipw@awssipw1/emergency/preaction/  
↳ timeout --set <Value>
```

### 8.5.3 Deleting an AWS Secondary IP monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon awssipw awssipw1
```

## 8.6 AWS Virtual IP monitor resource

---

**Note:**

The command lines in this section use **awsvipw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.6.1 Adding an AWS Virtual IP monitor resource

Be sure to set the following items. For details, see "*Setting AWS Virtual IP monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon awsvipw awsvipw1
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/target --set <Target Resource_
    ↪ (monitored when active)>
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/relation/name --set <Recovery_
    ↪ target> --nocheck
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/relation/type --set <Recovery_
    ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.6.2 Setting AWS Virtual IP monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/awsvipw@awsipw1/polling/interval --set
    ↳<Value>
```

- Timeout (sec)

Default, 180 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/awsvipw@awsipw1/polling/timeout --set
    ↳<Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/awsvipw@awsipw1/emergency/dumpcollect/use
    ↳--set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

```
clpcfadm.py mod -t monitor/awsvipw@awsipw1/emergency/timeout/
    ↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/awsvipw@awsipw1/emergency/timeout/
    ↳notrecovery/use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 1 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/awsvipw@awsipw1/polling/reconfirmation
    ↳--set <Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/target --set <Target  
→Resource (monitored when active)>
```

---

**Note:** You can specify only an AWS Virtual IP resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/proctrl/priority --set  
→<Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/polling/servers@<ID>/name  
→--set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/perf/metrics/use --set  
→<Value>
```

## Monitor (special)

- Action when AWS CLI command failed to receive response

Action when AWS CLI command failed to receive response	Value
Disable recovery action(Do nothing) (default)	0
Disable recovery action(Display warning)	1
Recover	2

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/parameters	mode --set  
→<Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/relation/name --set
  ↪<Recovery target> --nocheck
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/relation/type --set
  ↪<Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/threshold/
  ↪restart --set 0
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/threshold/fo_
  ↪--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/action --set_
  ↪1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/threshold/
  ↪restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/action --set_
  ↪1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/threshold/
  ↪script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/preaction/  
    ↳ userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/threshold/  
    ↳ restart --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/preaction/  
    ↳ usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/threshold/fo_  
    ↳ --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/preaction/use_  
    ↳ --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>14</sup>	16
Stop group <sup>15</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4

Continued on next page

Table 8.69 – continued from previous page

Final Action	Value
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/action --set
    ↳<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/preaction/
    ↳default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/preaction/
    ↳path --set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

---

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/preaction/
    ↳path --set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/awsvipw@awsvipw1/emergency/preaction/
    ↳timeout --set <Value>
```

<sup>14</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>15</sup> Cannot be specified with "Recovery target type" set to "cls".

### **8.6.3 Deleting an AWS Virtual IP monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon awsvipw awsvipwl
```

## 8.7 Azure DNS monitor resource

---

### Note:

The command lines in this section use **azurednsw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.7.1 Adding an Azure DNS monitor resource

Be sure to set the following items. For details, see "*Setting Azure DNS monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon azurednsw azurednsw1
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/target --set <Target_<br/>
    ↪Resource (monitored when active)>
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/relation/name --set
    ↪<Recovery target> --nocheck
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/relation/type --set
    ↪<Recovery target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.7.2 Setting Azure DNS monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/comment --set
    ↪<Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/polling/interval
    ↳--set <Value>
```
- Timeout (sec)  
Default, 180 (minimum, 5; maximum, 999)  

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/polling/timeout --set
    ↳<Value>
```
- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

  

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/timeout/
    ↳notreconfirmation/use --set <Value>
```
- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

  

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/timeout/
    ↳notrecovery/use --set <Value>
```
- **Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---
- Retry Count  
Default, 1 (minimum, 0; maximum, 999)  

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/polling/
    ↳reconfirmation --set <Value>
```
- Wait Time to Start Monitoring (sec)  
Default, 60 (minimum, 0; maximum, 9999)  

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/firstmonwait --set
    ↳<Value>
```
- Target Resource (monitored when active)  

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/target --set <Target_
    ↳Resource (monitored when active)>
```

**Note:** You can specify only an Azure DNS resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/proctrl/priority
    ↳--set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/polling/servers@<ID>/
    ↳name --set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/perf/metrics/use
    ↳--set <Value>
```

## Monitor (special)

- Check Name Resolution

Check Name Resolution	Value
Check Name Resolution (default)	1
Do not check name resolution	0

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/parameters/dnscheck
    ↳--set <Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/relation/name --set
```

```
↳<Recovery target> --nocheck  
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/relation/type --set  
↳<Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/  
↳threshold/restart --set 0  
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/  
↳threshold/fo --set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/action  
↳--set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/  
↳threshold/restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/action  
↳--set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/threshold/  
↳script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/preaction/  
↳userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File").

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/threshold/  
↳restart --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/preaction/
↳usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/threshold/
↳fo --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/preaction/
↳use --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>16</sup>	16
Stop group <sup>17</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/action
```

<sup>16</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>17</sup> Cannot be specified with "Recovery target type" set to "cls".

↳--set <Value>

### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/  
↳preaction/default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/  
↳preaction/path --set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/  
↳preaction/path --set preaction.sh --nocheck
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/azurednsw@azurednsw1/emergency/  
↳preaction/timeout --set <Value>
```

### 8.7.3 Deleting an Azure DNS monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon azurednsw azurednsw1
```

## 8.8 Azure load balance monitor resource

---

### Note:

The command lines in this section use **azurelbw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.8.1 Adding an Azure load balance monitor resource

Be sure to set the following items. For details, see "*Setting Azure load balance monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource
Recovery target
Recovery target type

```
clpcfadm.py add mon azurelbw azurelbw1
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/parameters/object --set
  ↪<Target Resource>
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/relation/name --set
  ↪<Recovery target> --nocheck
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/relation/type --set
  ↪<Recovery target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.8.2 Setting Azure load balance monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/azurelbw@azurelbw1/polling/interval --set  
  ↳<Value>`
- Timeout (sec)  
Default, 180 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/azurelbw@azurelbw1/polling/timeout --set  
  ↳<Value>`
- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

  
`clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/timeout/  
  ↳notreconfirmation/use --set <Value>`
- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

  
`clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/timeout/  
  ↳notrecovery/use --set <Value>`
- Note: Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".
- Retry Count  
Default, 1 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t monitor/azurelbw@azurelbw1/polling/reconfirmation  
  ↳--set <Value>`
- Wait Time to Start Monitoring (sec)  
Default, 0 (minimum, 0; maximum, 9999)  
`clpcfadm.py mod -t monitor/azurelbw@azurelbw1/firstmonwait --set  
  ↳<Value>`
- Nice Value  
Default, 0 (minimum, -20; maximum, 19)  
`clpcfadm.py mod -t monitor/azurelbw@azurelbw1/proctrl/priority --set  
  ↳<Value>`

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/polling/servers@<ID>/
    ↳name --set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/perf/metrics/use --set
    ↳<Value>
```

### Monitor (special)

- Target Resource

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/parameters/object --set
    ↳<Target Resource>
```

---

**Note:** You can specify only an Azure probe port resource.

### Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/relation/name --set
    ↳<Recovery target> --nocheck
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/relation/type --set
    ↳<Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/threshold/
    ↳restart --set 0
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/threshold/
    ↳fo --set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/action  
→--set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/threshold/  
→restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/action  
→--set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/threshold/  
→script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/preaction/  
→userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/threshold/  
→restart --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/preaction/  
→usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

- Maximum Failover Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/threshold/fo_
↪--set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/preaction/use_
↪--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>18</sup>	16
Stop group <sup>19</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/action --set
↪<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/preaction/
↪default --set <Value>
```

<sup>18</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>19</sup> Cannot be specified with "Recovery target type" set to "cls".

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/preaction/  
    ↳path --set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/preaction/  
    ↳path --set preaction.sh --nocheck
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/azurelbw@azurelbw1/emergency/preaction/  
    ↳timeout --set <Value>
```

### 8.8.3 Deleting an Azure load balance monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon azurelbw azurelbw1
```

## 8.9 Azure probe port monitor resource

---

### Note:

The command lines in this section use **azureppw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.9.1 Adding an Azure probe port monitor resource

Be sure to set the following items. For details, see "*Setting Azure probe port monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon azureppw azureppw1
clpcfadm.py mod -t monitor/azureppw@azureppw1/target --set <Target_
    ↪Resource (monitored when active)>
clpcfadm.py mod -t monitor/azureppw@azureppw1/relation/name --set
    ↪<Recovery target> --nocheck
clpcfadm.py mod -t monitor/azureppw@azureppw1/relation/type --set
    ↪<Recovery target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.9.2 Setting Azure probe port monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/azureppw@azureppw1/polling/interval --set  
  ↳<Value>`
- Timeout (sec)  
Default, 180 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/azureppw@azureppw1/polling/timeout --set  
  ↳<Value>`
- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

  
`clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/timeout/  
  ↳notreconfirmation/use --set <Value>`
- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

  
`clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/timeout/  
  ↳notrecovery/use --set <Value>`
- Note: Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".
- Retry Count  
Default, 1 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t monitor/azureppw@azureppw1/polling/reconfirmation  
  ↳--set <Value>`
- Wait Time to Start Monitoring (sec)  
Default, 0 (minimum, 0; maximum, 9999)  
`clpcfadm.py mod -t monitor/azureppw@azureppw1/firstmonwait --set  
  ↳<Value>`
- Target Resource (monitored when active)  
`clpcfadm.py mod -t monitor/azureppw@azureppw1/target --set <Target  
  ↳Resource (monitored when active)>`

**Note:** You can specify only an Azure probe port resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/proctrnl/priority --set
→<Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/polling/servers@<ID>/
→name --set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/perf/metrics/use --set
→<Value>
```

## Monitor (special)

- Action when Probe port wait timeout

Action when AWS CLI command failed to receive response	Value
Disable recovery action(Do nothing) (default)	0
Disable recovery action(Display warning)	1
Recover	2

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/parameters/mode --set
→<Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/relation/name --set
    ↳<Recovery target> --nocheck
clpcfadm.py mod -t monitor/azureppw@azureppw1/relation/type --set
    ↳<Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/threshold/
    ↳restart --set 0
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/threshold/
    ↳fo --set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/action
    ↳--set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/threshold/
    ↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/action
    ↳--set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/threshold/
    ↳script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/preaction/
    ↳userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File").

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/threshold/
```

- ↪ restart --set <Value>
- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/preaction/
↪usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/threshold/failover
↪--set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/preaction/usefailover
↪--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>20</sup>	16
Stop group <sup>21</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

<sup>20</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>21</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/action --set  
→<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/preaction/  
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/preaction/  
→path --set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/preaction/  
→path --set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/azureppw@azureppw1/emergency/preaction/  
→timeout --set <Value>
```

### 8.9.3 Deleting an Azure probe port monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon azureppw azureppw1
```

## 8.10 DB2 monitor resource

---

**Note:**

The command lines in this section use **db2w1** as the monitor resource name.

Change it to suit your environment.

---

### 8.10.1 Adding a DB2 monitor resource

Be sure to set the following items. For details, see "*Setting DB2 monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Database Name
Encrypted password
Character Set
Recovery target
Recovery target type

```
clpcfadm.py add mon db2w db2w1
clpcfadm.py mod -t monitor/db2w@db2w1/target --set <Target Resource_
↪(monitored when active)>
clpcfadm.py mod -t monitor/db2w@db2w1/parameters/database --set <Database_
↪Name> --nocheck
clpcfadm.py mod -t monitor/db2w@db2w1/parameters/password --set
↪<Encrypted password>
clpcfadm.py mod -t monitor/db2w@db2w1/parameters/encrypwd --set 1_
↪--nocheck
clpcfadm.py mod -t monitor/db2w@db2w1/parameters/characterset --set
↪<Character Set> --nocheck
clpcfadm.py mod -t monitor/db2w@db2w1/relation/name --set <Recovery_
↪target> --nocheck
clpcfadm.py mod -t monitor/db2w@db2w1/relation/type --set <Recovery_
↪target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

## 8.10.2 Setting DB2 monitor resource parameters

### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/db2w@db2w1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

### Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/db2w@db2w1/polling/interval --set <Value>
```

- Timeout (sec)

Default, 120 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/db2w@db2w1/polling/timeout --set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/dumpcollect/use --set  
  ↳<Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/timeout/  
  ↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/timeout/notrecovery/  
→use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 2 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/db2w@db2w1/polling/reconfirmation --set  
→<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/db2w@db2w1/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/db2w@db2w1/target --set <Target Resource  
→(monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/db2w@db2w1/proctr1/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/db2w@db2w1/polling/servers@<ID>/name --set  
→<Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/db2w@db2w1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Monitor Level

Monitor Level	Value
Level 1 (monitoring by select)	3
Level 2 (monitoring by update/select) (default)	0
Level 3 (create/drop table each time)	1

```
clpcfadm.py mod -t monitor/db2w@db2w1/parameters/docreatedrop --set  
  ↳<Value>
```

- Database Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/db2w@db2w1/parameters/database --set  
  ↳<Database Name> --nocheck
```

- Instance Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/db2w@db2w1/parameters/instance --set  
  ↳<Instance Name>
```

- User Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/db2w@db2w1/parameters/username --set <User_↳  
  Name>
```

- Password (Within 255 bytes)

```
clpcfadm.py mod -t monitor/db2w@db2w1/parameters/password --set  
  ↳<Encrypted password>  
clpcfadm.py mod -t monitor/db2w@db2w1/parameters/encrypwd --set 1_↳  
  --nocheck
```

---

### Note:

Set an encrypted password string.

For details, see "[Retrieving an encrypted password string](#)".

---

- Monitor Table Name (Within 255 bytes)

Default: db2watch

```
clpcfadm.py mod -t monitor/db2w@db2w1/parameters/table --set <Monitor_↳  
  Table Name>
```

- Character Set

Value
en_US.iso88591
ja_JP.eucJP
ja_JP.sjis
ja_JP.utf8
zh_TW.big5
zh_CN.eucCN
zh_CN.gb2312
zh_CN.utf8

```
clpcfadm.py mod -t monitor/db2w@db2w1/parameters/charerset --set
↳<Value> --nocheck
```

- Library Path (Within 1023 bytes)

Library Path
/opt/ibm/db2/V10.5/lib64/libdb2.so
/opt/ibm/db2/V11.1/lib64/libdb2.so (default)
/opt/ibm/db2/V11.5/lib64/libdb2.so

```
clpcfadm.py mod -t monitor/db2w@db2w1/parameters/libraryfullpath
↳--set <Library Path>
```

---

**Note:** Set it according to the environment (e.g., installation folder).

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/db2w@db2w1/relation/name --set <Recovery_
↳target> --nocheck
clpcfadm.py mod -t monitor/db2w@db2w1/relation/type --set <Recovery_
↳target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/threshold/restart
↳--set 0
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/threshold/fo --set
↳0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/threshold/restart
↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/threshold/script  
  --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/preaction/userrestart  
  --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/threshold/restart  
  --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/preaction/usefailover  
  --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/threshold/fo --set  
  <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/preaction/use --set
```

*→<Value>*

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing <sup>22</sup>	1
Stop resource <sup>23</sup>	16
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

`clpcfadm.py mod -t monitor/db2w@db2w1/emergency/action --set <Value>`

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

`clpcfadm.py mod -t monitor/db2w@db2w1/emergency/preaction/default →--set <Value>`

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

`clpcfadm.py mod -t monitor/db2w@db2w1/emergency/preaction/path →--set <File> --nocheck`

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

<sup>22</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>23</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/preaction/path  
↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/db2w@db2w1/emergency/preaction/timeout  
↳--set <Value>
```

### **8.10.3 Deleting a DB2 monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon db2w db2w1
```

## 8.11 Dynamic DNS monitor resource

---

**Note:**

The command lines in this section use **ddnsw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.11.1 Adding a Dynamic DNS monitor resource

Be sure to set the following items. For details, see "*Setting Dynamic DNS monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Target Resource
Recovery target
Recovery target type

```
clpcfadm.py add mon ddnsw ddnsw1
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/target --set <Target Resource
  ↪ (monitored when active)>
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/parameters/object --set <Target
  ↪ Resource>
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/relation/name --set <Recovery
  ↪ target> --nocheck
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/relation/type --set <Recovery
  ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.11.2 Setting Dynamic DNS monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/ddnsw@ddnsw1/polling/interval --set <Value>`
- Timeout (sec)  
Default, 180 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/ddnsw@ddnsw1/polling/timeout --set <Value>`
- Retry Count  
Default, 0 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t monitor/ddnsw@ddnsw1/polling/reconfirmation --set <Value>`
- Wait Time to Start Monitoring (sec)  
Default, 0 (minimum, 0; maximum, 9999)  
`clpcfadm.py mod -t monitor/ddnsw@ddnsw1/firstmonwait --set <Value>`
- Target Resource (monitored when active)  
`clpcfadm.py mod -t monitor/ddnsw@ddnsw1/target --set <Target Resource>  
  ↳ (monitored when active)>`

---

**Note:** You can specify only a dynamic DNS resource for this monitor resource.

---

- Nice Value  
Default, 0 (minimum, -20; maximum, 19)  
`clpcfadm.py mod -t monitor/ddnsw@ddnsw1/proctrl/priority --set <Value>`
- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

`clpcfadm.py mod -t monitor/ddnsw@ddnsw1/perf/metrics/use --set <Value>`

## Monitor (special)

- Target Resource  
`clpcfadm.py mod -t monitor/ddnsw@ddnsw1/parameters/object --set <Target Resource>`

---

**Note:** You can specify only a Dynamic DNS resource.

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/relation/name --set <Recovery target> --nocheck
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/relation/type --set <Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/threshold/restart --set 0
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/threshold/fo--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

---

```
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/threshold/restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

---

```
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/threshold/script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/preaction/userrestart --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/threshold/restart
    ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/preaction/
    ↳usefailover --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/threshold/fo --set
    ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/preaction/use --set
    ↳<Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>24</sup>	16
Stop group <sup>25</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9

Continued on next page

Table 8.123 – continued from previous page

Final Action	Value
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

`clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/action --set <Value>`

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

`clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/preaction/  
↳--default --set <Value>`

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

`clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/preaction/path  
↳--set <File> --nocheck`

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

`clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/preaction/path  
↳--set preaction.sh --nocheck`

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

`clpcfadm.py mod -t monitor/ddnsw@ddnsw1/emergency/preaction/  
↳--timeout --set <Value>`

<sup>24</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>25</sup> Cannot be specified with "Recovery target type" set to "cls".

### **8.11.3 Deleting a Dynamic DNS monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon ddnsw ddnsw1
```

## 8.12 Disk monitor resource

---

**Note:**

The command lines in this section use **diskw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.12.1 Adding a Disk monitor resource

Be sure to set the following items. For details, see "*Setting Disk monitor resource parameters*".

Item (mandatory)
Monitor resource name
Monitor Target
I/O size
Recovery target
Recovery target type

```
clpcfadm.py add mon diskw diskw1
clpcfadm.py mod -t monitor/diskw@diskw1/parameters/object --set <Monitor_
→Target>
clpcfadm.py mod -t monitor/diskw@diskw1/parameters/size --set <I/O size>
clpcfadm.py mod -t monitor/diskw@diskw1/relation/name --set <Recovery_
→target> --nocheck
clpcfadm.py mod -t monitor/diskw@diskw1/relation/type --set <Recovery_
→target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.12.2 Setting Disk monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/diskw@diskw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/diskw@diskw1/polling/interval --set <Value>`
- Timeout (sec)  
Default, 120 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/diskw@diskw1/polling/timeout --set <Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/diskw@diskw1/emergency/dumpcollect/use  
↳--set <Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

`clpcfadm.py mod -t monitor/diskw@diskw1/emergency/timeout/  
↳notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/diskw@diskw1/emergency/timeout/notrecovery/  
↳use --set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 1 (minimum, 0; maximum, 999)

`clpcfadm.py mod -t monitor/diskw@diskw1/polling/reconfirmation --set  
↳<Value>`

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

`clpcfadm.py mod -t monitor/diskw@diskw1/firstmonwait --set <Value>`

- Monitoring Timing

Monitoring Timing	Value
Always (default)	0
Active	1

```
clpcfadm.py mod -t monitor/diskw@diskw1/polling/timing --set <Value>
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/diskw@diskw1/target --set ""
```

---

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/diskw@diskw1/target --set <Target Resource  
→ (monitored when active)>
```

---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/diskw@diskw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/diskw@diskw1/polling/servers@<ID>/name  
→ --set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/diskw@diskw1/perf/metrics/use --set <Value>
```

## Monitor (special)

### Common

- Method

Value
TUR
TUR(generic)
TUR(legacy)
READ
READ(RAW)
READ(O_DIRECT)
WRITE(FILE)

```
clpcfadm.py mod -t monitor/diskw@diskw1/parameters/method --set  
→<Value>
```

---

**Note:** Enclose a string in double quotes to escape parentheses (e.g., "TUR(generic)").

---

---

**Note:** With "Method" set to "READ(RAW)", set "Monitor Target RAW Device Name".

---

---

**Important:** To change "Method" from "READ(RAW)", set as follows.

```
clpcfadm.py mod -t monitor/diskw@diskw1/parameters/rawdevice  
→--delete
```

---

- Monitor Target (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/diskw@diskw1/parameters/object --set  
→<Monitor Target>
```

---

**Note:** Specify it as an absolute path.

---

- Monitor Target RAW Device Name (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/diskw@diskw1/parameters/rawdevice --set  
→<Monitor Target RAW Device Name>
```

---

**Note:** You can set this parameter with "Method" set to "READ(RAW)".

---

---

**Note:** Specify it as an absolute path.

---

- I/O size (bytes)

Default, 2000000 (minimum, 1; maximum, 99999999)

```
clpcfadm.py mod -t monitor/diskw@diskw1/parameters/size --set  
→<Value>
```

---

**Important:** With "Method" set to "TUR", "TUR(generic)", or "TUR(legacy)", set "I/O size" to 0.

---



---

**Important:** With "Method" set to "READ(RAW)" or "READ(O\_DIRECT)", set "I/O size" to 512.

---

- Action When Diskfull Is Detected

Action When Diskfull Is Detected	Value
Recover (default)	1
Do not recover	0

```
clpcfadm.py mod -t monitor/diskw@diskw1/parameters/diskfullerr
    ↪--set <Value>
```

---

**Note:** You can set this parameter with "Method" set to "WRITE(FILE)".

---

#### Set Up Individually

Set the following for each server.

- Method

```
clpcfadm.py mod -t monitor/diskw@diskw1/server@<Server name>/
    ↪parameters/method --set <Value> --nocheck
```

- Monitor Target (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/diskw@diskw1/server@<Server name>/
    ↪parameters/object --set <Monitor Target> --nocheck
```

- Monitor Target RAW Device Name (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/diskw@diskw1/server@<Server name>/
    ↪parameters/rawdevice --set <Monitor Target RAW Device Name>
    ↪--nocheck
```

- I/O size (bytes)

```
clpcfadm.py mod -t monitor/diskw@diskw1/server@<Server name>/
    ↪parameters/size --set <Value> --nocheck
```

- Action When Diskfull Is Detected

```
clpcfadm.py mod -t monitor/diskw@diskw1/server@<Server name>/
    ↪parameters/diskfullerr --set <Value> --nocheck
```

---

**Note:** To return to the common settings, set the following for each server.

```
clpcfadm.py mod -t monitor/diskw@diskw1/server@<Server name> --delete
```

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/diskw@diskw1/relation/name --set <Recovery target>
clpcfadm.py mod -t monitor/diskw@diskw1/relation/type --set <Recovery target type>
--nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/diskw@diskw1/emergency/threshold/
--restart --set 0
clpcfadm.py mod -t monitor/diskw@diskw1/emergency/threshold/fo
--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/diskw@diskw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/diskw@diskw1/emergency/threshold/
--restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/diskw@diskw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/diskw@diskw1/emergency/threshold/script_
--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/diskw@diskw1/emergency/preaction/
--userrestart --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/diskw@diskw1/emergency/threshold/restart
    ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/diskw@diskw1/emergency/preaction/
    ↳usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/diskw@diskw1/emergency/threshold/fo --set
    ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/diskw@diskw1/emergency/preaction/use --set
    ↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>26</sup>	16
Stop group <sup>27</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9

Continued on next page

Table 8.137 – continued from previous page

Final Action	Value
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

clpcfadm.py mod -t monitor/diskw@diskw1/emergency/action --set <Value>

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

clpcfadm.py mod -t monitor/diskw@diskw1/emergency/preaction/  
 ↳default --set <Value>

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

clpcfadm.py mod -t monitor/diskw@diskw1/emergency/preaction/path  
 ↳--set <File> --nocheck

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

---

clpcfadm.py mod -t monitor/diskw@diskw1/emergency/preaction/path  
 ↳--set preaction.sh --nocheck

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

clpcfadm.py mod -t monitor/diskw@diskw1/emergency/preaction/  
 ↳timeout --set <Value>

---

<sup>26</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>27</sup> Cannot be specified with "Recovery target type" set to "cls".

### 8.12.3 Deleting a Disk monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon diskw diskwl
```

## 8.13 Floating IP monitor resource

---

**Note:**

The command lines in this section use **fipw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.13.1 Adding a Floating IP monitor resources

Be sure to set the following items. For details, see "*Setting Floating IP monitor resources parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon fipw fipw1
clpcfadm.py mod -t monitor/fipw@fipw1/target --set <Target Resource
    ↪ (monitored when active)>
clpcfadm.py mod -t monitor/fipw@fipw1/relation/name --set <Recovery
    ↪ target> --nocheck
clpcfadm.py mod -t monitor/fipw@fipw1/relation/type --set <Recovery
    ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.13.2 Setting Floating IP monitor resources parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/fipw@fipw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

### Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/fipw@fipwl/polling/interval --set <Value>
```

- Timeout (sec)

Default, 180 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/fipw@fipwl/polling/timeout --set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/fipw@fipwl/emergency/dumpcollect/use --set
↳<Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

```
clpcfadm.py mod -t monitor/fipw@fipwl/emergency/timeout/
↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/fipw@fipwl/emergency/timeout/notrecovery/
↳use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 1 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/fipw@fipwl/polling/reconfirmation --set
↳<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/fipw@fipwl/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/fipw@fipwl/target --set <Target Resource>  
→ (monitored when active)>
```

---

**Note:** You can specify only a Virtual IP resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/fipw@fipwl/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/fipw@fipwl/polling/servers@<ID>/name --set  
→ <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/fipw@fipwl/perf/metrics/use --set <Value>
```

## Monitor (special)

### Common

- Monitor NIC Link Up/Down

Monitor NIC Link Up/Down	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/fipw@fipwl/parameters/monmii --set  
→ <Value>
```

### Set Up Individually

Set the following for each server.

- Monitor NIC Link Up/Down

```
clpcfadm.py mod -t monitor/fipw@fipwl/server@<Server name>/  
→ parameters/monmii --set <Value> --nocheck
```

---

**Note:** To return to the common settings, set the following for each server.

```
clpcfadm.py mod -t monitor/fipw@fipwl/server@<Server name> --delete
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/fipw@fipw1/relation/name --set <Recovery_
→target> --nocheck
clpcfadm.py mod -t monitor/fipw@fipw1/relation/type --set <Recovery_
→target type> --nocheck
```

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/fipw@fipw1/emergency/threshold/restart_
→--set 0
clpcfadm.py mod -t monitor/fipw@fipw1/emergency/threshold/fo --set_
→0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/fipw@fipw1/emergency/action --set 1
```

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/fipw@fipw1/emergency/threshold/restart_
→--set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/fipw@fipw1/emergency/action --set 1
```

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/fipw@fipw1/emergency/threshold/script_
→--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1

Continued on next page

Table 8.146 – continued from previous page

Execute Script before Reactivation	Value
Do not check (default)	0

```
clpcfadm.py mod -t monitor/fipw@fipwl/emergency/preaction/userrestart
    ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/fipw@fipwl/emergency/threshold/restart
    ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/fipw@fipwl/emergency/preaction/usefailover
    ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/fipw@fipwl/emergency/threshold/fo --set
    ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/fipw@fipwl/emergency/preaction/use --set
    ↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1

Continued on next page

Table 8.149 – continued from previous page

Final Action	Value
Stop resource <sup>28</sup>	16
Stop group <sup>29</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

`clpcfadm.py mod -t monitor/fipw@fipwl/emergency/action --set <Value>`

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

`clpcfadm.py mod -t monitor/fipw@fipwl/emergency/preaction/default ↵--set <Value>`

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

`clpcfadm.py mod -t monitor/fipw@fipwl/emergency/preaction/path ↵--set <File> --nocheck`

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

---

`clpcfadm.py mod -t monitor/fipw@fipwl/emergency/preaction/path ↵--set preaction.sh --nocheck`

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

---

<sup>28</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>29</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/fipw@fipwl/emergency/preaction/timeout  
↳--set <Value>
```

### **8.13.3 Deleting a Floating IP monitor resources**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon fipw fipwl
```

## 8.14 FTP monitor resource

---

**Note:**

The command lines in this section use **ftpw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.14.1 Adding an FTP monitor resource

Be sure to set the following items. For details, see "*Setting FTP monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon ftpw ftpw1
clpcfadm.py mod -t monitor/ftpw@ftpw1/target --set <Target Resource
    ↪ (monitored when active)>
clpcfadm.py mod -t monitor/ftpw@ftpw1/relation/name --set <Recovery
    ↪ target> --nocheck
clpcfadm.py mod -t monitor/ftpw@ftpw1/relation/type --set <Recovery
    ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.14.2 Setting FTP monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/ftpw@ftpw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/ftpw@ftpwl/polling/interval --set <Value>`
- Timeout (sec)  
Default, 120 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/ftpw@ftpwl/polling/timeout --set <Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/dumpcollect/use --set  
  ↳<Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

`clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/timeout/  
  ↳notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/timeout/notrecovery/  
  ↳use --set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 3 (minimum, 0; maximum, 999)

`clpcfadm.py mod -t monitor/ftpw@ftpwl/polling/reconfirmation --set  
  ↳<Value>`

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

`clpcfadm.py mod -t monitor/ftpw@ftpwl/firstmonwait --set <Value>`

- Monitoring Timing

Monitoring Timing	Value
Always	0
Active (default)	1

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/polling/timing --set <Value>
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/target --set ""
```

---

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/target --set <Target Resource  
→ (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---



---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/polling/servers@<ID>/name --set  
→ <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/perf/metrics/use --set <Value>
```

## Monitor (special)

- IP Address  
Default: 127.0.0.1  
`clpcfadm.py mod -t monitor/ftpw@ftpwl/parameters/ipaddress --set <IP_Address>`
- Port Number  
Default, 21 (minimum, 1; maximum, 65535)  
`clpcfadm.py mod -t monitor/ftpw@ftpwl/parameters/port --set <Value>`
- User Name (Within 255 bytes)  
`clpcfadm.py mod -t monitor/ftpw@ftpwl/parameters/username --set <User_Name>`
- Password (Within 255 bytes)  
`clpcfadm.py mod -t monitor/ftpw@ftpwl/parameters/password --set <Encrypted password>`  
`clpcfadm.py mod -t monitor/ftpw@ftpwl/parameters/encrypwd --set 1 --nocheck`

---

### Note:

Set an encrypted password string.  
For details, see "[Retrieving an encrypted password string](#)".

---

- Protocol

Protocol	Value
FTP (default)	0
FTPS	1

`clpcfadm.py mod -t monitor/ftpw@ftpwl/parameters/protocol --set <Value>`

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

`clpcfadm.py mod -t monitor/ftpw@ftpwl/relation/name --set <Recovery_target> --nocheck`  
`clpcfadm.py mod -t monitor/ftpw@ftpwl/relation/type --set <Recovery_target_type> --nocheck`

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/threshold/restart
  ↵--set 0
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/threshold/fo --set
  ↵0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/threshold/restart
  ↵--set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/threshold/script
  ↵--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/preaction/userrestart
  ↵--set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/threshold/restart
  ↵--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1

Continued on next page

Table 8.160 – continued from previous page

Execute Script before Failover	Value
Do not check (default)	0

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/preaction/usefailover
  ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/threshold/fo --set
  ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/preaction/use --set
  ↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1
Stop resource <sup>30</sup>	16
Stop group <sup>31</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/action --set <Value>
```

#### Script Settings

<sup>30</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>31</sup> Cannot be specified with "Recovery target type" set to "cls".

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/preaction/default
↳--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/preaction/path
↳--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/preaction/path
↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/ftpw@ftpwl/emergency/preaction/timeout
↳--set <Value>
```

### 8.14.3 Deleting an FTP monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon ftpw ftpwl
```

## 8.15 Google Cloud DNS monitor resource

---

**Note:**

The command lines in this section use **gcdnsw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.15.1 Adding a Google Cloud DNS monitor resource

Be sure to set the following items. For details, see "*Setting Google Cloud DNS monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon gcdnsw gcdnsw1
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/target --set <Target Resource_
    ↪ (monitored when active)>
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/relation/name --set <Recovery_
    ↪ target> --nocheck
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/relation/type --set <Recovery_
    ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.15.2 Setting Google Cloud DNS monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/polling/interval --set
    ↳<Value>
```

- Timeout (sec)

Default, 120 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/polling/timeout --set
    ↳<Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/timeout/
    ↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/timeout/
    ↳notrecovery/use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/polling/reconfirmation_
    ↳--set <Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/target --set <Target_ _
    ↳Resource (monitored when active)>
```

---

**Note:** You can specify only a Google Cloud DNS resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/proctrl/priority --set  
→<Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/polling/servers@<ID>/name  
→--set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/perf/metrics/use --set  
→<Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/relation/name --set  
→<Recovery target> --nocheck  
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/relation/type --set  
→<Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/threshold/  
→restart --set 0  
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/threshold/fo  
→--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/threshold/
    ↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/threshold/script_
    ↳--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/preaction/
    ↳userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/threshold/restart_
    ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/preaction/
    ↳usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/threshold/fo_
    ↳--set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/preaction/use_
↪--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>32</sup>	16
Stop group <sup>33</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/action --set
↪<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/preaction/
↪default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/preaction/path_
↪--set <File> --nocheck
```

<sup>32</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>33</sup> Cannot be specified with "Recovery target type" set to "cls".

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/preaction/path  
↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/gcdnsw@gcdnsw1/emergency/preaction/  
↳timeout --set <Value>
```

---

### 8.15.3 Deleting a Google Cloud DNS monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon gcdnsw gcdnsw1
```

## 8.16 Google Cloud load balance monitor resource

---

**Note:**

The command lines in this section use **gclbw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.16.1 Adding a Google Cloud load balance monitor resource

Be sure to set the following items. For details, see "[Setting Google Cloud load balance monitor resource parameters](#)".

Item (mandatory)
Monitor resource name
Target Resource
Recovery target
Recovery target type

```
clpcfadm.py add mon gclbw gclbw1
clpcfadm.py mod -t monitor/gclbw@gclbw1/parameters/object --set <Target_<br/>
    ↪Resource>
clpcfadm.py mod -t monitor/gclbw@gclbw1/relation/name --set <Recovery_<br/>
    ↪target> --nocheck
clpcfadm.py mod -t monitor/gclbw@gclbw1/relation/type --set <Recovery_<br/>
    ↪target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.16.2 Setting Google Cloud load balance monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/polling/interval --set <Value>
```

- Timeout (sec)

Default, 180 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/polling/timeout --set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/timeout/  
→notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/timeout/notrecovery/  
→use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 1 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/polling/reconfirmation --set  
→<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/firstmonwait --set <Value>
```

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/polling/servers@<ID>/name_  
→--set <Server name> --nocheck
```

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Target Resource

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/parameters/object --set  
  ↳<Target Resource>
```

**Note:** You can specify only a Google Cloud Virtual IP resource.

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/relation/name --set <Recovery  
  ↳target> --nocheck  
clpcfadm.py mod -t monitor/gclbw@gclbw1/relation/type --set <Recovery  
  ↳target type> --nocheck
```

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/threshold/  
  ↳restart --set 0  
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/threshold/fo  
  ↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/action --set 1
```

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/threshold/  
    ↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/threshold/script_  
    ↳--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/preaction/  
    ↳userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/threshold/restart/  
    ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/preaction/  
    ↳usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

- Maximum Failover Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/threshold/fo --set  
    ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>34</sup>	16
Stop group <sup>35</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/action --set <Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/preaction/
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/preaction/path_
→--set <File> --nocheck
```

<sup>34</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>35</sup> Cannot be specified with "Recovery target type" set to "cls".

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/preaction/path
↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/gclbw@gclbw1/emergency/preaction/
↳timeout --set <Value>
```

---

### 8.16.3 Deleting a Google Cloud load balance monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon gclbw gclbw1
```

## 8.17 Google Cloud Virtual IP monitor resource

---

**Note:**

The command lines in this section use **gcvipw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.17.1 Adding a Google Cloud Virtual IP monitor resource

Be sure to set the following items. For details, see "*Setting Google Cloud Virtual IP monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon gcvipw gcvipw1
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/target --set <Target Resource
  ↪ (monitored when active)>
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/relation/name --set <Recovery
  ↪ target> --nocheck
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/relation/type --set <Recovery
  ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.17.2 Setting Google Cloud Virtual IP monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/polling/interval --set
    ↳<Value>
```

- Timeout (sec)

Default, 180 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/polling/timeout --set
    ↳<Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/timeout/
    ↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/timeout/
    ↳notrecovery/use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 1 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/polling/reconfirmation_
    ↳--set <Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/target --set <Target_...
    ↳Resource (monitored when active)>
```

---

**Note:** You can specify only a Google Cloud Virtual IP resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/proctrl/priority --set  
→<Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/polling/servers@<ID>/name  
→--set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/perf/metrics/use --set  
→<Value>
```

## Monitor (special)

- Health Check Timeout Operation

Health Check Timeout Operation	Value
Disable recovery action(Do nothing) (default)	0
Disable recovery action(Display warning)	1
Recover	2

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/parameters	mode --set  
→<Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/relation/name --set  
→<Recovery target> --nocheck
```

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/relation/type --set  
→<Recovery target type> --nocheck
```

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/threshold/
    ↳restart --set 0
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/threshold/fo_
    ↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/threshold/
    ↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/threshold/script_
    ↳--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/preaction/
    ↳userrestart --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/threshold/restart_
    ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1

Continued on next page

Table 8.191 – continued from previous page

Execute Script before Failover	Value
Do not check (default)	0

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/preaction/
    ↳usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/threshold/fo_
    ↳--set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/preaction/use_
    ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>36</sup>	16
Stop group <sup>37</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/action --set
    ↳<Value>
```

#### Script Settings

<sup>36</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>37</sup> Cannot be specified with "Recovery target type" set to "cls".

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/preaction/  
→--default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/preaction/path  
→--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/preaction/path  
→--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/gcvipw@gcvipw1/emergency/preaction/  
→timeout --set <Value>
```

### 8.17.3 Deleting a Google Cloud Virtual IP monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon gcvipw gcvipw1
```

## 8.18 Custom monitor resource

---

**Note:**

The command lines in this section use **genw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.18.1 Adding a Custom monitor resource

Be sure to set the following items. For details, see "*Setting Custom monitor resource parameters*".

Item (mandatory)
Monitor resource name
Script file
Recovery target
Recovery target type

```
clpcfadm.py add mon genw genw1
clpcfadm.py mod -t monitor/genw@genw1/parameters/path --set <Script file>
    ↪--nocheck
clpcfadm.py mod -t monitor/genw@genw1/relation/name --set <Recovery
    ↪target> --nocheck
clpcfadm.py mod -t monitor/genw@genw1/relation/type --set <Recovery
    ↪target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.18.2 Setting Custom monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/genw@genw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/genw@genw1/polling/interval --set <Value>
```

- Timeout (sec)

Default, 120 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/genw@genw1/polling/timeout --set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/timeout/
    ↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/timeout/notrecovery/
    ↳use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/genw@genw1/polling/reconfirmation --set
    ↳<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/genw@genw1/firstmonwait --set <Value>
```

- Monitoring Timing

Monitoring Timing	Value
Always (default)	0
Active	1

```
clpcfadm.py mod -t monitor/genw@genw1/polling/timing --set <Value>
```

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/genw@genw1/target --set ""
```

---

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/genw@genw1/target --set <Target Resource  
→ (monitored when active)>
```

---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/genw@genw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/genw@genw1/polling/servers@<ID>/name --set  
→ <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/genw@genw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Script file type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/genw@genw1/parameters/default --set <Value>
```

**Note:** If you change the value of this parameter, also change that of "Script file".

---

- Script file (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/genw@genwl/parameters/path --set <Script_file> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **genw.sh**.

```
clpcfadm.py mod -t monitor/genw@genwl/parameters/path --set genw.sh --nocheck
```

- Monitor Type

Monitor Type	Value
Synchronous (default)	1
Asynchronous	0

```
clpcfadm.py mod -t monitor/genw@genwl/parameters/sync --set <Value>
```

- Wait for the application/script monitoring to start for a certain period of time (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/genw@genwl/parameters/waitmonstart --set <Value>
```

---

**Note:** You can set this parameter with "Monitor Type" set to "Asynchronous".

---

- Log Output Path (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/genw@genwl/parameters/userlog --set <Log_Output_Path>
```

---

**Note:** Specify it as an absolute path.

---

- Rotate Log

Rotate Log	Value
Set	1
Do not set (default)	0

```
clpcfadm.py mod -t monitor/genw@genwl/parameters/logrotate/use --set <Value>
```

- Rotation Size (bytes)

Default, 1000000 (minimum, 1; maximum, 99999999)

```
clpcfadm.py mod -t monitor/genw@genwl/parameters/logrotate/size --set <Value>
```

---

**Note:** You can set this parameter with "Rotate Log" set to "Set".

---

- Normal Return Value

Default: 0

```
clpcfadm.py mod -t monitor/genw@genwl/parameters/normalval --set  
  ↳<Value>
```

- Warning Return Value

```
clpcfadm.py mod -t monitor/genw@genwl/parameters/warningval --set  
  ↳<Value>
```

- Wait for activation monitoring to stop before stopping the cluster

Wait for activation monitoring to stop before stopping the cluster	Value
Wait for the stop	1
Do not wait for the stop (default)	0

```
clpcfadm.py mod -t monitor/genw@genwl/parameters/waitstop --set  
  ↳<Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/genw@genwl/relation/name --set <Recovery  
  ↳target> --nocheck  
clpcfadm.py mod -t monitor/genw@genwl/relation/type --set <Recovery  
  ↳target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/genw@genwl/emergency/threshold/restart  
  ↳--set 0  
clpcfadm.py mod -t monitor/genw@genwl/emergency/threshold/fo --set  
  ↳0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/genw@genwl/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

---

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/threshold/restart
    ↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/threshold/script
    ↳--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/preaction/userrestart
    ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/threshold/restart
    ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/preaction/usefailover
    ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/threshold/fo --set
    ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>38</sup>	16
Stop group <sup>39</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/action --set <Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/preaction/default
→--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/preaction/path
→--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file

<sup>38</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>39</sup> Cannot be specified with "Recovery target type" set to "cls".

in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/preaction/path  
↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/genw@genw1/emergency/preaction/timeout  
↳--set <Value>
```

---

### 8.18.3 Deleting a Custom monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon genw genw1
```

## 8.19 Hybrid disk connect monitor resource

---

**Note:**

The command lines in this section use **hdnw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.19.1 Adding a Hybrid disk connect monitor resource

Be sure to set the following items. For details, see "*Setting Hybrid disk connect monitor resource parameters*".

Item (mandatory)
Monitor resource name
Hybrid disk resource
Recovery target (LocalServer)
Recovery target type (cls)

```
clpcfadm.py add mon hdnw hdnw1
clpcfadm.py mod -t monitor/hdnw@hdnw1/parameters/object --set <Hybrid_
    ↪disk resource>
clpcfadm.py mod -t monitor/hdnw@hdnw1/relation/name --set LocalServer_
    ↪--nocheck
clpcfadm.py mod -t monitor/hdnw@hdnw1/relation/type --set cls --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.19.2 Setting Hybrid disk connect monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/hdnw@hdnw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/hdnw@hdnwl/polling/interval --set <Value>
```

- Timeout (sec)

Default, 120 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/hdnw@hdnwl/polling/timeout --set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/hdnw@hdnwl/emergency/dumpcollect/use --set
↳<Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/hdnw@hdnwl/emergency/timeout/
↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/hdnw@hdnwl/emergency/timeout/notrecovery/
↳use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/hdnw@hdnwl/polling/reconfirmation --set
↳<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/hdnw@hdnwl/firstmonwait --set <Value>
```

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/hdnw@hdnwl/proctrl/priority --set <Value>
```

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/hdnw@hdnwl/perf/metrics/use --set <Value>
```

## Monitor (special)

- Hybrid Disk Resource

```
clpcfadm.py mod -t monitor/hdnw@hdnwl/parameters/object --set <Hybrid  
Disk Resource>
```

---

**Note:** You can specify only a hybrid disk resource.

---

## Recovery Action

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/hdnw@hdnwl/emergency/preaction/use --set  
-><Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

## Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/hdnw@hdnwl/emergency/preaction/default  
--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/hdnw@hdnw1/emergency/preaction/path  
↳--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/hdnw@hdnw1/emergency/preaction/path  
↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/hdnw@hdnw1/emergency/preaction/timeout  
↳--set <Value>
```

### 8.19.3 Deleting a Hybrid disk connect monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon hdnw hdnw1
```

## 8.20 Hybrid disk monitor resource

---

**Note:**

The command lines in this section use **hdw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.20.1 Adding a Hybrid disk monitor resource

Be sure to set the following items. For details, see "*Setting Hybrid disk monitor resource parameters*".

Item (mandatory)
Monitor resource name
Hybrid disk resource
Recovery target (LocalServer)
Recovery target type (cls)

```
clpcfadm.py add mon hdw hdw1
clpcfadm.py mod -t monitor/hdw@hdw1/parameters/object --set <Hybrid disk_
resource>
clpcfadm.py mod -t monitor/hdw@hdw1/relation/name --set LocalServer_
--nocheck
clpcfadm.py mod -t monitor/hdw@hdw1/relation/type --set cls --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.20.2 Setting Hybrid disk monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/hdw@hdw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 10 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/hdw@hdw1/polling/interval --set <Value>
```

- Timeout (sec)

Default, 60 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/hdw@hdw1/polling/timeout --set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/hdw@hdw1/emergency/dumpcollect/use --set  
→<Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/hdw@hdw1/emergency/timeout/  
→notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/hdw@hdw1/emergency/timeout/notrecovery/use  
→--set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/hdw@hdw1/polling/reconfirmation --set  
→<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/hdw@hdw1/firstmonwait --set <Value>
```

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/hdw@hdw1/proctr1/priority --set <Value>
```

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/hdw@hdw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Hybrid Disk Resource

```
clpcfadm.py mod -t monitor/hdw@hdw1/parameters/object --set <Hybrid  
Disk Resource>
```

---

**Note:** You can specify only a hybrid disk resource.

---

## Recovery Action

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/hdw@hdw1/emergency/preaction/use --set  
-><Value>
```

## Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/hdw@hdw1/emergency/preaction/default  
->--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/hdw@hdw1/emergency/preaction/path --set  
-><File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/hdw@hdw1/emergency/preaction/path --set ↳  
→preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/hdw@hdw1/emergency/preaction/timeout ↳  
→--set <Value>
```

---

### 8.20.3 Deleting a Hybrid disk monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon hdw hdw1
```

## 8.21 HTTP monitor resource

---

**Note:**

The command lines in this section use **httpw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.21.1 Adding an HTTP monitor resource

Be sure to set the following items. For details, see "*Setting HTTP monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon httpw httpw1
clpcfadm.py mod -t monitor/httpw@httpw1/target --set <Target Resource
  ↪ (monitored when active)>
clpcfadm.py mod -t monitor/httpw@httpw1/relation/name --set <Recovery
  ↪ target> --nocheck
clpcfadm.py mod -t monitor/httpw@httpw1/relation/type --set <Recovery
  ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.21.2 Setting HTTP monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/httpw@httpw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/httpw@httpw1/polling/interval --set <Value>
```

- Timeout (sec)

Default, 10 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/httpw@httpw1/polling/timeout --set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/dumpcollect/use
↳--set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/timeout/
↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/timeout/notrecovery/
↳use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 3 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/httpw@httpw1/polling/reconfirmation --set
↳<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/httpw@httpw1/firstmonwait --set <Value>
```

- Monitoring Timing

Monitoring Timing	Value
Always	0
Active (default)	1

```
clpcfadm.py mod -t monitor/httpw@httpw1/polling/timing --set <Value>
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/httpw@httpw1/target --set ""
```

---

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/httpw@httpw1/target --set <Target Resource  
→ (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---

---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/httpw@httpw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/httpw@httpw1/polling/servers@<ID>/name  
→ --set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/httpw@httpw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Connecting Destination (Within 255 bytes)

Default: localhost

```
clpcfadm.py mod -t monitor/httpw@httpw1/parameters/servername --set
    ↳<Connecting Destination>
```

- Port Number

Default, 80 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/httpw@httpw1/parameters/port --set <Value>
```

- Request URI (Within 255 bytes)

```
clpcfadm.py mod -t monitor/httpw@httpw1/parameters/requesturi --set
    ↳<Request URI>
```

- Protocol

Protocol	Value
HTTP (default)	0
HTTPS	1

```
clpcfadm.py mod -t monitor/httpw@httpw1/parameters/https --set <Value>
```

---

**Note:** If necessary, also change the setting for "Port Number".

---

- Request Type

Request Type	Value
HEAD (default)	0
GET	1

```
clpcfadm.py mod -t monitor/httpw@httpw1/parameters/requesttype --set
    ↳<Value>
```

- Authentication Method

Authentication Method	Value
No authentication (default)	0
Basic authentication	1
Digest authentication	2

```
clpcfadm.py mod -t monitor/httpw@httpw1/parameters/authmethod --set
    ↳<Value>
```

- User Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/httpw@httpw1/parameters/username --set
    ↳<User Name>
```

---

**Note:** Set as above with "Authentication Method" set to "Basic authentication" or "Digest authenti-

cation".

---

- Password (Within 255 bytes)

```
clpcfadm.py mod -t monitor/httpw@httpw1/parameters/password --set  
→<Encrypted password>  
clpcfadm.py mod -t monitor/httpw@httpw1/parameters/encrypwd --set 1  
→--nocheck
```

---

**Note:** Set as above with "Authentication Method" set to "Basic authentication" or "Digest authentication".

---

**Note:**

Set an encrypted password string.

For details, see "[Retrieving an encrypted password string](#)".

---

- Client Authentication

Client Authentication	Value
Set	1
Do not set (default)	0

```
clpcfadm.py mod -t monitor/httpw@httpw1/parameters/clientauth --set  
→<Value>
```

---

**Note:** You can set this parameter with "Protocol" set to "HTTPS".

---

- Private Key (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/httpw@httpw1/parameters/privatekey --set  
→<Private Key>
```

---

**Note:** Set as above with "Client Authentication" set to "Set".

---

**Note:** Specify it as an absolute path.

---

- Client Certificate (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/httpw@httpw1/parameters/clientcert --set  
→<Client Certificate>
```

---

**Note:** Set as above with "Client Authentication" set to "Set".

---

**Note:** Specify it as an absolute path.

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/httpw@httpw1/relation/name --set <Recovery target>
clpcfadm.py mod -t monitor/httpw@httpw1/relation/type --set <Recovery target type>
--nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/threshold/
--restart --set 0
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/threshold/fo
--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

---

```
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/threshold/
--restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

---

```
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/threshold/script_
--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/preaction/
--userrestart --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/threshold/restart  
  --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/preaction/  
  usefailover --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/threshold/fo --set  
  <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/httpw@httpw1/emergency/preaction/use --set  
  <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1
Stop resource <sup>40</sup>	16
Stop group <sup>41</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8

Continued on next page

Table 8.238 – continued from previous page

Final Action	Value
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

`clpcfadm.py mod -t monitor/httpw@httpw1/emergency/action --set <Value>`

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

`clpcfadm.py mod -t monitor/httpw@httpw1/emergency/preaction/  
→default --set <Value>`

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

`clpcfadm.py mod -t monitor/httpw@httpw1/emergency/preaction/path  
→--set <File> --nocheck`

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

`clpcfadm.py mod -t monitor/httpw@httpw1/emergency/preaction/path  
→--set preaction.sh --nocheck`

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

`clpcfadm.py mod -t monitor/httpw@httpw1/emergency/preaction/  
→timeout --set <Value>`

<sup>40</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>41</sup> Cannot be specified with "Recovery target type" set to "cls".

### **8.21.3 Deleting an HTTP monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon httpw httpwl
```

## 8.22 IMAP4 monitor resource

---

**Note:**

The command lines in this section use **imap4w1** as the monitor resource name.

Change it to suit your environment.

---

### 8.22.1 Adding an IMAP4 monitor resource

Be sure to set the following items. For details, see "*Setting IMAP4 monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon imap4w imap4w1
clpcfadm.py mod -t monitor/imap4w@imap4w1/target --set <Target Resource_
↪ (monitored when active)>
clpcfadm.py mod -t monitor/imap4w@imap4w1/relation/name --set <Recovery_
↪ target> --nocheck
clpcfadm.py mod -t monitor/imap4w@imap4w1/relation/type --set <Recovery_
↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.22.2 Setting IMAP4 monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/imap4w@imap4w1/polling/interval --set  
  ↳<Value>`
- Timeout (sec)  
Default, 120 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/imap4w@imap4w1/polling/timeout --set  
  ↳<Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/dumpcollect/use  
  ↳--set <Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

`clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/timeout/  
  ↳notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/timeout/  
  ↳notrecovery/use --set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count  
Default, 3 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t monitor/imap4w@imap4w1/polling/reconfirmation  
  ↳--set <Value>`
- Wait Time to Start Monitoring (sec)  
Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/firstmonwait --set <Value>
```

- Monitoring Timing

Monitoring Timing	Value
Always	0
Active (default)	1

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/polling/timing --set <Value>
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/target --set ""
```

---

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/target --set <Target  
Resource (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---



---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/proctrl/priority --set  
-><Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/polling/servers@<ID>/name  
->--set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/perf/metrics/use --set  
-><Value>
```

## Monitor (special)

- IP Address  
Default: 127.0.0.1  

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/parameters/ipaddress --set
↳<IP Address>
```
- Port Number  
Default, 143 (minimum, 1; maximum, 65535)  

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/parameters/port --set
↳<Value>
```
- User Name (Within 255 bytes)  

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/parameters/username --set
↳<User Name>
```
- Password (Within 189 bytes)  

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/parameters/password --set
↳<Encrypted password>
clpcfadm.py mod -t monitor/imap4w@imap4w1/parameters/encrypwd --set 1
↳--nocheck
```

---

### Note:

Set an encrypted password string.  
For details, see "[Retrieving an encrypted password string](#)".

---

- Authentication Method

Authentication Method	Value
AUTHENTICATE LOGIN (default)	0
LOGIN	1

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/parameters/certificate
↳--set <Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/relation/name --set
↳<Recovery target> --nocheck
clpcfadm.py mod -t monitor/imap4w@imap4w1/relation/type --set
↳<Recovery target type> --nocheck
```

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/threshold/
    ↳restart --set 0
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/threshold/fo_
    ↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/threshold/
    ↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/threshold/script_
    ↳--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/preaction/
    ↳userrestart --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/threshold/restart_
    ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1

Continued on next page

Table 8.249 – continued from previous page

Execute Script before Failover	Value
Do not check (default)	0

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/preaction/
    ↳usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/threshold/fo_
    ↳--set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/preaction/use_
    ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1
Stop resource <sup>42</sup>	16
Stop group <sup>43</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (de-         fault)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/action --set
    ↳<Value>
```

<sup>42</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>43</sup> Cannot be specified with "Recovery target type" set to "cls".

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/preaction/  
→--default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/preaction/path  
→--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/preaction/path  
→--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/imap4w@imap4w1/emergency/preaction/  
→timeout --set <Value>
```

### 8.22.3 Deleting an IMAP4 monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon imap4w imap4w1
```

## 8.23 IP monitor resource

---

**Note:**

The command lines in this section use **ipw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.23.1 Adding an IP monitor resource

Be sure to set the following items. For details, see "*Setting IP monitor resource parameters*".

Item (mandatory)
Monitor resource name
IP Address
Recovery target
Recovery target type

```
clpcfadm.py add mon ipw ipw1
clpcfadm.py mod -t monitor/ipw@ipw1/parameters/list@<ID>/ip --set <IP_
→Address> --nocheck
clpcfadm.py mod -t monitor/ipw@ipw1/relation/name --set <Recovery target>_
→--nocheck
clpcfadm.py mod -t monitor/ipw@ipw1/relation/type --set <Recovery target_→
→type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.23.2 Setting IP monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/ipw@ipw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 30 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/ipw@ipw1/polling/interval --set <Value>
```

- Timeout (sec)

Default, 30 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/ipw@ipw1/polling/timeout --set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/dumpcollect/use --set  
→<Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/timeout/  
→notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/timeout/notrecovery/use  
→--set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/ipw@ipw1/polling/reconfirmation --set  
→<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/ipw@ipw1/firstmonwait --set <Value>
```

- Monitoring Timing

Monitoring Timing	Value
Always (default)	0
Active	1

```
clpcfadm.py mod -t monitor/ipw@ipw1/polling/timing --set <Value>
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/ipw@ipw1/target --set ""
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/ipw@ipw1/target --set <Target Resource  
→ (monitored when active)>
```

---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/ipw@ipw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/ipw@ipw1/polling/servers@<ID>/name --set  
→ <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/ipw@ipw1/perf/metrics/use --set <Value>
```

## Monitor (special)

### Common

- IP Address

#### Add

```
clpcfadm.py mod -t monitor/ipw@ipw1/parameters/list@<ID>/ip
↳--set <IP Address> --nocheck
```

---

#### Note:

With only one IP address to be monitored, specify 0 for ID.

With more than one IP address to be monitored, specify consecutive numbers (e.g., 0, 1, 2...). (Maximum: 7)

---

#### Delete

```
clpcfadm.py mod -t monitor/ipw@ipw1/parameters/list@<ID>
↳--delete
```

### Set Up Individually

Set the following for each server.

- IP Address

```
clpcfadm.py mod -t monitor/ipw@ipw1/server@<Server name>/
↳parameters/list@<ID>/ip --set <IP Address> --nocheck
```

---

**Note:** To return to the common settings, set the following for each server.

```
clpcfadm.py mod -t monitor/ipw@ipw1/server@<Server name> --delete
```

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/ipw@ipw1/relation/name --set <Recovery
↳target> --nocheck
clpcfadm.py mod -t monitor/ipw@ipw1/relation/type --set <Recovery
↳target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/threshold/restart
↳--set 0
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/threshold/fo --set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/threshold/restart  
  --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/threshold/script --set  
  <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/preaction/userrestart  
  --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/threshold/restart --set  
  <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/preaction/usefailover  
  --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/threshold/fo --set
→<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>44</sup>	16
Stop group <sup>45</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/action --set <Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/preaction/default
→--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

<sup>44</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>45</sup> Cannot be specified with "Recovery target type" set to "cls".

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/preaction/path --set  
→<File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/preaction/path --set  
→preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/ipw@ipw1/emergency/preaction/timeout  
→--set <Value>
```

### 8.23.3 Deleting an IP monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon ipw ipw1
```

## 8.24 JVM monitor resource

---

**Note:**

The command lines in this section use **jraw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.24.1 Adding a JVM monitor resource

---

**Note:** Please set Java installation path in JVM monitor on the cluster property before creating a JVM monitor resource.

---

Be sure to set the following items. For details, see "*Setting JVM monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
JVM Type
Identifier
Connection Port
Target
Recovery target
Recovery target type
Number of JVM monitor resources

```
clpcfadm.py add mon jraw jraw1
clpcfadm.py mod -t monitor/jraw@jraw1/target --set <Target Resource
  ↳ (monitored when active)>
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jvmtype --set <JVM Type>
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jvm/name --set
  ↳ <Identifier>
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jvm/port --set
  ↳ <Connection Port>
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jvm/servertype --set
  ↳ <Target>
clpcfadm.py mod -t monitor/jraw@jraw1/relation/name --set <Recovery
  ↳ target> --nocheck
clpcfadm.py mod -t monitor/jraw@jraw1/relation/type --set <Recovery
  ↳ target type> --nocheck
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/targetnum --set <Number
  ↳ of JVM monitor resources>
```

---

**Note:**

With only one JVM monitor, specify 0 for Number of JVM monitor resources.

With more than one JVM monitor, specify consecutive numbers (e.g., 0, 1, 2...). (Maximum: 24)

---

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

## 8.24.2 Setting JVM monitor resource parameters

### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

### Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/jraw@jraw1/polling/interval --set <Value>
```

- Timeout (sec)

Default, 180 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/jraw@jraw1/polling/timeout --set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/emergency/dumpcollect/use --set  
→<Value>
```

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/jraw@jraw1/polling/reconfirmation --set  
→<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/jraw@jraw1/firstmonwait --set <Value>
```

- Monitoring Timing

Monitoring Timing	Value
Always	0
Active (default)	1

```
clpcfadm.py mod -t monitor/jraw@jraw1/polling/timing --set <Value>
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/jraw@jraw1/target --set ""
```

---

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/jraw@jraw1/target --set <Target Resource  
→ (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---



---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/jraw@jraw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/jraw@jraw1/polling/servers@<ID>/name --set  
→ <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

## Monitor (special)

- Target

Target	Value (targettypeidx)	Value (servertype)
WebLogic Server (default)	0	weblogic
WebOTX Domain Agent	1	webotx
WebOTX Process Group	2	sun
JBoss	3	sun
JBoss Domain Mode	4	local

Continued on next page

Table 8.268 – continued from previous page

Target	Value (targettypeidx)	Value (servertype)
Tomcat	5	sun
WebOTX ESB	6	sun
WebSAM SVF	7	sun
iPlanet Web Server	8	sun
Java Application	9	sun

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/targettypeidx --set
  ↳<Value (targettypeidx)>
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jvm/servertype --set
  ↳<Value (servertype)>
```

- JVM Type

Value
Oracle Java (default)
Oracle Java(usage monitoring)
Oracle JRockit
OpenJDK

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jvmtype --set <Value>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Oracle Java").

---

- Identifier (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jvm/name --set
  ↳<Identifier>
```

- Connection Port

Default, None (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jvm/port --set
  ↳<Value>
```

- Process Name (Within 1024 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jvm/processname
  ↳--set <Process Name>
```

---

**Note:** Set as above with "Target" set to "JBoss Domain Mode".

---

- User Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jvm/user/id --set
  ↳<User Name>
```

---

**Note:** Set as above with "Target" set to "WebOTX Domain Agent".

---

- Password (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jvm/user/passwd
    ↵--set <Encrypted password>
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/encrypwd --set 1
    ↵--nocheck
```

---

**Note:** Set as above with "Target" set to "WebOTX Domain Agent".

---

**Note:**

Set an encrypted password string.

For details, see "[Retrieving an encrypted password string](#)".

---

- Command (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jvm/action/down/
    ↵runcommand --set <command>
```

---

**Note:** Specify the command as an absolute path enclosed with double quotes (e.g., "/home/ cmd").

---

## Tuning

### Memory

**If "JVM Type" is set to "Oracle Java" or "OpenJDK":**

- Monitor Heap Memory Rate

Monitor Heap Memory Rate	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↵heapgroup/check --set <Value>
```

- Total Usage

Total Usage	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↵heap/check --set <Value>
```

- \* Total Usage (%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↵heap/threshold --set <Value>
```

- Eden Space

Eden Space	Value
Monitor	1

Continued on next page

Table 8.272 – continued from previous page

Eden Space	Value
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳eden/check --set <Value>
```

\* Eden Space(%)

Default, 100 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳eden/threshold --set <Value>
```

- Survivor Space

Survivor Space	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳survivor/check --set <Value>
```

\* Survivor Space(%)

Default, 100 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳survivor/threshold --set <Value>
```

- Tenured Gen

Tenured Gen	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳tenured/check --set <Value>
```

\* Tenured Gen(%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳tenured/threshold --set <Value>
```

- Command (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳heapgroup/action/down/runcommand --set <command>
```

---

**Note:** Enclose the path with double quotes.

---



---

**Note:** Specify it as an absolute path.

---

- Monitor Non-Heap Memory Rate

Monitor Non-Heap Memory Rate	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳nonheapgroup/check --set <Value>
```

- Total Usage

Total Usage	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳nonheap/check --set <Value>
```

- \* Total Usage (%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳nonheap/threshold --set <Value>
```

- Code Cache

Code Cache	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳codecash/check --set <Value>
```

- \* Code Cache(%)

Default, 100 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳codecash/threshold --set <Value>
```

- Perm Gen

Perm Gen	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳perm/check --set <Value>
```

- \* Perm Gen(%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳perm/threshold --set <Value>
```

- Perm Gen[shared-ro]

Perm Gen[shared-ro]	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳perm/ro/check --set <Value>
```

- \* Perm Gen[shared-ro](%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳perm/ro/threshold --set <Value>
```

- Perm Gen[shared-rw]

Perm Gen[shared-rw]	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳perm/rw/check --set <Value>
```

\* Perm Gen[shared-rw](%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳perm/rw/threshold --set <Value>
```

- Command (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳nonheapgroup/action/down/runcommand --set <command>
```

---

**Note:** Enclose the path with double quotes.

---

---

**Note:** Specify it as an absolute path.

---

**If "JVM Type" is set to "Oracle Java (usage monitoring)":**

- Monitor Heap Memory Rate

Monitor Heap Memory Rate	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳heapgroup/maxcheck --set <Value>
```

- Total Usage

Total Usage	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳heap/check --set <Value>
```

\* Total Usage (MB)

Default, 0 (minimum, 0; maximum, 102400)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳heap/maxsize --set <Value>
```

- Eden Space

Eden Space	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳eden/check --set <Value>
```

\* Eden Space(MB)

Default, 0 (minimum, 0; maximum, 102400)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳eden/maxsize --set <Value>
```

- Survivor Space

Survivor Space	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳survivor/check --set <Value>
```

- \* Survivor Space(MB)

Default, 0 (minimum, 0; maximum, 102400)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳survivor/maxsize --set <Value>
```

- Tenured Gen(Old Gen)

Tenured Gen(Old Gen)	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳tenured/check --set <Value>
```

- \* Tenured Gen(Old Gen)(MB)

Default, 0 (minimum, 0; maximum, 102400)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳tenured/maxsize --set <Value>
```

- Command (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳heapgroup/action/down/runcommand --set <command>
```

---

**Note:** Enclose the path with double quotes.

---



---

**Note:** Specify it as an absolute path.

---

- Monitor Non-Heap Memory Rate

Monitor Non-Heap Memory Rate	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳nonheapgroup/maxcheck --set <Value>
```

- Total Usage

Total Usage	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳nonheap/check --set <Value>
```

\* Total Usage (MB)

Default, 0 (minimum, 0; maximum, 102400)

clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳nonheap/maxsize --set <Value>

- Code Cache

Code Cache	Value
Monitor	1
Do not monitor (default)	0

clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳codecash/check --set <Value>

\* Code Cache(MB)

Default, 0 (minimum, 0; maximum, 102400)

clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳codecash/maxsize --set <Value>

- CodeHeap non-nmethods

CodeHeap non-nmethods	Value
Monitor	1
Do not monitor (default)	0

clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳nonnmethods/check --set <Value>

\* CodeHeap non-nmethods(MB)

Default, 0 (minimum, 0; maximum, 102400)

clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳nonnmethods/maxsize --set <Value>

---

**Note:** Set as above with "Code Cache" set to "Do not monitor".

---

- CodeHeap profiled

CodeHeap profiled	Value
Monitor	1
Do not monitor (default)	0

clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳profilednmethods/check --set <Value>

\* CodeHeap profiled(MB)

Default, 0 (minimum, 0; maximum, 102400)

clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
    ↳profilednmethods/maxsize --set <Value>

---

**Note:** Set as above with "Code Cache" set to "Do not monitor".

---

- CodeHeap non-profiled

CodeHeap non-profiled	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳nonprofilednmethods/check --set <Value>
* CodeHeap non-profiled(MB)
Default, 0 (minimum, 0; maximum, 102400)
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳nonprofilednmethods/maxsize --set <Value>
```

---

**Note:** Set as above with "Code Cache" set to "Do not monitor".

---

– Compressed Class Space

Compressed Class Space	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳ccs/check --set <Value>
* Compressed Class Space(MB)
Default, 0 (minimum, 0; maximum, 102400)
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳ccs/maxsize --set <Value>
```

– Metaspace

Metaspace	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳metaspace/check --set <Value>
* Metaspace(MB)
Default, 0 (minimum, 0; maximum, 102400)
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳metaspace/maxsize --set <Value>
```

– Command (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳nonheapgroup/action/down/runcommand --set <command>
```

---

**Note:** Enclose the path with double quotes.

---



---

**Note:** Specify it as an absolute path.

---

**If "JVM Type" is set to "Oracle JRockit":**

- Monitor Heap Memory Rate

Monitor Heap Memory Rate	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
↳heapgroup/check --set <Value>
```

– Total Usage

Total Usage	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
↳heap/check --set <Value>
```

\* Total Usage (%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
↳heap/threshold --set <Value>
```

– Nursery Space

Nursery Space	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jrockit/  
↳memory/nursery/check --set <Value>
```

\* Nursery Space(%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/  
↳jrockit/memory/nursery/threshold --set <Value>
```

– Old Space

Old Space	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jrockit/  
↳memory/oldspace/check --set <Value>
```

\* Old Space(%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/  
↳jrockit/memory/oldspace/threshold --set <Value>
```

– Command (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/  
↳heapgroup/action/down/runcommand --set <command>
```

---

**Note:** Enclose the path with double quotes.

---

---

**Note:** Specify it as an absolute path.

---

• Monitor Non-Heap Memory Rate

Monitor Non-Heap Memory Rate	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳nonheapgroup/check --set <Value>
```

– Total Usage

Total Usage	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳nonheap/check --set <Value>
```

\* Total Usage (%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳nonheap/threshold --set <Value>
```

– Class Memory

Class Memory	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/jrockit/
    ↳memory/classmemory/check --set <Value>
```

\* Class Memory(%)

Default, 100 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/
    ↳jrockit/memory/classmemory/threshold --set <Value>
```

– Command (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/memory/
    ↳nonheapgroup/action/down/runcommand --set <command>
```

---

**Note:** Enclose the path with double quotes.

---



---

**Note:** Specify it as an absolute path.

---

### Thread

- Monitor the number of Active Threads

Monitor the number of Active Threads	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/thread/count/
    ↳check --set <Value>
```

– (Thread)

Default, 65535 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/thread/
    ↳count/threshold --set <Value>
```

**Note:** Set as above with "Monitor the number of Active Threads" set to "Monitor".

---

- Command (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/thread/  
↳action/down/runcommand --set <command>
```

**Note:** Enclose the path with double quotes.

---

**Note:** Specify it as an absolute path.

---

**Note:** Set as above with "Monitor the number of Active Threads" set to "Monitor".

---

## GC

- Monitor the time in Full GC

Monitor the time in Full GC	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/gc/time/check  
↳--set <Value>
```

- (msec)

Default, 65535 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/gc/time/  
↳threshold --set <Value>
```

**Note:** Set as above with "Monitor the time in Full GC" set to "Monitor".

---

- Monitor the count of Full GC execution

Monitor the count of Full GC execution	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/gc/cont/check  
↳--set <Value>
```

- (count)

Default, 1 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/gc/cont/  
↳threshold --set <Value>
```

---

**Note:** Set as above with "Monitor the count of Full GC execution" set to "Monitor".

---

- Command (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/gc/action/down/  
↳ runcommand --set <command>
```

---

**Note:** Enclose the path with double quotes.

---

---

**Note:** Specify it as an absolute path.

---

---

**Note:**

Set as above with "Monitor the time in Full GC" or "Monitor the count of Full GC execution" set to "Monitor".

---

### WebLogic

---

**Note:** To set the following items, set "Target" to "WebLogic Server" in advance.

---

- Monitor the requests in Work Manager

Monitor the requests in Work Manager	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/wm/check  
↳ --set <Value>
```

- Target Work Managers (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/work/  
↳ manager --set <Target Work Managers>
```

---

**Note:** Set as above with "Monitor the requests in Work Manager" set to "Monitor".

---

### Waiting Requests

---

**Note:** To set the following items, set "Monitor the requests in Work Manager" to "Monitor" in advance.

---

- The number

The number	Value
Enable	1
Do not enable (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/wm/  
    ↳ pending/requests/chkthreshold --set <Value>
```

- The number

Default, 65535 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/wm/  
    ↳ pending/requests/threshold --set <Value>
```

- Average

Average	Value
Enable	1
Do not enable (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/wm/  
    ↳ pending/requests/avg/chkthreshold --set <Value>
```

- Average

Default, 65535 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/wm/  
    ↳ pending/requests/avg/threshold --set <Value>
```

- Increment from the last

Increment from the last	Value
Enable (default)	1
Do not enable	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/wm/  
    ↳ pending/requests/chkincrement --set <Value>
```

- Increment from the last (%)

Default, 80 (minimum, 1; maximum, 1024)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/wm/  
    ↳ pending/requests/increment --set <Value>
```

- Monitor the requests in Thread Pool

Monitor the requests in Thread Pool	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/check  
    ↳ --set <Value>
```

#### **Waiting Requests**

---

**Note:** To set the following items, set "Monitor the requests in Thread Pool" to "Monitor" in advance.

---

- The number

The number	Value
Enable	1
Do not enable (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/
    ↵pending/requests/chkthreshold --set <Value>
```

- The number

Default, 65535 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/
    ↵pending/requests/threshold --set <Value>
```

- Average

Average	Value
Enable	1
Do not enable (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/
    ↵pending/requests/avg/chkthreshold --set <Value>
```

- Average

Default, 65535 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/
    ↵pending/requests/avg/threshold --set <Value>
```

- Increment from the last

Increment from the last	Value
Enable (default)	1
Do not enable	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/
    ↵pending/requests/chkincrement --set <Value>
```

- Increment from the last (%)

Default, 80 (minimum, 1; maximum, 1024)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/
    ↵pending/requests/increment --set <Value>
```

## Executing Requests

---

**Note:** To set the following items, set "Monitor the requests in Thread Pool" to "Monitor" in advance.

---

- The number

The number	Value
Enable	1
Do not enable (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/
    ↵throughput/chkthreshold --set <Value>
```

- The number

Default, 65535 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/
```

- `clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/  
  ↳throughput/threshold --set <Value>`

Average	Value
Enable	1
Do not enable (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/  
  ↳throughput/avg/chkthreshold --set <Value>
```

- Average

Default, 65535 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/  
  ↳throughput/avg/threshold --set <Value>
```

- Increment from the last

Increment from the last	Value
Enable (default)	1
Do not enable	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/  
  ↳throughput/chkincrement --set <Value>
```

- Increment from the last (%)

Default, 80 (minimum, 1; maximum, 1024)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/tp/  
  ↳throughput/increment --set <Value>
```

- Command (Within 255 bytes)

```
clpcfadm.py mod -t monitor/jraw@jraw1/parameters/wl/action/down/  
  ↳runcommand --set <command>
```

---

**Note:** Enclose the path with double quotes.

---

---

**Note:** Specify it as an absolute path.

---

---

**Note:**

Set as above with "Monitor the requests in Work Manager" or "Monitor the requests in Thread Pool" set to "Monitor".

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/jraw@jraw1/relation/name --set <Recovery target> --nocheck
clpcfadm.py mod -t monitor/jraw@jraw1/relation/type --set <Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/jraw@jraw1/emergency/threshold/restart --set 0
clpcfadm.py mod -t monitor/jraw@jraw1/emergency/threshold/fo --set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/jraw@jraw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/jraw@jraw1/emergency/threshold/restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/jraw@jraw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/jraw@jraw1/emergency/threshold/script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/emergency/preaction/userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/jraw@jraw1/emergency/threshold/restart  
  --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/emergency/preaction/usefailover  
  --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/jraw@jraw1/emergency/threshold/fo --set  
  <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/jraw@jraw1/emergency/preaction/use --set  
  <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>46</sup>	16
Stop group <sup>47</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9

Continued on next page

Table 8.319 – continued from previous page

Final Action	Value
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

`clpcfadm.py mod -t monitor/jraw@jraw1/emergency/action --set <Value>`

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

`clpcfadm.py mod -t monitor/jraw@jraw1/emergency/preaction/default ↴--set <Value>`

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

`clpcfadm.py mod -t monitor/jraw@jraw1/emergency/preaction/path ↴--set <File> --nocheck`

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

`clpcfadm.py mod -t monitor/jraw@jraw1/emergency/preaction/path ↴--set preaction.sh --nocheck`

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

`clpcfadm.py mod -t monitor/jraw@jraw1/emergency/preaction/timeout ↴--set <Value>`

<sup>46</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>47</sup> Cannot be specified with "Recovery target type" set to "cls".

### **8.24.3 Deleting a JVM monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon jraw jraw1
```

## 8.25 Mirror Disk Connect monitor resource

---

**Note:**

The command lines in this section use **mdnw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.25.1 Adding a Mirror Disk Connect monitor resource

Be sure to set the following items. For details, see "*Setting Mirror Disk Connect monitor resource parameters*".

Item (mandatory)
Monitor resource name
Mirror Disk Resource
Recovery target (LocalServer)
Recovery target type (cls)

```
clpcfadm.py add mon mdnw mdnw1
clpcfadm.py mod -t monitor/mdnw@mdnw1/parameters/object --set <Mirror_
Disk Resource>
clpcfadm.py mod -t monitor/mdnw@mdnw1/relation/name --set LocalServer_
--nocheck
clpcfadm.py mod -t monitor/mdnw@mdnw1/relation/type --set cls --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.25.2 Setting Mirror Disk Connect monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/mdnw@mdnw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/mdnw@mdnw1/polling/interval --set <Value>`
- Timeout (sec)  
Default, 120 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/mdnw@mdnw1/polling/timeout --set <Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/mdnw@mdnw1/emergency/dumpcollect/use --set  
  ↳<Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

`clpcfadm.py mod -t monitor/mdnw@mdnw1/emergency/timeout/  
  ↳notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/mdnw@mdnw1/emergency/timeout/notrecovery/  
  ↳use --set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

`clpcfadm.py mod -t monitor/mdnw@mdnw1/polling/reconfirmation --set  
  ↳<Value>`

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

`clpcfadm.py mod -t monitor/mdnw@mdnw1/firstmonwait --set <Value>`

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/mdnw@mdnw1/proctrl/priority --set <Value>
```

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/mdnw@mdnw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Mirror Disk Resource

```
clpcfadm.py mod -t monitor/mdnw@mdnw1/parameters/object --set <Mirror  
Disk Resource>
```

---

**Note:** You can specify only a mirror disk resource.

---

## Recovery Action

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/mdnw@mdnw1/emergency/preaction/use --set  
-><Value>
```

## Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/mdnw@mdnw1/emergency/preaction/default  
->--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/mdnw@mdnw1/emergency/preaction/path  
->--set <File> --nocheck
```

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/mdnw@mdnw1/emergency/preaction/path  
→--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/mdnw@mdnw1/emergency/preaction/timeout  
→--set <Value>
```

---

### 8.25.3 Deleting a Mirror Disk Connect monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon mdnw mdnw1
```

## 8.26 Mirror disk monitor resource

---

**Note:**

The command lines in this section use **mdw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.26.1 Adding a Mirror disk monitor resource

Be sure to set the following items. For details, see "*Setting Mirror disk monitor resource parameters*".

Item (mandatory)
Monitor resource name
Mirror Disk Resource
Recovery target (LocalServer)
Recovery target type (cls)

```
clpcfadm.py add mon mdw mdw1
clpcfadm.py mod -t monitor/mdw@mdw1/parameters/object --set <Mirror Disk
    ↪Resource>
clpcfadm.py mod -t monitor/mdw@mdw1/relation/name --set LocalServer
    ↪--nocheck
clpcfadm.py mod -t monitor/mdw@mdw1/relation/type --set cls --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.26.2 Setting Mirror disk monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/mdw@mdw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 10 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/mdw@mdw1/polling/interval --set <Value>`
- Timeout (sec)  
Default, 60 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/mdw@mdw1/polling/timeout --set <Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/mdw@mdw1/emergency/dumpcollect/use --set  
  ↳<Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

`clpcfadm.py mod -t monitor/mdw@mdw1/emergency/timeout/  
  ↳notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/mdw@mdw1/emergency/timeout/notrecovery/use  
  ↳--set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

`clpcfadm.py mod -t monitor/mdw@mdw1/polling/reconfirmation --set  
  ↳<Value>`

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

`clpcfadm.py mod -t monitor/mdw@mdw1/firstmonwait --set <Value>`

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/mdw@mdw1/proctrl/priority --set <Value>
```

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/mdw@mdw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Mirror Disk Resource

```
clpcfadm.py mod -t monitor/mdw@mdw1/parameters/object --set <Mirror  
Disk Resource>
```

---

**Note:** You can specify only a mirror disk resource.

---

## Recovery Action

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/mdw@mdw1/emergency/preaction/use --set  
-><Value>
```

## Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/mdw@mdw1/emergency/preaction/default  
->--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/mdw@mdw1/emergency/preaction/path --set  
-><File> --nocheck
```

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/mdw@mdw1/emergency/preaction/path --set path  
→ preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/mdw@mdw1/emergency/preaction/timeout value  
→ --set <Value>
```

---

### 8.26.3 Deleting a Mirror disk monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon mdw mdw1
```

## 8.27 NIC Link Up/Down monitor resource

---

### Note:

The command lines in this section use **miiw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.27.1 Adding an NIC Link Up/Down monitor resource

Be sure to set the following items. For details, see "*Setting NIC Link Up/Down monitor resource parameters*".

Item (mandatory)
Monitor resource name
Monitor Target
Recovery target
Recovery target type

```
clpcfadm.py add mon miiw miiw1
clpcfadm.py mod -t monitor/miiw@miiw1/parameters/object --set <Monitor_
    ↪Target>
clpcfadm.py mod -t monitor/miiw@miiw1/relation/name --set <Recovery_
    ↪target> --nocheck
clpcfadm.py mod -t monitor/miiw@miiw1/relation/type --set <Recovery_
    ↪target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.27.2 Setting NIC Link Up/Down monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/miiw@miiw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 10 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/miiw@miiwl/polling/interval --set <Value>`
- Timeout (sec)  
Default, 180 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/miiw@miiwl/polling/timeout --set <Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/miiw@miiwl/emergency/dumpcollect/use --set  
  ↳<Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

`clpcfadm.py mod -t monitor/miiw@miiwl/emergency/timeout/  
  ↳notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/miiw@miiwl/emergency/timeout/notrecovery/  
  ↳use --set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 3 (minimum, 0; maximum, 999)

`clpcfadm.py mod -t monitor/miiw@miiwl/polling/reconfirmation --set  
  ↳<Value>`

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

`clpcfadm.py mod -t monitor/miiw@miiwl/firstmonwait --set <Value>`

- Monitoring Timing

Monitoring Timing	Value
Always (default)	0
Active	1

```
clpcfadm.py mod -t monitor/miiw@miiwl/polling/timing --set <Value>
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/miiw@miiwl/target --set ""
```

---

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/miiw@miiwl/target --set <Target Resource  
→ (monitored when active)>
```

---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/miiw@miiwl/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/miiw@miiwl/polling/servers@<ID>/name --set  
→ <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/miiw@miiwl/perf/metrics/use --set <Value>
```

## Monitor (special)

### Common

- Monitor Target (Within 15 bytes)

```
clpcfadm.py mod -t monitor/miiw@miiwl/parameters/object --set  
↳<Monitor Target>
```

### Set Up Individually

Set the following for each server.

- Monitor Target (Within 15 bytes)

```
clpcfadm.py mod -t monitor/miiw@miiwl/server@<Server name>/  
↳parameters/object --set <Monitor Target> --nocheck
```

---

**Note:** To return to the common settings, set the following for each server.

```
clpcfadm.py mod -t monitor/miiw@miiwl/server@<Server name> --delete
```

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/miiw@miiwl/relation/name --set <Recovery  
↳target> --nocheck  
clpcfadm.py mod -t monitor/miiw@miiwl/relation/type --set <Recovery  
↳target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/miiw@miiwl/emergency/threshold/restart  
↳--set 0  
clpcfadm.py mod -t monitor/miiw@miiwl/emergency/threshold/fo --set  
↳0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/miiw@miiwl/emergency/action --set 1
```

---

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/miiw@miiwl/emergency/threshold/restart  
↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

---

```
clpcfadm.py mod -t monitor/miiw@miiw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/miiw@miiw1/emergency/threshold/script
  ↵--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/miiw@miiw1/emergency/preaction/userrestart
  ↵--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/miiw@miiw1/emergency/threshold/restart
  ↵--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/miiw@miiw1/emergency/preaction/usefailover
  ↵--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/miiw@miiw1/emergency/threshold/fo --set
  ↵<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/miiw@miiw1/emergency/preaction/use --set
```

↪<Value>

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>48</sup>	16
Stop group <sup>49</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

clpcfadm.py mod -t monitor/miiw@miiwl/emergency/action --set <Value>

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

clpcfadm.py mod -t monitor/miiw@miiwl/emergency/preaction/default ↪--set <Value>

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

clpcfadm.py mod -t monitor/miiw@miiwl/emergency/preaction/path ↪--set <File> --nocheck

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

<sup>48</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>49</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/miiw@miiw1/emergency/preaction/path  
↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/miiw@miiw1/emergency/preaction/timeout  
↳--set <Value>
```

### **8.27.3 Deleting an NIC Link Up/Down monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon miiw miiw1
```

## 8.28 Message receive monitor resource

---

**Note:**

The command lines in this section use **mrw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.28.1 Adding a Message receive monitor resource

Be sure to set the following items. For details, see "*Setting Message receive monitor resource parameters*".

Item (mandatory)
Monitor resource name
Recovery target
Recovery target type

```
clpcfadm.py add mon mrw mrw1
clpcfadm.py mod -t monitor/mrw@mrw1/relation/name --set <Recovery target>
  ↵--nocheck
clpcfadm.py mod -t monitor/mrw@mrw1/relation/type --set <Recovery target>
  ↵type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.28.2 Setting Message receive monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/mrw@mrw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 10 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/mrw@mrw1/polling/interval --set <Value>
```

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/mrw@mrw1/polling/reconfirmation --set  
    ↳<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/mrw@mrw1/firstmonwait --set <Value>
```

- Monitoring Timing

Monitoring Timing	Value
Always (default)	0
Active	1

```
clpcfadm.py mod -t monitor/mrw@mrw1/polling/timing --set <Value>
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/mrw@mrw1/target --set ""
```

---

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/mrw@mrw1/target --set <Target Resource  
    ↳(monitored when active)>
```

---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 19 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/mrw@mrw1/proctr1/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/mrw@mrw1/polling/servers@<ID>/name --set  
    ↳<Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

## Monitor (special)

### Common

- Category (Within 32 bytes)

Category
NIC (default)
FC
HA/SS
HA/AM
HA/RS
SPS

```
clpcfadm.py mod -t monitor/mrw@mrwl/parameters/object --set  
→<Category>
```

- Keyword (Within 1023 bytes)

```
clpcfset add monparam mrw mrwl parameters/target <Keyword>
```

### Set Up Individually

Set the following for each server.

- Keyword (Within 1023 bytes)

```
clpcfset add monparam mrw mrwl server@<Server name>/parameters/  
→target <Keyword>
```

---

**Note:** To return to the common settings, set the following for each server.

```
clpcfadm.py mod -t monitor/mrw@mrwl/server@<Server name> --delete
```

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/mrw@mrwl/relation/name --set <Recovery  
→target> --nocheck  
clpcfadm.py mod -t monitor/mrw@mrwl/relation/type --set <Recovery  
→target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/mrw@mrwl/emergency/action --set 1
```

---

- Execute Failover to outside the Server Group

Execute Failover to outside the Server Group	Value
Yes	1
No (default)	0

```
clpcfadm.py mod -t monitor/mrw@mrwl/emergency/site --set <Value>
```

- Final Action

Final Action	Value
No operation (default)	1
Stop resource	16
Stop group	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/mrw@mrwl/emergency/action --set <Value>
```

- Execute Script before Recovery Action

Execute Script before Recovery Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/mrw@mrwl/emergency/preaction/use --set
  ↳<Value>
clpcfadm.py mod -t monitor/mrw@mrwl/emergency/preaction/userrestart ↳
  ↳--set <Value>
clpcfadm.py mod -t monitor/mrw@mrwl/emergency/preaction/usefailover ↳
  ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1

Continued on next page

Table 8.354 – continued from previous page

Script file type	Value
User Application	0

```
clpcfadm.py mod -t monitor/mrw@mrwl/emergency/preaction/default  
→--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/mrw@mrwl/emergency/preaction/path --set  
→<File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/mrw@mrwl/emergency/preaction/path --set  
→preaction.sh --nocheck
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/mrw@mrwl/emergency/preaction/timeout  
→--set <Value>
```

### 8.28.3 Deleting a Message receive monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon mrw mrwl
```

## 8.29 Multi target monitor resource

---

**Note:**

The command lines in this section use **mtw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.29.1 Adding a Multi target monitor resource

Be sure to set the following items. For details, see "*Setting Multi target monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target monitor resource name
Target monitor resource type
Recovery target
Recovery target type

```
clpcfadm.py add mon mtw mtw1
clpcfadm.py mod -t monitor/mtw@mtw1/parameters/list@<ID>/member --set
  ↳<Target monitor resource name> --nocheck
clpcfadm.py mod -t monitor/mtw@mtw1/parameters/list@<ID>/type --set
  ↳<Target monitor resource type> --nocheck
clpcfadm.py mod -t monitor/mtw@mtw1/relation/name --set <Recovery target>_
  ↳--nocheck
clpcfadm.py mod -t monitor/mtw@mtw1/relation/type --set <Recovery target>_
  ↳type --nocheck
clpcfadm.py mod -t monitor/<Monitor resource type>@<Monitor resource name>
  ↳/multi --set 1
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.29.2 Setting Multi target monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/mtw@mtw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 30 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/mtw@mtw1/polling/interval --set <Value>`
- Timeout (sec)  
Default, 30 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/mtw@mtw1/polling/timeout --set <Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/mtw@mtw1/emergency/dumpcollect/use --set  
  ↳<Value>`

- Retry Count  
Default, 0 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t monitor/mtw@mtw1/polling/reconfirmation --set  
  ↳<Value>`
- Wait Time to Start Monitoring (sec)  
Default, 0 (minimum, 0; maximum, 9999)  
`clpcfadm.py mod -t monitor/mtw@mtw1/firstmonwait --set <Value>`
- Monitoring Timing

Monitoring Timing	Value
Always (default)	0
Active	1

`clpcfadm.py mod -t monitor/mtw@mtw1/polling/timing --set <Value>`

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

---

`clpcfadm.py mod -t monitor/mtw@mtw1/target --set ""`

---

- Target Resource (monitored when active)  
`clpcfadm.py mod -t monitor/mtw@mtw1/target --set <Target Resource  
  ↳(monitored when active)>`

---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/mtw@mtw1/proctrl/priority --set <Value>
```

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/mtw@mtw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Monitor Resource

### Add

```
clpcfadm.py mod -t monitor/mtw@mtw1/parameters/list@<ID>/member_
↳--set <Monitor resource name> --nocheck
clpcfadm.py mod -t monitor/mtw@mtw1/parameters/list@<ID>/type_
↳--set <Monitor resource type> --nocheck
clpcfadm.py mod -t monitor/<Monitor resource type>@<Monitor_
↳resource name>/multi --set 1
```

---

### Note:

With only one monitor resource to be added, specify 0 for ID.

With more than one monitor resource to be added, specify consecutive numbers (e.g., 0, 1, 2...).

---

**Note:** Set "Monitor resource type" to any of the following values:

Monitor resource type	Value
AWS AZ monitor resource	awsazw
Azure DNS monitor resource	awsdnsw
AWS Elastic IP monitor resource	awseipw
AWS Secondary IP monitor resource	awssipw
AWS Virtual IP monitor resource	awsvipw
Azure DNS monitor resource	azuredns
Azure load balance monitor resource	azurelbw
Azure probe port monitor resource	azureppw
Disk monitor resource	diskw
Floating IP monitor resource	fipw
Google Cloud DNS monitor resource	gcdnsw
Google Cloud load balance monitor resource	gclbw
Google Cloud Virtual IP monitor resource	gcvipw
Custom monitor resource	genw

Continued on next page

Table 8.359 – continued from previous page

Monitor resource type	Value
IP monitor resource	ipw
JVM monitor resource	jraw
NIC Link Up/Down monitor resource	miiw
Oracle Cloud load balance monitor resource	oclbw
Oracle Cloud Virtual IP monitor resource	ocvipw
PID monitor resource	pidw
Process resource monitor resource	psrw
Process name monitor resource	psw
System monitor resource	sraw

#### Delete

```
clpcfadm.py mod -t monitor/mtw@mtw1/parameters/list@<ID> --delete
clpcfadm.py mod -t monitor/<Monitor resource type>@<Monitor
    ↳resource name>/multi --set 0
```

#### Tuning

- Failure Threshold

Failure Threshold	Value
Same as Number of Members (default)	0
Specify Number	1

```
clpcfadm.py mod -t monitor/mtw@mtw1/parameters/info/seterr --set
    ↳<Value>
```

##### – Specify Number

Default, 64 (minimum, 1; maximum, 64)

```
clpcfadm.py mod -t monitor/mtw@mtw1/parameters/info/errnum
    ↳--set <Value>
```

- Warning Threshold (Specify Number)

Default, None (minimum, 1; maximum, 63)

```
clpcfadm.py mod -t monitor/mtw@mtw1/parameters/info/caunum --set
    ↳<Value>
```

---

**Note:** With "Error Threshold" set to "Specify Number", set "Warning Threshold" to a value smaller than "Failure threshold".

---



---

**Note:** To turn off "Warning Threshold", specify 0.

---

```
clpcfadm.py mod -t monitor/mtw@mtw1/parameters/info/caunum --set 0
```

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/mtw@mtw1/relation/name --set <Recovery target> --nocheck
clpcfadm.py mod -t monitor/mtw@mtw1/relation/type --set <Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/mtw@mtw1/emergency/threshold/restart --set 0
clpcfadm.py mod -t monitor/mtw@mtw1/emergency/threshold/fo --set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/mtw@mtw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/mtw@mtw1/emergency/threshold/restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/mtw@mtw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/mtw@mtw1/emergency/threshold/script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/mtw@mtw1/emergency/preaction/userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/mtw@mtw1/emergency/threshold/restart --set  
  ↳<Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/mtw@mtw1/emergency/preaction/usefailover  
  ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/mtw@mtw1/emergency/threshold/fo --set  
  ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/mtw@mtw1/emergency/preaction/use --set  
  ↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>50</sup>	16
Stop group <sup>51</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9

Continued on next page

Table 8.365 – continued from previous page

Final Action	Value
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

`clpcfadm.py mod -t monitor/mtw@mtw1/emergency/action --set <Value>`

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

`clpcfadm.py mod -t monitor/mtw@mtw1/emergency/preaction/default ↴--set <Value>`

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

`clpcfadm.py mod -t monitor/mtw@mtw1/emergency/preaction/path --set ↴<File> --nocheck`

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

`clpcfadm.py mod -t monitor/mtw@mtw1/emergency/preaction/path --set ↴preaction.sh --nocheck`

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

`clpcfadm.py mod -t monitor/mtw@mtw1/emergency/preaction/timeout ↴--set <Value>`

<sup>50</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>51</sup> Cannot be specified with "Recovery target type" set to "cls".

### **8.29.3 Deleting a Multi target monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon mtw mtwl
```

## 8.30 MySQL monitor resource

---

**Note:**

The command lines in this section use **mysqlw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.30.1 Adding a MySQL monitor resource

Be sure to set the following items. For details, see "*Setting MySQL monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Database Name
User Name
Recovery target
Recovery target type

```
clpcfadm.py add mon mysqlw mysqlw1
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/target --set <Target Resource_
 ↪(monitored when active)>
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/parameters/database --set
 ↪<Database Name> --nocheck
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/parameters/username --set <User_
 ↪Name> --nocheck
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/relation/name --set <Recovery_
 ↪target> --nocheck
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/relation/type --set <Recovery_
 ↪target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.30.2 Setting MySQL monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

clpcfadm.py mod -t monitor/mysqlw@mysqlw1/comment --set <Comment>

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/polling/interval --set  
→<Value>
```

- Timeout (sec)

Default, 120 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/polling/timeout --set  
→<Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/dumpcollect/use  
→--set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/timeout/  
→notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/timeout/  
→notrecovery/use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 2 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/polling/reconfirmation  
→--set <Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/target --set <Target Resource (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/polling/servers@<ID>/name --set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Monitor Level

Monitor Level	Value
Level 1 (monitoring by select)	3
Level 2 (monitoring by update/select) (default)	0
Level 3 (create/drop table each time)	1

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/parameters/docreatedrop --set <Value>
```

- Database Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/parameters/database --set <Database Name> --nocheck
```

- IP Address

Default: 127.0.0.1

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/parameters/ipaddress --set  
→<IP Address>
```

- Port

Default, 3306 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/parameters/port --set  
→<Value>
```

- User Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/parameters/username --set  
→<User Name> --nocheck
```

- Password (Within 255 bytes)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/parameters/password --set  
→<Encrypted password>
```

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/parameters/encrypwd --set 1  
→--nocheck
```

---

**Note:**

Set an encrypted password string.

For details, see "[Retrieving an encrypted password string](#)".

---

- Table (Within 255 bytes)

Default: mysqlwatch

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/parameters/table --set  
→<Monitor Table Name>
```

- Storage Engine

Value
InnoDB (default)
MyISAM

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/parameters/engine --set  
→<Value>
```

- Library Path (Within 1023 bytes)

Library Path
/usr/lib64/libmysqlclient.so.18
/usr/lib64/libmysqlclient.so
/usr/lib64/mysql/libmysqlclient.so.20 (default)
/usr/lib64/mysql/libmysqlclient.so.21
/usr/lib64/mysql/libmysqlclient.so

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/parameters/libraryfullpath  
→--set <Library Path>
```

---

**Note:** Set it according to the environment (e.g., installation folder).

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/relation/name --set
↳<Recovery target> --nocheck
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/relation/type --set
↳<Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/threshold/
↳restart --set 0
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/threshold/fo_
↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/threshold/
↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/threshold/script_
↳--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/preaction/
↳userrestart --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/threshold/restart  
→--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/preaction/  
→usefailover --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/threshold/fo  
→--set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/preaction/use  
→--set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>52</sup>	16
Stop group <sup>53</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9

Continued on next page

Table 8.379 – continued from previous page

Final Action	Value
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/action --set
    ↳<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/preaction/
    ↳default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/preaction/path_
    ↳--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

---

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/preaction/path_
    ↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/mysqlw@mysqlw1/emergency/preaction/
    ↳timeout --set <Value>
```

<sup>52</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>53</sup> Cannot be specified with "Recovery target type" set to "cls".

### **8.30.3 Deleting a MySQL monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon mysqlw mysqlwl
```

## 8.31 NFS monitor resource

---

**Note:**

The command lines in this section use **nfs1** as the monitor resource name.

Change it to suit your environment.

---

### 8.31.1 Adding an NFS monitor resource

Be sure to set the following items. For details, see "*Setting NFS monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Share Directory
Recovery target
Recovery target type

```
clpcfadm.py add mon nfsw nfs1
clpcfadm.py mod -t monitor/nfs1/target --set <Target Resource
  ↪ (monitored when active)>
clpcfadm.py mod -t monitor/nfs1/parameters/sharedir --set <Share
  ↪ Directory> --nocheck
clpcfadm.py mod -t monitor/nfs1/relation/name --set <Recovery
  ↪ target> --nocheck
clpcfadm.py mod -t monitor/nfs1/relation/type --set <Recovery
  ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.31.2 Setting NFS monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/nfs1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 30 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/nfsw@nfsw1/polling/interval --set <Value>`
- Timeout (sec)  
Default, 60 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/nfsw@nfsw1/polling/timeout --set <Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/dumpcollect/use --set  
  ↳<Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

`clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/timeout/  
  ↳notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/timeout/notrecovery/  
  ↳use --set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 5 (minimum, 0; maximum, 999)

`clpcfadm.py mod -t monitor/nfsw@nfsw1/polling/reconfirmation --set  
  ↳<Value>`

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

`clpcfadm.py mod -t monitor/nfsw@nfsw1/firstmonwait --set <Value>`

- Monitoring Timing

Monitoring Timing	Value
Always	0
Active (default)	1

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/polling/timing --set 0
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/target --set ""
```

---

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/target --set <Target Resource  
→ (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---



---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/polling/servers@<ID>/name --set  
→ <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Shared Directory (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/parameters/sharedir --set  
→<Share Directory> --nocheck
```

---

**Note:** Specify it as an absolute path.

---

- NFS Server

Default: 127.0.0.1

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/parameters/ipaddress --set <NFS  
→Server>
```

- NFS Version

NFS Version	Value
v2	2
v3	3
v4 (default)	4

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/parameters/nfsversion --set  
→<Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/relation/name --set <Recovery  
→target> --nocheck  
clpcfadm.py mod -t monitor/nfsw@nfsw1/relation/type --set <Recovery  
→target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/threshold/restart  
→--set 0  
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/threshold/fo --set  
→0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/action --set 1
```

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/threshold/restart
  ↵--set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/threshold/script
  ↵--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/preaction/userrestart
  ↵--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/threshold/restart
  ↵--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/preaction/usefailover
  ↵--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/threshold/fo --set
  ↵<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/preaction/use --set  
↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1
Stop resource <sup>54</sup>	16
Stop group <sup>55</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/action --set <Value>
```

#### **Script Settings**

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/preaction/default  
↳--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

<sup>54</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>55</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/preaction/path  
↳--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/preaction/path  
↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/nfsw@nfsw1/emergency/preaction/timeout  
↳--set <Value>
```

### 8.31.3 Deleting an NFS monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon nfsw nfsw1
```

## 8.32 Oracle Cloud load balance monitor resource

---

**Note:**

The command lines in this section use **oclbw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.32.1 Adding an Oracle Cloud load balance monitor resource

Be sure to set the following items. For details, see "*Setting Oracle Cloud load balance monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource
Recovery target
Recovery target type

```
clpcfadm.py add mon oclbw oclbw1  
clpcfadm.py mod -t monitor/oclbw@oclbw1/parameters/object --set <Target_<br/>  
    ↪Resource>  
clpcfadm.py mod -t monitor/oclbw@oclbw1/relation/name --set <Recovery_<br/>  
    ↪target> --nocheck  
clpcfadm.py mod -t monitor/oclbw@oclbw1/relation/type --set <Recovery_<br/>  
    ↪target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.32.2 Setting Oracle Cloud load balance monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/oclbw@oclbw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/polling/interval --set <Value>
```

- Timeout (sec)

Default, 180 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/polling/timeout --set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/emergency/timeout/  
→notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/emergency/timeout/notrecovery/  
→use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 1 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/polling/reconfirmation --set  
→<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/firstmonwait --set <Value>
```

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/polling/servers@<ID>/name_  
→--set <Server name> --nocheck
```

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/perf/metrics/use --set <Value>
```

## Monitor (special)

- Target Resource

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/parameters/object --set  
→<Target Resource>
```

**Note:** You can specify only an Oracle Cloud Virtual IP resource.

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/relation/name --set <Recovery  
→target> --nocheck  
clpcfadm.py mod -t monitor/oclbw@oclbwl/relation/type --set <Recovery  
→target type> --nocheck
```

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/emergency/threshold/  
→restart --set 0  
clpcfadm.py mod -t monitor/oclbw@oclbwl/emergency/threshold/fo  
→--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/emergency/action --set 1
```

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/oclbw@oclbw1/emergency/threshold/  
    ↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/oclbw@oclbw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/oclbw@oclbw1/emergency/threshold/script/  
    ↳--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/oclbw@oclbw1/emergency/preaction/  
    ↳userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/oclbw@oclbw1/emergency/threshold/restart/  
    ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/oclbw@oclbw1/emergency/preaction/  
    ↳usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

- Maximum Failover Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/oclbw@oclbw1/emergency/threshold/fo --set  
    ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/emergency/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>56</sup>	16
Stop group <sup>57</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/emergency/action --set <Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/emergency/preaction/
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/oclbw@oclbwl/emergency/preaction/path_
→--set <File> --nocheck
```

<sup>56</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>57</sup> Cannot be specified with "Recovery target type" set to "cls".

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/oclbw@oclbw1/emergency/preaction/path
↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/oclbw@oclbw1/emergency/preaction/
↳timeout --set <Value>
```

### 8.32.3 Deleting an Oracle Cloud load balance monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon oclbw oclbw1
```

## 8.33 Oracle Cloud Virtual IP monitor resource

---

**Note:**

The command lines in this section use **ocvipw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.33.1 Adding an Oracle Cloud Virtual IP monitor resource

Be sure to set the following items. For details, see "*Setting Oracle Cloud Virtual IP monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon ocvipw ocvipw1
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/target --set <Target Resource_
    ↪ (monitored when active)>
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/relation/name --set <Recovery_
    ↪ target> --nocheck
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/relation/type --set <Recovery_
    ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.33.2 Setting Oracle Cloud Virtual IP monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/polling/interval --set
    ↳<Value>
```

- Timeout (sec)

Default, 180 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/polling/timeout --set
    ↳<Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/timeout/
    ↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/timeout/
    ↳notrecovery/use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 1 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/polling/reconfirmation_
    ↳--set <Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/target --set <Target_ _
    ↳Resource (monitored when active)>
```

---

**Note:** You can specify only an Oracle Cloud Virtual IP resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/proctrl/priority --set  
→<Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/polling/servers@<ID>/name  
→--set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/perf/metrics/use --set  
→<Value>
```

## Monitor (special)

- Health Check Timeout Operation

Health Check Timeout Operation	Value
Disable recovery action(Do nothing) (default)	0
Disable recovery action(Display warning)	1
Recover	2

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/parameters	mode --set  
→<Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/relation/name --set  
→<Recovery target> --nocheck
```

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/relation/type --set  
→<Recovery target type> --nocheck
```

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/threshold/
    ↳restart --set 0
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/threshold/fo_
    ↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/threshold/
    ↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/threshold/script_
    ↳--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/preaction/
    ↳userrestart --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/threshold/restart_
    ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1

Continued on next page

Table 8.411 – continued from previous page

Execute Script before Failover	Value
Do not check (default)	0

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/preaction/
    ↳usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/threshold/fo_
    ↳--set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/preaction/use_
    ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>58</sup>	16
Stop group <sup>59</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/action --set
    ↳<Value>
```

#### Script Settings

<sup>58</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>59</sup> Cannot be specified with "Recovery target type" set to "cls".

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/preaction/  
→--default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/preaction/path  
→--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/preaction/path  
→--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/ocvipw@ocvipw1/emergency/preaction/  
→timeout --set <Value>
```

### 8.33.3 Deleting an Oracle Cloud Virtual IP monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon ocvipw ocvipw1
```

## 8.34 ODBC monitor resource

---

**Note:**

The command lines in this section use **odbcw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.34.1 Adding an ODBC monitor resource

Be sure to set the following items. For details, see "*Setting ODBC monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Data Source Name
Recovery target
Recovery target type

```
clpcfadm.py add mon odbcw odbcw1
clpcfadm.py mod -t monitor/odbcw@odbcw1/target --set <Target Resource
  ↪ (monitored when active)>
clpcfadm.py mod -t monitor/odbcw@odbcw1/parameters/datasource --set <Data
  ↪ Source Name>
clpcfadm.py mod -t monitor/odbcw@odbcw1/relation/name --set <Recovery
  ↪ target> --nocheck
clpcfadm.py mod -t monitor/odbcw@odbcw1/relation/type --set <Recovery
  ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.34.2 Setting ODBC monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/odbcw@odbcw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/polling/interval --set <Value>
```

- Timeout (sec)

Default, 120 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/polling/timeout --set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/emergency/dumpcollect/use
↳--set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/emergency/timeout/
↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/emergency/timeout/notrecovery/
↳use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 2 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/polling/reconfirmation --set
↳<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/target --set <Target Resource>  
    ↪ (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/proctr1/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/polling/servers@<ID>/name  
    ↪ --set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/perf/metrics/use --set <Value>
```

## Monitor (special)

- Monitor Level

Monitor Level	Value
Level 1 (monitoring by select)	3
Level 2 (monitoring by update/select) (default)	0
Level 3 (create/drop table each time)	1

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/parameters/monitorlevel --set  
    ↪ <Value>
```

- Data Source Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/parameters/datasource --set  
    ↪ <Data Source Name>
```

- User Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/parameters/username --set  
    ↪ <User Name>
```

- Password (Within 255 bytes)

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/parameters/password --set
    ↳<Encrypted password>
clpcfadm.py mod -t monitor/odbcw@odbcwl/parameters/encrypwd --set 1
    ↳--nocheck
```

---

**Note:**

Set an encrypted password string.  
For details, see "[Retrieving an encrypted password string](#)".

---

- Monitor Table Name (Within 255 bytes)

Default: odbcwatch

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/parameters/table --set
    ↳<Monitor Table Name>
```

- Message Character Set

Value
UTF-8 (default)
UTF-16LE
ISO-8859-1
EUC-JP
SHIFT_JIS
GB2312
GBK
GB18030
BIG5

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/parameters/charerset --set
    ↳<Value>
```

### Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/relation/name --set <Recovery
    ↳target> --nocheck
clpcfadm.py mod -t monitor/odbcw@odbcwl/relation/type --set <Recovery
    ↳target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/emergency/threshold/
```

```
→ restart --set 0  
clpcfadm.py mod -t monitor/odbcw@odbcw1/emergency/threshold/fo_  
→--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/odbcw@odbcw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/odbcw@odbcw1/emergency/threshold/  
→restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/odbcw@odbcw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/odbcw@odbcw1/emergency/threshold/script_  
→--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/odbcw@odbcw1/emergency/preaction/  
→userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File").

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/odbcw@odbcw1/emergency/threshold/restart_  
→--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/odbcw@odbcw1/emergency/preaction/  
→usefailover --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/emergency/threshold/fo --set
→<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/emergency/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1
Stop resource <sup>60</sup>	16
Stop group <sup>61</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/odbcw@odbcwl/emergency/action --set <Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

<sup>60</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>61</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/odbcw@odbcw1/emergency/preaction/  
    ↳default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/odbcw@odbcw1/emergency/preaction/path  
    ↳--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/odbcw@odbcw1/emergency/preaction/path  
    ↳--set preaction.sh --nocheck
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/odbcw@odbcw1/emergency/preaction/  
    ↳timeout --set <Value>
```

### 8.34.3 Deleting an ODBC monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon odbcw odbcw1
```

## 8.35 Oracle monitor resource

---

**Note:**

The command lines in this section use **oraclew1** as the monitor resource name.

Change it to suit your environment.

---

### 8.35.1 Adding an Oracle monitor resource

Be sure to set the following items. For details, see "*Setting Oracle monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Connect Command
Character Set
Recovery target
Recovery target type

```
clpcfadm.py add mon oraclew oraclew1
clpcfadm.py mod -t monitor/oraclew@oraclew1/target --set <Target Resource_
↪(monitored when active)>
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/database --set
↪<Connect Command> --nocheck
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/charerset --set
↪<Character Set> --nocheck
clpcfadm.py mod -t monitor/oraclew@oraclew1/relation/name --set <Recovery_
↪target> --nocheck
clpcfadm.py mod -t monitor/oraclew@oraclew1/relation/type --set <Recovery_
↪target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.35.2 Setting Oracle monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/oraclew@oraclew1/polling/interval --set  
→<Value>`
- Timeout (sec)  
Default, 120 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/oraclew@oraclew1/polling/timeout --set  
→<Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/dumpcollect/use  
→--set <Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

`clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/timeout/  
→notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/timeout/  
→notrecovery/use --set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count  
Default, 2 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t monitor/oraclew@oraclew1/polling/reconfirmation  
→--set <Value>`
- Wait Time to Start Monitoring (sec)  
Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/target --set <Target_<br/><Resource (monitored when active)>>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/polling/servers@<ID>/name_<br/><--set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Monitor Method

Monitor Method	Value
Listener and Instance Monitor (default)	0
Listener Monitor	1
Instance Monitor	2

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/monmethod <Value>
```

- Monitor Level

Monitor Level	Value
Level 0 (database status)	2
Level 1 (monitoring by select)	3

Continued on next page

Table 8.434 – continued from previous page

Monitor Level	Value
Level 2 (monitoring by update/select) (default)	0
Level 3 (create/drop table each time)	1

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/docreatedrop
    ↳--set <Value>
```

- Connect Command (Within 255 bytes)

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/database --set
    ↳<Connect Command> --nocheck
```

- User Name (Within 255 bytes)

Default: sys

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/username --set
    ↳<User Name>
```

- Password (Within 255 bytes)

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/password --set
    ↳<Encrypted password>
```

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/encrypwd --set
    ↳1 --nocheck
```

---

**Note:**

Set an encrypted password string.

For details, see "[Retrieving an encrypted password string](#)".

---

- Authentication Method

Value
SYSDBA (default)
DEFAULT

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/authority
    ↳--set <Value>
```

- Monitor Table Name (Within 255 bytes)

Default: orawatch

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/table --set
    ↳<Monitor Table Name>
```

- ORACLE\_HOME (Within 255 bytes)

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/oraclehome
    ↳--set <ORACLE_HOME>
```

---

**Note:** Specify it as an absolute path.

---

- Character Set

Value
JAPANESE_JAPAN.JA16EUC
JAPANESE_JAPAN.JA16EUCTILDE
JAPANESE_JAPAN.JA16SJIS
JAPANESE_JAPAN.JA16SJISTILDE
SIMPLIFIED CHINESE_CHINA.ZHS16CGB231280
SIMPLIFIED CHINESE_CHINA.ZHS16GBK
TRADITIONAL CHINESE_HONG KONG.ZHT16BIG5
AMERICAN_AMERICA.US7ASCII
AMERICAN_AMERICA.UTF8

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/charerset
↳--set <Value> --nocheck
```

- Library Path (Within 1023 bytes)

Library Path
/u01/app/oracle/product/12.1.0/dbhome_1/lib/libclntsh.so.12.1
/u01/app/oracle/product/12.2.0/dbhome_1/lib/libclntsh.so.12.1 (default)
/u01/app/oracle/product/18.0.0/dbhome_1/lib/libclntsh.so.18.1
/u01/app/oracle/product/19.0.0/dbhome_1/lib/libclntsh.so.19.1

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/
↳libraryfullpath --set <Library Path>
```

---

**Note:** Set it according to the environment (e.g., installation folder).

---

- Collect detailed application information at failure occurrence

Collect detailed application information at failure occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/infocollect/use
↳--set <Value>
```

- Collection Timeout (sec)

Default, 600 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/infocollect/
↳timeout --set <Value>
```

---

**Note:** Set as above with "Collect detailed application information at failure occurrence" set to "Collect".

---

- Set error during Oracle initialization or shutdown

Set error during Oracle initialization or shutdown	Value
Yes	1
No (default)	0

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/parameters/ignoreuse  
  ↳--set <Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/relation/name --set  
  ↳<Recovery target> --nocheck  
clpcfadm.py mod -t monitor/oraclew@oraclew1/relation/type --set  
  ↳<Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/threshold/  
  ↳restart --set 0  
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/threshold/fo  
  ↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/action --set  
  ↳1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/threshold/  
  ↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/action --set  
  ↳1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/threshold/  
  ↳script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/preaction/
    ↳ userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/threshold/
    ↳ restart --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/preaction/
    ↳ usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/threshold/fo_
    ↳ --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/preaction/use_
    ↳ --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1

Continued on next page

Table 8.444 – continued from previous page

Final Action	Value
Stop resource <sup>62</sup>	16
Stop group <sup>63</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/action --set
    ↳<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/preaction/
    ↳default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/preaction/
    ↳path --set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

---

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/preaction/
    ↳path --set preaction.sh --nocheck
```

---

- Timeout (sec)

---

<sup>62</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>63</sup> Cannot be specified with "Recovery target type" set to "cls".

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/oraclew@oraclew1/emergency/preaction/  
→timeout --set <Value>
```

### 8.35.3 Deleting an Oracle monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon oraclew oraclew1
```

## 8.36 WebOTX monitor resource

---

**Note:**

The command lines in this section use **otxw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.36.1 Adding a WebOTX monitor resource

Be sure to set the following items. For details, see "*Setting WebOTX monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
User Name
Recovery target
Recovery target type

```
clpcfadm.py add mon otxw otxw1
clpcfadm.py mod -t monitor/otxw@otxw1/target --set <Target Resource
  ↪ (monitored when active)>
clpcfadm.py mod -t monitor/otxw@otxw1/parameters/username --set <User
  ↪ Name>
clpcfadm.py mod -t monitor/otxw@otxw1/relation/name --set <Recovery
  ↪ target> --nocheck
clpcfadm.py mod -t monitor/otxw@otxw1/relation/type --set <Recovery
  ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.36.2 Setting WebOTX monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/otxw@otxw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/otxw@otxw1/polling/interval --set <Value>
```

- Timeout (sec)

Default, 120 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/otxw@otxw1/polling/timeout --set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/otxw@otxw1/emergency/dumpcollect/use --set
↳<Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/otxw@otxw1/emergency/timeout/
↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/otxw@otxw1/emergency/timeout/notrecovery/
↳use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 1 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/otxw@otxw1/polling/reconfirmation --set
↳<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/otxw@otxw1/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/otxw@otxw1/target --set <Target Resource>  
→ (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/otxw@otxw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/otxw@otxw1/polling/servers@<ID>/name --set  
→ <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/otxw@otxw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Connecting Destination (Within 255 bytes)

Default: localhost

```
clpcfadm.py mod -t monitor/otxw@otxw1/parameters/servername --set  
→ <Connecting Destination>
```

- Port Number

Default, 6212 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/otxw@otxw1/parameters/port --set <Value>
```

- User Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/otxw@otxw1/parameters/username --set <User>  
→ <Name>
```

- Password (Within 255 bytes)

```
clpcfadm.py mod -t monitor/otxw@otxw1/parameters/password --set  
→ <Encrypted password>
```

```
clpcfadm.py mod -t monitor/otxw@otxw1/parameters/encrypwd --set 1  
→ --nocheck
```

**Note:**

Set an encrypted password string.

For details, see "*Retrieving an encrypted password string*".

---

- Install Path (Within 1023 bytes)

Default: /opt/WebOTX

```
clpcfadm.py mod -t monitor/otxw@otxwl/parameters/installpath --set
  ↪<Install Path>
```

---

**Note:** Specify it as an absolute path.

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/otxw@otxwl/relation/name --set <Recovery
  ↪target> --nocheck
clpcfadm.py mod -t monitor/otxw@otxwl/relation/type --set <Recovery
  ↪target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/otxw@otxwl/emergency/threshold/restart
  ↪--set 0
clpcfadm.py mod -t monitor/otxw@otxwl/emergency/threshold/fo --set
  ↪0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/otxw@otxwl/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/otxw@otxwl/emergency/threshold/restart
  ↪--set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/otxw@otxw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/otxw@otxw1/emergency/threshold/script_
↪--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/otxw@otxw1/emergency/preaction/userrestart_
↪--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/otxw@otxw1/emergency/threshold/restart_
↪--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/otxw@otxw1/emergency/preaction/usefailover_
↪--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/otxw@otxw1/emergency/threshold/fo --set
↪<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/otxw@otxw1/emergency/preaction/use --set
↪<Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1
Stop resource <sup>64</sup>	16
Stop group <sup>65</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

clpcfadm.py mod -t monitor/otxw@otxw1/emergency/action --set <Value>

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

clpcfadm.py mod -t monitor/otxw@otxw1/emergency/preaction/default  
↳--set <Value>

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

clpcfadm.py mod -t monitor/otxw@otxw1/emergency/preaction/path  
↳--set <File> --nocheck

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

<sup>64</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>65</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/otxw@otxw1/emergency/preaction/path  
↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/otxw@otxw1/emergency/preaction/timeout  
↳--set <Value>
```

### 8.36.3 Deleting a WebOTX monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon otxw otxw1
```

## 8.37 PID monitor resource

---

**Note:**

The command lines in this section use **pidw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.37.1 Adding a PID monitor resource

Be sure to set the following items. For details, see "*Setting PID monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon pidw pidw1
clpcfadm.py mod -t monitor/pidw@pidw1/target --set <Target Resource
    ↪ (monitored when active)>
clpcfadm.py mod -t monitor/pidw@pidw1/relation/name --set <Recovery
    ↪ target> --nocheck
clpcfadm.py mod -t monitor/pidw@pidw1/relation/type --set <Recovery
    ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.37.2 Setting PID monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/pidw@pidw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 5 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/pidw@pidwl/polling/interval --set <Value>`
- Timeout (sec)  
Default, 60 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/pidw@pidwl/polling/timeout --set <Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/pidw@pidwl/emergency/dumpcollect/use --set  
  ↳<Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

`clpcfadm.py mod -t monitor/pidw@pidwl/emergency/timeout/  
  ↳notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/pidw@pidwl/emergency/timeout/notrecovery/  
  ↳use --set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

`clpcfadm.py mod -t monitor/pidw@pidwl/polling/reconfirmation --set  
  ↳<Value>`

- Wait Time to Start Monitoring (sec)

Default, 3 (minimum, 0; maximum, 9999)

`clpcfadm.py mod -t monitor/pidw@pidwl/firstmonwait --set <Value>`

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/pidw@pidwl/target --set <Target Resource>
  ↳ (monitored when active) >
```

---

**Note:** You can specify only an asynchronous "EXEC resource" for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/pidw@pidwl/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/pidw@pidwl/polling/servers@<ID>/name --set
  ↳ <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/pidw@pidwl/perf/metrics/use --set <Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/pidw@pidwl/relation/name --set <Recovery target>
  ↳ --nocheck
```

```
clpcfadm.py mod -t monitor/pidw@pidwl/relation/type --set <Recovery target type>
  ↳ --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/threshold/restart
  ↳ --set 0
```

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/threshold/fo --set
```

→ 0

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/threshold/restart  
→--set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/threshold/script  
→--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/preaction/userrestart  
→--set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/threshold/restart  
→--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/preaction/usefailover  
→--set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/threshold/fo --set
→<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>66</sup>	16
Stop group <sup>67</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/action --set <Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/preaction/default_
→--set <Value>
```

<sup>66</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>67</sup> Cannot be specified with "Recovery target type" set to "cls".

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/preaction/path  
↳--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/preaction/path  
↳--set preaction.sh --nocheck
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/pidw@pidwl/emergency/preaction/timeout  
↳--set <Value>
```

### 8.37.3 Deleting a PID monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon pidw pidwl
```

## 8.38 POP3 monitor resource

---

**Note:**

The command lines in this section use **pop3w1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.38.1 Adding a POP3 monitor resource

Be sure to set the following items. For details, see "*Setting POP3 monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon pop3w pop3w1
clpcfadm.py mod -t monitor/pop3w@pop3w1/target --set <Target Resource
  ↪ (monitored when active)>
clpcfadm.py mod -t monitor/pop3w@pop3w1/relation/name --set <Recovery
  ↪ target> --nocheck
clpcfadm.py mod -t monitor/pop3w@pop3w1/relation/type --set <Recovery
  ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.38.2 Setting POP3 monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/pop3w@pop3w1/polling/interval --set <Value>`
- Timeout (sec)  
Default, 120 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/pop3w@pop3w1/polling/timeout --set <Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/dumpcollect/use  
↳--set <Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

`clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/timeout/  
↳notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/timeout/notrecovery/  
↳use --set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 3 (minimum, 0; maximum, 999)

`clpcfadm.py mod -t monitor/pop3w@pop3w1/polling/reconfirmation --set  
↳<Value>`

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

`clpcfadm.py mod -t monitor/pop3w@pop3w1/firstmonwait --set <Value>`

- Monitoring Timing

Monitoring Timing	Value
Always	0
Active (default)	1

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/polling/timing --set <Value>
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/target --set ""
```

---

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/target --set <Target Resource  
→ (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---



---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/polling/servers@<ID>/name  
→ --set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/perf/metrics/use --set <Value>
```

## Monitor (special)

- IP Address
  - Default: 127.0.0.1
  - clpcfadm.py mod -t monitor/pop3w@pop3w1/parameters/ipaddress --set  
→<IP Address>
- Port Number
  - Default, 110 (minimum, 1; maximum, 65535)
  - clpcfadm.py mod -t monitor/pop3w@pop3w1/parameters/port --set <Value>
- User Name (Within 255 bytes)
  - clpcfadm.py mod -t monitor/pop3w@pop3w1/parameters/username --set  
→<User Name>
- Password (Within 255 bytes)
  - clpcfadm.py mod -t monitor/pop3w@pop3w1/parameters/password --set  
→<Encrypted password>
  - clpcfadm.py mod -t monitor/pop3w@pop3w1/parameters/encrypwd --set 1  
→--nocheck

---

### Note:

Set an encrypted password string.  
For details, see "[Retrieving an encrypted password string](#)".

---

- Authentication Method

Authentication Method	Value
APOP (default)	0
USER/PASS	1

clpcfadm.py mod -t monitor/pop3w@pop3w1/parameters/certificate --set  
→<Value>

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

clpcfadm.py mod -t monitor/pop3w@pop3w1/relation/name --set <Recovery  
→target> --nocheck  
clpcfadm.py mod -t monitor/pop3w@pop3w1/relation/type --set <Recovery  
→target type> --nocheck

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/threshold/
    ↳restart --set 0
    clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/threshold/fo_
    ↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/threshold/
    ↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/threshold/script_
    ↳--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/preaction/
    ↳userrestart --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/threshold/restart_
    ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1

Continued on next page

Table 8.477 – continued from previous page

Execute Script before Failover	Value
Do not check (default)	0

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/preaction/
    ↳usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/threshold/fo --set
    ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/preaction/use --set
    ↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1
Stop resource <sup>68</sup>	16
Stop group <sup>69</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/action --set <Value>
```

#### Script Settings

<sup>68</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>69</sup> Cannot be specified with "Recovery target type" set to "cls".

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/preaction/
↳--default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/preaction/path_
↳--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/preaction/path_
↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/pop3w@pop3w1/emergency/preaction/
↳timeout --set <Value>
```

### 8.38.3 Deleting a POP3 monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon pop3w pop3w1
```

## 8.39 PostgreSQL monitor resource

---

**Note:**

The command lines in this section use **psqlw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.39.1 Adding a PostgreSQL monitor resource

Be sure to set the following items. For details, see "*Setting PostgreSQL monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Database Name
Recovery target
Recovery target type

```
clpcfadm.py add mon psqlw psqlw1
clpcfadm.py mod -t monitor/psqlw@psqlw1/target --set <Target Resource
  ↪ (monitored when active)>
clpcfadm.py mod -t monitor/psqlw@psqlw1/parameters/database --set
  ↪ <Database Name> --nocheck
clpcfadm.py mod -t monitor/psqlw@psqlw1/relation/name --set <Recovery
  ↪ target> --nocheck
clpcfadm.py mod -t monitor/psqlw@psqlw1/relation/type --set <Recovery
  ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.39.2 Setting PostgreSQL monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/psqlw@psqlw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/polling/interval --set <Value>
```

- Timeout (sec)

Default, 120 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/polling/timeout --set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/emergency/dumpcollect/use
↳--set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/emergency/timeout/
↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/emergency/timeout/notrecovery/
↳use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 2 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/polling/reconfirmation --set
↳<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/target --set <Target Resource>  
→ (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/proctr1/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/polling/servers@<ID>/name  
→ --set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/perf/metrics/use --set <Value>
```

## Monitor (special)

- Monitor Level

Monitor Level	Value
Level 1 (monitoring by select)	3
Level 2 (monitoring by update/select) (default)	0
Level 3 (create/drop table each time)	1

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/parameters/docreatedrop --set  
→ <Value>
```

- Database Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/parameters/database --set  
→ <Database Name> --nocheck
```

- IP Address

Default: 127.0.0.1

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/parameters/ipaddress --set  
→ <IP Address>
```

- Port Number

Default, 5432 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/parameters/port --set <Value>
```

- User Name (Within 255 bytes)

Default: postgres

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/parameters/username --set  
→<User Name>
```

- Password (Within 255 bytes)

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/parameters/password --set  
→<Encrypted password>
```

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/parameters/encrypwd --set 1  
→--nocheck
```

---

**Note:**

Set an encrypted password string.

For details, see "[Retrieving an encrypted password string](#)".

---

- Table (Within 255 bytes)

Default: psqlwatch

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/parameters/table --set  
→<Monitor Table Name>
```

- Library Path (Within 1023 bytes)

Library Path
/opt/PostgreSQL/9.3/lib/libpq.so.5.6
/opt/PostgreSQL/9.3/lib/libpq.so
/opt/PostgreSQL/9.4/lib/libpq.so.5.7
/opt/PostgreSQL/9.4/lib/libpq.so
/opt/PostgreSQL/9.5/lib/libpq.so.5.8
/opt/PostgreSQL/9.5/lib/libpq.so
/opt/PostgreSQL/9.6/lib/libpq.so.5.9
/opt/PostgreSQL/9.6/lib/libpq.so
/opt/PostgreSQL/10/lib/libpq.so.5.10 (default)
/opt/PostgreSQL/10/lib/libpq.so
/usr/pgsql-11/lib/libpq.so.5.11
/usr/pgsql-11/lib/libpq.so.5
/usr/pgsql-12/lib/libpq.so.5.12
/usr/pgsql-12/lib/libpq.so.5

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/parameters/libraryfullpath  
→--set <Library Path>
```

---

**Note:** Set it according to the environment (e.g., installation folder).

---

- Set error during PostgreSQL initialization or shutdown

Set error during PostgreSQL initialization or shutdown	Value
Yes (default)	1
No	0

```
clpcfadm.py mod -t monitor/pgsqlw@pgsqlw1/parameters/ignoreerrorflg  
→--set <Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/pgsqlw@pgsqlw1/relation/name --set <Recovery  
→target> --nocheck  
clpcfadm.py mod -t monitor/pgsqlw@pgsqlw1/relation/type --set <Recovery  
→target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/pgsqlw@pgsqlw1/emergency/threshold/  
→restart --set 0  
clpcfadm.py mod -t monitor/pgsqlw@pgsqlw1/emergency/threshold/fo  
→--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/pgsqlw@pgsqlw1/emergency/action --set 1
```

---

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/pgsqlw@pgsqlw1/emergency/threshold/  
→restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/pgsqlw@pgsqlw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/pgsqlw@pgsqlw1/emergency/threshold/script  
→--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/emergency/preaction/
    ↳ userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/emergency/threshold/restart
    ↳ --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/emergency/preaction/
    ↳ usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/emergency/threshold/fo --set
    ↳ <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/psqlw@psqlwl/emergency/preaction/use --set
    ↳ <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing <sup>70</sup>	1
Stop resource <sup>70</sup>	16
Stop group <sup>71</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/psqlw@psqlw1/emergency/action --set <Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/psqlw@psqlw1/emergency/preaction/  

→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/psqlw@psqlw1/emergency/preaction/path  

→--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/psqlw@psqlw1/emergency/preaction/path  

→--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

<sup>70</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>71</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/pgsqlw@pgsqlw1/emergency/preaction/  
    ↳timeout --set <Value>
```

### **8.39.3 Deleting a PostgreSQL monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon pgsqlw pgsqlw1
```

## 8.40 Process resource monitor resource

---

**Note:**

The command lines in this section use **psrw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.40.1 Adding a Process resource monitor resource

Be sure to set the following items. For details, see "*Setting process resource monitor resource parameters*".

Item (mandatory)
Monitor resource name
Recovery target
Recovery target type

```
clpcfadm.py add mon psrw psrw1  
clpcfadm.py mod -t monitor/psrw@psrw1/relation/name --set <Recovery  
↳target> --nocheck  
clpcfadm.py mod -t monitor/psrw@psrw1/relation/type --set <Recovery  
↳target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.40.2 Setting process resource monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/psrw@psrw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 30 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/psrw@psrw1/polling/interval --set <Value>
```

- Timeout (sec)

Default, 60 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/psrw@psrw1/polling/timeout --set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/psrw@psrw1/emergency/dumpcollect/use --set
→<Value>
```

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/psrw@psrw1/polling/reconfirmation --set
→<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/psrw@psrw1/firstmonwait --set <Value>
```

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/psrw@psrw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/psrw@psrw1/polling/servers@<ID>/name --set
→<Server name> --nocheck
```

---

### Note:

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

## Monitor (special)

- Process Name (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/name --set  
→<Process Name>
```

- Monitoring CPU usage

Monitoring CPU usage	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/cpu/docheck  
→--set <Value>
```

- CPU usage (%)

Default, 90 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/cpu/  
→rate --set <Value>
```

---

**Note:** Set as above with "Monitoring CPU usage" set to "Monitor".

---

- Duration Time (min)

Default, 1440 (minimum, 1; maximum, 129600)

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/cpu/  
→count --set <Value>
```

---

**Note:** Set as above with "Monitoring CPU usage" set to "Monitor".

---

- Monitoring usage of memory

Monitoring usage of memory	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/memory/  
→docheck --set <Value>
```

- Rate of Increase from the First Monitoring Point (%)

Default, 10 (minimum, 1; maximum, 1000)

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/memory/  
→rate --set <Value>
```

---

**Note:** Set as above with "Monitoring usage of memory" set to "Monitor".

---

- Maximum Refresh Count

Default, 1440 (minimum, 1; maximum, 129600)

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/memory/
    ↳count --set <Value>
```

---

**Note:** Set as above with "Monitoring usage of memory" set to "Monitor".

---

- Monitoring number of opening files (maximum number)

Monitoring number of opening files (maximum number)	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/fileleak/
    ↳docheck --set <Value>
```

– Refresh Count

Default, 1000 (minimum, 1; maximum, 1024)

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/
    ↳fileleak/count --set <Value>
```

---

**Note:** Set as above with "Monitoring number of opening files (maximum number)" set to "Monitor".

---

- Monitoring number of opening files(kernel limit)

Monitoring number of opening files(kernel limit)	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/fileopen/
    ↳docheck --set <Value>
```

– Ratio (%)

Default, 90 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/
    ↳fileopen/rate --set <Value>
```

---

**Note:** Set as above with "Monitoring number of opening files(kernel limit) " set to "Monitor".

---

- Monitoring number of running threads

Monitoring number of running threads	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/thread/
    ↳docheck --set <Value>
```

– Duration Time (min)

Default, 1440 (minimum, 1; maximum, 129600)

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/thread/  
→count --set <Value>
```

---

**Note:** Set as above with "Monitoring number of running threads" set to "Monitor".

---

- Monitoring Zombie Processes

Monitoring Zombie Processes	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/defunct/  
→docheck --set <Value>
```

– Duration Time (min)

Default, 1440 (minimum, 1; maximum, 129600)

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/  
→defunct/count --set <Value>
```

---

**Note:** Set as above with "Monitoring Zombie Processes" set to "Monitor".

---

- Monitoring Processes of the Same Name

Monitoring Processes of the Same Name	Value
Monitor	1
Do not monitor (default)	0

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/proccount/  
→docheck --set <Value>
```

– Count

Default, 100 (minimum, 1; maximum, 10000)

```
clpcfadm.py mod -t monitor/psrw@psrw1/parameters/process/  
→proccount/number --set <Value>
```

---

**Note:** You can set this parameter with "Monitoring Processes of the Same Name" set to "Monitor".

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/psrw@psrw1/relation/name --set <Recovery target> --nocheck
clpcfadm.py mod -t monitor/psrw@psrw1/relation/type --set <Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/psrw@psrw1/emergency/threshold/restart --set 0
clpcfadm.py mod -t monitor/psrw@psrw1/emergency/threshold/fo --set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

---

```
clpcfadm.py mod -t monitor/psrw@psrw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/psrw@psrw1/emergency/threshold/restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

---

```
clpcfadm.py mod -t monitor/psrw@psrw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/psrw@psrw1/emergency/threshold/script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/psrw@psrw1/emergency/preaction/userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/psrw@psrw1/emergency/threshold/restart  
  --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/psrw@psrw1/emergency/preaction/usefailover  
  --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/psrw@psrw1/emergency/threshold/fo --set  
  <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/psrw@psrw1/emergency/preaction/use --set  
  <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>72</sup>	16
Stop group <sup>73</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9

Continued on next page

Table 8.508 – continued from previous page

Final Action	Value
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

`clpcfadm.py mod -t monitor/psrw@psrw1/emergency/action --set <Value>`

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

`clpcfadm.py mod -t monitor/psrw@psrw1/emergency/preaction/default ↴--set <Value>`

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

`clpcfadm.py mod -t monitor/psrw@psrw1/emergency/preaction/path ↴--set <File> --nocheck`

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

`clpcfadm.py mod -t monitor/psrw@psrw1/emergency/preaction/path ↴--set preaction.sh --nocheck`

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

`clpcfadm.py mod -t monitor/psrw@psrw1/emergency/preaction/timeout ↴--set <Value>`

<sup>72</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>73</sup> Cannot be specified with "Recovery target type" set to "cls".

### **8.40.3 Deleting a Process resource monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon psrw psrw1
```

## 8.41 Process name monitor resource

---

### Note:

The command lines in this section use **psw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.41.1 Adding a Process name monitor resource

Be sure to set the following items. For details, see "*Setting Process name monitor resource parameters*".

Item (mandatory)
Monitor resource name
Process Name
Recovery target
Recovery target type

```
clpcfadm.py add mon psw psw1
clpcfadm.py mod -t monitor/psw@psw1/parameters/processname --set <Process_
    ↪Name>
clpcfadm.py mod -t monitor/psw@psw1/relation/name --set <Recovery target>_
    ↪--nocheck
clpcfadm.py mod -t monitor/psw@psw1/relation/type --set <Recovery target_>_
    ↪type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.41.2 Setting Process name monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/psw@psw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 5 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/psw@psw1/polling/interval --set <Value>
```

- Timeout (sec)

Default, 60 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/psw@psw1/polling/timeout --set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/dumpcollect/use --set  
→<Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry	0
Do not retry (default)	1

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/timeout/  
→notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover	0
Do not recover (default)	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/timeout/notrecovery/use  
→--set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/psw@psw1/polling/reconfirmation --set  
→<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 3 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/psw@psw1/firstmonwait --set <Value>
```

- Monitoring Timing

Monitoring Timing	Value
Always (default)	0
Active	1

```
clpcfadm.py mod -t monitor/psw@psw1/polling/timing --set <Value>
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/psw@psw1/target --set ""
```

---

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/psw@psw1/target --set <Target Resource  
→ (monitored when active)>
```

---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/psw@psw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/psw@psw1/polling/servers@<ID>/name --set  
→ <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/psw@psw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Process Name (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/psw@psw1/parameters/processname --set  
  ↳<Process Name>
```

- Minimum Process Count

Default, 1 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/psw@psw1/parameters/processnum --set  
  ↳<Value>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/psw@psw1/relation/name --set <Recovery  
  ↳target> --nocheck  
clpcfadm.py mod -t monitor/psw@psw1/relation/type --set <Recovery  
  ↳target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/threshold/restart  
  ↳--set 0
```

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/threshold/fo --set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/threshold/restart  
  ↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/threshold/script --set
    ↳<Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/preaction/userrestart
    ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/threshold/restart --set
    ↳<Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/preaction/usefailover
    ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/threshold/fo --set
    ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/preaction/use --set
    ↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>74</sup>	16
Stop group <sup>75</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

`clpcfadm.py mod -t monitor/psw@pswl/emergency/action --set <Value>`

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

`clpcfadm.py mod -t monitor/psw@pswl/emergency/preaction/default ↴--set <Value>`

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

`clpcfadm.py mod -t monitor/psw@pswl/emergency/preaction/path --set ↴<File> --nocheck`

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

`clpcfadm.py mod -t monitor/psw@pswl/emergency/preaction/path --set ↴preaction.sh --nocheck`

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

---

<sup>74</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>75</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/psw@psw1/emergency/preaction/timeout  
→--set <Value>
```

### **8.41.3 Deleting a Process name monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon psw psw1
```

## 8.42 Samba monitor resource

---

**Note:**

The command lines in this section use **sambaw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.42.1 Adding a Samba monitor resource

Be sure to set the following items. For details, see "*Setting Samba monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Share Name
User Name
Recovery target
Recovery target type

```
clpcfadm.py add mon sambaw sambaw1
clpcfadm.py mod -t monitor/sambaw@sambaw1/target --set <Target Resource_
 ↪(monitored when active)>
clpcfadm.py mod -t monitor/sambaw@sambaw1/parameters/sharename --set
 ↪<Share Name> --nocheck
clpcfadm.py mod -t monitor/sambaw@sambaw1/parameters/username --set <User_
 ↪Name> --nocheck
clpcfadm.py mod -t monitor/sambaw@sambaw1/relation/name --set <Recovery_
 ↪target> --nocheck
clpcfadm.py mod -t monitor/sambaw@sambaw1/relation/type --set <Recovery_
 ↪target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.42.2 Setting Samba monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 30 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/polling/interval --set
    ↳<Value>
```

- Timeout (sec)

Default, 60 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/polling/timeout --set
    ↳<Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/dumpcollect/use
    ↳--set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/timeout/
    ↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/timeout/
    ↳notrecovery/use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 5 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/polling/reconfirmation
    ↳--set <Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/firstmonwait --set <Value>
```

- Monitoring Timing

Monitoring Timing	Value
Always	0
Active (default)	1

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/polling/timing --set <Value>
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/target --set ""
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/target --set <Target  
  Resource (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---

---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/proctrl/priority --set  
  -><Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/polling/servers@<ID>/name  
  ->--set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/perf/metrics/use --set  
  -><Value>
```

## Monitor (special)

- Share Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/parameters/sharename --set
    ↳<Share Name> --nocheck
```

- IP Address

Default: 127.0.0.1

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/parameters/ipaddress --set
    ↳<IP Address>
```

- Port

Default, 139 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/parameters/port --set
    ↳<Value>
```

- User Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/parameters/username --set
    ↳<User Name> --nocheck
```

- Password (Within 255 bytes)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/parameters/password --set
    ↳<Encrypted password>
```

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/parameters/encrypwd --set 1
    ↳--nocheck
```

---

### Note:

Set an encrypted password string.

For details, see "[Retrieving an encrypted password string](#)".

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/relation/name --set
    ↳<Recovery target> --nocheck
clpcfadm.py mod -t monitor/sambaw@sambaw1/relation/type --set
    ↳<Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/threshold/  
    ↳restart --set 0  
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/threshold/fo_  
    ↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/threshold/  
    ↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/threshold/script_  
    ↳--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/preaction/  
    ↳userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/threshold/restart_  
    ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/preaction/  
    ↳usefailover --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/threshold/fo_
↪--set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/preaction/use_
↪--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1
Stop resource <sup>76</sup>	16
Stop group <sup>77</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (de- fault)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/action --set
↪<Value>
```

#### Script Settings

- File type

<sup>76</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>77</sup> Cannot be specified with "Recovery target type" set to "cls".

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/preaction/  
→default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/preaction/path  
→--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/preaction/path  
→--set preaction.sh --nocheck
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/sambaw@sambaw1/emergency/preaction/  
→timeout --set <Value>
```

### 8.42.3 Deleting a Samba monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon sambaw sambaw1
```

## 8.43 SMTP monitor resource

---

**Note:**

The command lines in this section use **smtpw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.43.1 Adding an SMTP monitor resource

Be sure to set the following items. For details, see "*Setting SMTP monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon smtpw smtpw1
clpcfadm.py mod -t monitor/smtpw@smtpw1/target --set <Target Resource
  ↪ (monitored when active)>
clpcfadm.py mod -t monitor/smtpw@smtpw1/relation/name --set <Recovery
  ↪ target> --nocheck
clpcfadm.py mod -t monitor/smtpw@smtpw1/relation/type --set <Recovery
  ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.43.2 Setting SMTP monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/smtpw@smtpw1/polling/interval --set <Value>`
- Timeout (sec)  
Default, 120 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/smtpw@smtpw1/polling/timeout --set <Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/dumpcollect/use  
↳--set <Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

`clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/timeout/  
↳notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/timeout/notrecovery/  
↳use --set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 3 (minimum, 0; maximum, 999)

`clpcfadm.py mod -t monitor/smtpw@smtpw1/polling/reconfirmation --set  
↳<Value>`

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

`clpcfadm.py mod -t monitor/smtpw@smtpw1/firstmonwait --set <Value>`

- Monitoring Timing

Monitoring Timing	Value
Always	0
Active (default)	1

```
clpcfadm.py mod -t monitor/smtpw@smtpwl/polling/timing --set <Value>
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/smtpw@smtpwl/target --set ""
```

---

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/smtpw@smtpwl/target --set <Target Resource  
→ (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---



---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/smtpw@smtpwl/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/smtpw@smtpwl/polling/servers@<ID>/name  
→ --set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/smtpw@smtpwl/perf/metrics/use --set <Value>
```

## Monitor (special)

- IP Address  
Default: 127.0.0.1  
`clpcfadm.py mod -t monitor/smtpw@smtpw1/parameters/ipaddress --set  
→<IP Address>`
- Port Number  
Default, 25 (minimum, 1; maximum, 65535)  
`clpcfadm.py mod -t monitor/smtpw@smtpw1/parameters/port --set <Value>`

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/relation/name --set <Recovery  
→target> --nocheck  
clpcfadm.py mod -t monitor/smtpw@smtpw1/relation/type --set <Recovery  
→target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/threshold/  
→restart --set 0  
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/threshold/fo  
→--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/threshold/  
→restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/threshold/script
  ↳--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/preaction/
  ↳userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/threshold/restart
  ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/preaction/
  ↳usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/threshold/fo --set
  ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/preaction/use --set
  ↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1
Stop resource <sup>78</sup>	16
Stop group <sup>79</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/action --set <Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/preaction/  

↳ default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/preaction/path  

↳ --set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/preaction/path  

↳ --set preaction.sh --nocheck
```

---

<sup>78</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>79</sup> Cannot be specified with "Recovery target type" set to "cls".

- Timeout (sec)  
Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/smtpw@smtpw1/emergency/preaction/  
--timeout --set <Value>
```

### 8.43.3 Deleting an SMTP monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon smtpw smtpw1
```

## 8.44 SQL Server monitor resource

---

**Note:**

The command lines in this section use **sqlserverw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.44.1 Adding an SQL Server monitor resource

Be sure to set the following items. For details, see "*Setting SQL Server monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Database Name
Recovery target
Recovery target type

```
clpcfadm.py add mon sqlserverw sqlserverw1
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/target --set <Target_
    ↳Resource (monitored when active)>
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/parameters/dbname --set
    ↳<Database Name>
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/relation/name --set
    ↳<Recovery target> --nocheck
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/relation/type --set
    ↳<Recovery target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.44.2 Setting SQL Server monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/comment --set
    ↳<Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/polling/interval
    ↳--set <Value>
```

- Timeout (sec)

Default, 120 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/polling/timeout
    ↳--set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/
    ↳dumpcollect/use --set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/timeout/
    ↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/timeout/
    ↳notrecovery/use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 2 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/polling/
    ↳reconfirmation --set <Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/firstmonwait --set  
  ↳<Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/target --set  
  ↳<Target Resource (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/proctrl/priority  
  ↳--set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/polling/servers@<ID>  
  ↳/name --set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/perf/metrics/use  
  ↳--set <Value>
```

## Monitor (special)

- Monitor Level

Monitor Level	Value
Level 0 (database status)	2
Level 1 (monitoring by select)	3
Level 2 (monitoring by update/select) (default)	0
Level 3 (create/drop table each time)	1

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/parameters/  
  ↳monitorlevel --set <Value>
```

- Database Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/parameters/dbname  
  ↳--set <Database Name>
```

- Server Name (Within 255 bytes)

Default: localhost

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/parameters/
    ↳servername --set <Server name>
```

- User Name (Within 255 bytes)

Default: SA

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/parameters/username_
    ↳--set <User Name>
```

- Password (Within 255 bytes)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/parameters/password_
    ↳--set <Encrypted password>
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/parameters/encrypwd_
    ↳--set 1 --nocheck
```

---

**Note:**

Set an encrypted password string.

For details, see "*Retrieving an encrypted password string*".

---

- Monitor Table Name (Within 255 bytes)

Default: sqlwatch

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/parameters/table_
    ↳--set <Monitor Table Name>
```

- ODBC Driver Name (Within 255 bytes)

ODBC Driver Name
ODBC Driver 13 for SQL Server (default)
ODBC Driver 17 for SQL Server

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/parameters/
    ↳odbcdriver --set <ODBC Driver Name>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/relation/name --set
    ↳<Recovery target> --nocheck
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/relation/type --set
    ↳<Recovery target type> --nocheck
```

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/  
    ↳threshold/restart --set 0  
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/  
    ↳threshold/fo --set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/action  
    ↳--set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/  
    ↳threshold/restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/action  
    ↳--set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/threshold/  
    ↳script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/preaction/  
    ↳userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File").

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/threshold/  
    ↳restart --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/preaction/  
→usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/threshold/  
→fo --set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/preaction/  
→use --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1
Stop resource <sup>80</sup>	16
Stop group <sup>81</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/action  
→--set <Value>
```

<sup>80</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>81</sup> Cannot be specified with "Recovery target type" set to "cls".

#### **Script Settings**

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/  
    ↪preaction/default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/  
    ↪preaction/path --set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/  
    ↪preaction/path --set preaction.sh --nocheck
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/sqlserverw@sqlserverw1/emergency/  
    ↪preaction/timeout --set <Value>
```

### **8.44.3 Deleting an SQL Server monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon sqlserverw sqlserverw1
```

## 8.45 System monitor resource

---

**Note:**

The command lines in this section use **sraw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.45.1 Adding a System monitor resource

Be sure to set the following items. For details, see "*Setting System monitor resource parameters*".

Item (mandatory)
Monitor resource name
Recovery target
Recovery target type

```
clpcfadm.py add mon sraw sraw1
clpcfadm.py mod -t monitor/sraw@sraw1/relation/name --set <Recovery_
↳target> --nocheck
clpcfadm.py mod -t monitor/sraw@sraw1/relation/type --set <Recovery_
↳target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.45.2 Setting System monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/sraw@sraw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 30 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/sraw@sraw1/polling/interval --set <Value>`
- Timeout (sec)  
Default, 60 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/sraw@sraw1/polling/timeout --set <Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

  
`clpcfadm.py mod -t monitor/sraw@sraw1/emergency/dumpcollect/use --set  
→<Value>`
- Retry Count  
Default, 0 (minimum, 0; maximum, 999)  
`clpcfadm.py mod -t monitor/sraw@sraw1/polling/reconfirmation --set  
→<Value>`
- Wait Time to Start Monitoring (sec)  
Default, 0 (minimum, 0; maximum, 9999)  
`clpcfadm.py mod -t monitor/sraw@sraw1/firstmonwait --set <Value>`
- Nice Value  
Default, 0 (minimum, -20; maximum, 19)  
`clpcfadm.py mod -t monitor/sraw@sraw1/proctrl/priority --set <Value>`
- Choose servers that execute monitoring  
`clpcfadm.py mod -t monitor/sraw@sraw1/polling/servers@<ID>/name --set  
→<Server name> --nocheck`

---

### Note:

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

## Monitor (special)

- Monitoring CPU usage

Monitoring CPU usage	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/cpu/docheck
  ↵--set <Value>
```

- CPU usage (%)

Default, 90 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/cpu/
  ↵rate --set <Value>
```

---

**Note:** Set as above with "Monitoring CPU usage" set to "Monitor".

---

- Duration Time (sec)

Default, 3600 (minimum, 60; maximum, 84600)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/cpu/
  ↵time --set <Value>
```

---

**Note:** Set as above with "Monitoring CPU usage" set to "Monitor".

---



---

**Note:** Specify a value in seconds (divisible by 60).

---

- Monitoring total usage of memory

Monitoring total usage of memory	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/memory/
  ↵docheck --set <Value>
```

- Total usage of memory (%)

Default, 90 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/memory/
  ↵rate --set <Value>
```

---

**Note:** Set as above with "Monitoring total usage of memory" set to "Monitor".

---

- Duration Time (sec)

Default, 3600 (minimum, 60; maximum, 84600)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/memory/  
    ↳time --set <Value>
```

---

**Note:** Set as above with "Monitoring total usage of memory" set to "Monitor".

---

---

**Note:** Specify a value in seconds (divisible by 60).

---

- Monitoring total usage of virtual memory

Monitoring total usage of virtual memory	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/swap/docheck  
    ↳--set <Value>
```

- Total usage of memory (%)

Default, 90 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/swap/  
    ↳rate --set <Value>
```

---

**Note:** Set as above with "Monitoring total usage of virtual memory" set to "Monitor".

---

- Duration Time (sec)

Default, 3600 (minimum, 60; maximum, 84600)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/swap/  
    ↳time --set <Value>
```

---

**Note:** Set as above with "Monitoring total usage of virtual memory" set to "Monitor".

---

---

**Note:** Specify a value in seconds (divisible by 60).

---

- Monitoring total number of opening files

Monitoring total number of opening files	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/file/docheck  
    ↳--set <Value>
```

- Total number of opening files (in a ratio comparing with the system upper limit)(%)

Default, 90 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/file/  
    ↳rate --set <Value>
```

**Note:** Set as above with "Monitoring total number of opening files" set to "Monitor".

---

– Duration Time (sec)

Default, 3600 (minimum, 60; maximum, 84600)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/file/
  ↵time --set <Value>
```

---

**Note:** Set as above with "Monitoring total number of opening files" set to "Monitor".

---

**Note:** Specify a value in seconds (divisible by 60).

---

- Monitoring total number of running threads

Monitoring total number of running threads	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/thread/
  ↵docheck --set <Value>
```

– Total number of running threads (%)

Default, 90 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/thread/
  ↵rate --set <Value>
```

---

**Note:** Set as above with "Monitoring total number of running threads" set to "Monitor".

---

– Duration Time (sec)

Default, 3600 (minimum, 60; maximum, 84600)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/thread/
  ↵time --set <Value>
```

---

**Note:** Set as above with "Monitoring total number of running threads" set to "Monitor".

---

**Note:** Specify a value in seconds (divisible by 60).

---

- Monitoring number of running processes for each user

Monitoring number of running processes for each user	Value
Monitor (default)	1
Do not monitor	0

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/uproc/docheck
```

```
→--set <Value>
  – Number of running processes for each user (%)

    Default, 90 (minimum, 1; maximum, 100)

    clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/uproc/
      →rate --set <Value>
```

---

**Note:** Set as above with "Monitoring number of running processes for each user" set to "Monitor".

---

```
  – Duration Time (sec)

    Default, 3600 (minimum, 60; maximum, 84600)

    clpcfadm.py mod -t monitor/sraw@sraw1/parameters/system/uproc/
      →time --set <Value>
```

---

**Note:** Set as above with "Monitoring number of running processes for each user" set to "Monitor".

---

---

**Note:** Specify a value in seconds (divisible by 60).

---

#### **Condition of detecting failure**

##### **Add**

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/
  →mountpoint --set <Mount Point> --nocheck
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/dochek_
  →rate --set <Utilization rate> --nocheck
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/warning_
  →rate --set <(Utilization rate) Warning level> --nocheck
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/notice_
  →rate --set <(Utilization rate) Notice level> --nocheck
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/rate_
  →time --set <(Utilization rate) Duration Time> --nocheck
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/dochek_
  →size --set <Free space> --nocheck
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/warning_
  →size --set <(Free space) Warning level> --nocheck
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/notice_
  →size --set <(Free space) Notice level> --nocheck
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/size_
  →time --set <(Free space) Duration Time> --nocheck
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/dochek_
  →inode_rate --set <i-node Utilization rate> --nocheck
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/warning_
  →inode_rate --set <(i-node Utilization rate) Warning level> --nocheck
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/notice_
  →inode_rate --set <(i-node Utilization rate) Notice level> --nocheck
```

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/inode_
↳rate_time --set <(i-node Utilization rate) Duration time> --nocheck
```

**Note:**

With only one condition of detecting failure, specify 0 for ID.

With more than one condition of detecting failure, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Mount point (Within 1024 bytes)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/
↳mountpoint --set <Mount Point> --nocheck
```

**Note:** Specify it as an absolute path.

---

**Monitor Type**

- Utilization rate

Utilization rate	Value
Set (default)	1
Do not set	0

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/
↳docheck_rate --set <Value> --nocheck
```

**Note:** To set the following items, set "Utilization rate" to "Set" in advance.

---

- Warning level (%)

Default, 90 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/
↳warning_rate --set <Value> --nocheck
```

**Note:** Set the warning level to a value equal to or greater than the notice level value.

---

- Notice level (%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/
↳notice_rate --set <Value> --nocheck
```

- Duration Time (sec)

Default, 86400 (minimum, 60; maximum, 2592000)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/
↳rate_time --set <Value> --nocheck
```

**Note:** Specify a value in seconds (divisible by 60).

---

- Free space

Free space	Value
Set (default)	1
Do not set	0

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/  
    ↳docheck_size --set <Value> --nocheck
```

---

**Note:** To set the following items, set "Free space" to "Set" in advance.

---

- Warning level (MB)

Default, 500 (minimum, 1; maximum, 4294967295)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/  
    ↳warning_size --set <Value> --nocheck
```

---

**Note:** Set the warning level to a value equal to or less than the notice level value.

---

- Notice level (MB)

Default, 1000 (minimum, 1; maximum, 4294967295)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/  
    ↳notice_size --set <Value> --nocheck
```

- Duration Time (sec)

Default, 86400 (minimum, 60; maximum, 2592000)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/  
    ↳size_time --set <Value> --nocheck
```

---

**Note:** Specify a value in seconds (divisible by 60).

---

- i-node Utilization rate

i-node Utilization rate	Value
Set	1
Do not set (default)	0

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/  
    ↳docheck_inode_rate --set <Value> --nocheck
```

---

**Note:** To set the following items, set "i-node Utilization rate" to "Set" in advance.

---

- Warning level (%)

Default, 90 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/  
    ↳warning_inode_rate --set <Value> --nocheck
```

---

**Note:** Set the warning level to a value equal to or greater than the notice level value.

---

- Notice level (%)

Default, 80 (minimum, 1; maximum, 100)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/  
    ↳notice_inode_rate --set <Value> --nocheck
```

- Duration Time (sec)

Default, 86400 (minimum, 60; maximum, 2592000)

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID>/  
    ↳inode_rate_time --set <Value> --nocheck
```

---

**Note:** Specify a value in seconds (divisible by 60).

---

#### Delete

```
clpcfadm.py mod -t monitor/sraw@sraw1/parameters/diskcap@<ID> --delete
```

### Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/sraw@sraw1/relation/name --set <Recovery target> --nocheck
clpcfadm.py mod -t monitor/sraw@sraw1/relation/type --set <Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/sraw@sraw1/emergency/threshold/restart --set 0
clpcfadm.py mod -t monitor/sraw@sraw1/emergency/threshold/fo --set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/sraw@sraw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/sraw@sraw1/emergency/threshold/restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/sraw@sraw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/sraw@sraw1/emergency/threshold/script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/sraw@sraw1/emergency/preaction/userrestart  
↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/sraw@sraw1/emergency/threshold/restart  
↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/sraw@sraw1/emergency/preaction/usefailover  
↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/sraw@sraw1/emergency/threshold/fo --set  
↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/sraw@sraw1/emergency/preaction/use --set  
↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>82</sup>	16
Stop group <sup>83</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

`clpcfadm.py mod -t monitor/sraw@sraw1/emergency/action --set <Value>`

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

`clpcfadm.py mod -t monitor/sraw@sraw1/emergency/preaction/default ↵--set <Value>`

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

`clpcfadm.py mod -t monitor/sraw@sraw1/emergency/preaction/path ↵--set <File> --nocheck`

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

---

`clpcfadm.py mod -t monitor/sraw@sraw1/emergency/preaction/path ↵--set preaction.sh --nocheck`

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

---

<sup>82</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>83</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/sraw@sraw1/emergency/preaction/timeout  
↳--set <Value>
```

### **8.45.3 Deleting a System monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon sraw sraw1
```

## 8.46 Tuxedo monitor resource

---

### Note:

The command lines in this section use **tuxw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.46.1 Adding a Tuxedo monitor resource

Be sure to set the following items. For details, see "*Setting Tuxedo monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Config File
Recovery target
Recovery target type

```
clpcfadm.py add mon tuxw tuxw1
clpcfadm.py mod -t monitor/tuxw@tuxw1/target --set <Target Resource>
  ↪ (monitored when active)
clpcfadm.py mod -t monitor/tuxw@tuxw1/parameters/tuxconfig --set <Config File>
  ↪ --nocheck
clpcfadm.py mod -t monitor/tuxw@tuxw1/relation/name --set <Recovery>
  ↪ target> --nocheck
clpcfadm.py mod -t monitor/tuxw@tuxw1/relation/type --set <Recovery>
  ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.46.2 Setting Tuxedo monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/tuxw@tuxw1/polling/interval --set <Value>`
- Timeout (sec)  
Default, 120 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/tuxw@tuxw1/polling/timeout --set <Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/dumpcollect/use --set  
  ↳<Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

`clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/timeout/  
  ↳notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/timeout/notrecovery/  
  ↳use --set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 2 (minimum, 0; maximum, 999)

`clpcfadm.py mod -t monitor/tuxw@tuxw1/polling/reconfirmation --set  
  ↳<Value>`

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

`clpcfadm.py mod -t monitor/tuxw@tuxw1/firstmonwait --set <Value>`

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/target --set <Target Resource>
  ↳ (monitored when active) >
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/polling/servers@<ID>/name --set
  ↳ <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Application Server Name (Within 255 bytes)

Default: BBL

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/parameters/servername --set
  ↳ <Application Server Name>
```

- Config File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/parameters/tuxconfig --set
  ↳ <Config File> --nocheck
```

---

**Note:** Specify it as an absolute path.

---

- Library Path (Within 1023 bytes)

Library Path
/home/Oracle/tuxedo/tuxedo12.1.3.0.0/lib/libtux.so (default)

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/parameters/libraryfullpath --
  ↳ --set <Library Path>
```

---

**Note:** Specify it as an absolute path.

---

---

**Note:** Set it according to the environment (e.g., installation folder).

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/relation/name --set <Recovery target> --nocheck  
clpcfadm.py mod -t monitor/tuxw@tuxw1/relation/type --set <Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/threshold/restart --set 0  
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/threshold/fo --set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/threshold/restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/action --set 1
```

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/threshold/script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/preaction/userrestart
↪--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/threshold/restart
↪--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/preaction/usefailover
↪--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/threshold/fo --set
↪<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/preaction/use --set
↪<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing <sup>84</sup>	1
Stop resource <sup>84</sup>	16
Stop group <sup>85</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/action --set <Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/preaction/default  

  ↳--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/preaction/path  

  ↳--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

---

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/preaction/path  

  ↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

---

<sup>84</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>85</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/tuxw@tuxw1/emergency/preaction/timeout  
→--set <Value>
```

### **8.46.3 Deleting a Tuxedo monitor resource**

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon tuxw tuxw1
```

## 8.47 User mode monitor resource

---

### Note:

The command lines in this section use **userw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.47.1 Adding a User mode monitor resource

Be sure to set the following items. For details, see "*Setting User mode monitor resource parameters*".

Item (mandatory)
Monitor resource name
Recovery target (LocalServer)
Recovery target type (cls)

```
clpcfadm.py add mon userw userw1
clpcfadm.py mod -t monitor/userw@userw1/relation/name --set LocalServer
  ↵--nocheck
clpcfadm.py mod -t monitor/userw@userw1/relation/type --set cls --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.47.2 Setting User mode monitor resource parameters

#### Information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/userw@userw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 3 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/userw@userw1/polling/interval --set <Value>
```

- Timeout (sec)

Default, 90 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/userw@userw1/polling/timeout --set <Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/userw@userw1/firstmonwait --set <Value>
```

- Nice Value

Default, -20 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/userw@userw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/userw@userw1/polling/servers@<ID>/name
  ↳--set <Server name> --nocheck
```

---

### Note:

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

- 
- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/userw@userw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Use heartbeat interval and timeout

Use heartbeat interval and timeout	Value
Use (default)	1
Do not use	0

```
clpcfadm.py mod -t monitor/userw@userw1/parameters/usehb --set <Value>
```

- Method

Value
softdog
ipmi
keepalive (default)
none

```
clpcfadm.py mod -t monitor/userw@userw1/parameters/method --set  
→<Value>
```

- Action at Timeout Occurrence

Value (with "Method" set to "keepalive")	Value (with "Method" set to "ipmi")
RESET (default)	RESET (default)
PANIC	NMI

```
clpcfadm.py mod -t monitor/userw@userw1/parameters/action --set  
→<Value>
```

---

**Note:** You can set this parameter with "Method" set to "keepalive" or "ipmi".

---

- Open/Close Temporary File

Open/Close Temporary File	Value
Set	1
Do not set (default)	0

```
clpcfadm.py mod -t monitor/userw@userw1/parameters/reopen --set  
→<Value>
```

- Write

Write	Value
Yes	1
No (default)	0

```
clpcfadm.py mod -t monitor/userw@userw1/parameters/repwrite --set  
→<Value>
```

---

**Note:** You can set this parameter with "Open/Close Temporary File" set to "Set".

---

- Size (bytes)

Default, 10000 (minimum, 1; maximum, 9999999)

```
clpcfadm.py mod -t monitor/userw@userw1/parameters/writesize --set  
→<Value>
```

---

**Note:** You can set this parameter with "Write" set to "Write".

---

- Create Temporary Thread

Create Temporary Thread	Value
Set	1
Do not set (default)	0

```
clpcfadm.py mod -t monitor/userw@userwl/parameters/mkthread --set
→<Value>
```

#### Recovery Action

This cannot be set for this monitor resource.

#### 8.47.3 Deleting a User mode monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon userw userwl
```

## 8.48 Virtual IP monitor resource

---

**Note:**

The command lines in this section use **vipw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.48.1 Adding a Virtual IP monitor resource

Be sure to set the following items. For details, see "*Setting Virtual IP monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
VIP resource name
Recovery target
Recovery target type

```
clpcfadm.py add mon vipw vipw1
clpcfadm.py mod -t monitor/vipw@vipw1/target --set <Target Resource
  ↳ (monitored when active)>
clpcfadm.py mod -t monitor/vipw@vipw1/parameters/object --set <VIP
  ↳ resource name>
clpcfadm.py mod -t monitor/vipw@vipw1/relation/name --set <Recovery
  ↳ target> --nocheck
clpcfadm.py mod -t monitor/vipw@vipw1/relation/type --set <Recovery
  ↳ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.48.2 Setting Virtual IP monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/vipw@vipw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 3 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/vipw@vipwl/polling/interval --set <Value>
```

- Timeout (sec)

Default, 180 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/vipw@vipwl/polling/timeout --set <Value>
```

- Retry Count

Default, 0 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/vipw@vipwl/polling/reconfirmation --set  
  -><Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/vipw@vipwl/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/vipw@vipwl/target --set <Target Resource  
  ->(monitored when active)>
```

---

**Note:** You can specify only a Virtual IP resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/vipw@vipwl/proctrl/priority --set <Value>
```

## Monitor (special)

- VIP resource name

```
clpcfadm.py mod -t monitor/vipw@vipwl/parameters/object --set <VIP  
  ->resource name>
```

---

**Note:** You can specify only "Virtual IP resource".

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/vipw@vipw1/relation/name --set <Recovery target> --nocheck  
clpcfadm.py mod -t monitor/vipw@vipw1/relation/type --set <Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/vipw@vipw1/emergency/threshold/restart --set 0  
clpcfadm.py mod -t monitor/vipw@vipw1/emergency/threshold/fo --set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/vipw@vipw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/vipw@vipw1/emergency/threshold/restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/vipw@vipw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/vipw@vipw1/emergency/threshold/script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/vipw@vipw1/emergency/preaction/userrestart --set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/vipw@vipw1/emergency/threshold/restart
  ↳--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/vipw@vipw1/emergency/preaction/usefailover
  ↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/vipw@vipw1/emergency/threshold/fo --set
  ↳<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/vipw@vipw1/emergency/preaction/use --set
  ↳<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
No operation (default)	1
Stop resource <sup>86</sup>	16
Stop group <sup>87</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9

Continued on next page

Table 8.601 – continued from previous page

Final Action	Value
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

clpcfadm.py mod -t monitor/vipw@vipw1/emergency/action --set <Value>

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

clpcfadm.py mod -t monitor/vipw@vipw1/emergency/preaction/default  
 ↳--set <Value>

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

clpcfadm.py mod -t monitor/vipw@vipw1/emergency/preaction/path  
 ↳--set <File> --nocheck

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---



---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

clpcfadm.py mod -t monitor/vipw@vipw1/emergency/preaction/path  
 ↳--set preaction.sh --nocheck

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

clpcfadm.py mod -t monitor/vipw@vipw1/emergency/preaction/timeout  
 ↳--set <Value>

---

<sup>86</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>87</sup> Cannot be specified with "Recovery target type" set to "cls".

### 8.48.3 Deleting a Virtual IP monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon vipw vipwl
```

## 8.49 Volume manager monitor resource

---

**Note:**

The command lines in this section use **volmgrw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.49.1 Adding a Volume manager monitor resource

Be sure to set the following items. For details, see "*Setting Volume manager monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Target Name
Recovery target
Recovery target type

```
clpcfadm.py add mon volmgrw volmgrw1  
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/target --set <Target Resource_  
↪ (monitored when active)>  
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/parameters/devname --set  
↪ <Target Name>  
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/relation/name --set <Recovery_  
↪ target> --nocheck  
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/relation/type --set <Recovery_  
↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.49.2 Setting Volume manager monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/polling/interval --set
    ↳<Value>
```

- Timeout (sec)

Default, 120 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/polling/timeout --set
    ↳<Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/dumpcollect/use
    ↳--set <Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/timeout/
    ↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/timeout/
    ↳notrecovery/use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 1 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/polling/reconfirmation
    ↳--set <Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/firstmonwait --set <Value>
```

- Monitoring Timing

Monitoring Timing	Value
Always	0
Active (default)	1

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/polling/timing --set  
  -><Value>
```

---

**Note:** If "Monitoring Timing" is set to "Active", set "Target Resource (monitored when active)".

---

**Important:** If you change the setting for "Monitoring timing" to "Always", set "Target Resource" to blank ("").

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/target --set ""
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/target --set <Target  
  ->Resource (monitored when active)>
```

---

**Note:** Set as above with "Monitoring Timing" set to "Active".

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/proctrl/priority --set  
  -><Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/polling/servers@<ID>/name  
  ->--set <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/perf/metrics/use --set  
  -><Value>
```

## Monitor (special)

- Volume Manager

Value
lvm (default)
zfspool

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/parameters/type --set
↳<Value>
```

- Target Name (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/parameters/devname --set
↳<Target Name>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/relation/name --set
↳<Recovery target> --nocheck
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/relation/type --set
↳<Recovery target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/threshold/
↳restart --set 0
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/threshold/fo_
↳--set 0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/action --set_
↳1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/threshold/
↳restart --set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/action --set ↴  
→1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/threshold/ ↴  
→script --set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/preaction/ ↴  
→userrestart --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 3 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/threshold/ ↴  
→restart --set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/preaction/ ↴  
→usefailover --set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/threshold/fo ↴  
→--set <Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/volmgrw@volmgrwl/emergency/preaction/use_
↳--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1
Stop resource <sup>88</sup>	16
Stop group <sup>89</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/volmgrw@volmgrwl/emergency/action --set
↳<Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

```
clpcfadm.py mod -t monitor/volmgrw@volmgrwl/emergency/preaction/
↳default --set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/volmgrw@volmgrwl/emergency/preaction/
↳path --set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

<sup>88</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>89</sup> Cannot be specified with "Recovery target type" set to "cls".

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/preaction/  
    ↳path --set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/volmgrw@volmgrw1/emergency/preaction/  
    ↳timeout --set <Value>
```

### 8.49.3 Deleting a Volume manager monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon volmgrw volmgrw1
```

## 8.50 WebSphere monitor resource

---

### Note:

The command lines in this section use **wasw1** as the monitor resource name.

Change it to suit your environment.

---

### 8.50.1 Adding a WebSphere monitor resource

Be sure to set the following items. For details, see "*Setting WebSphere monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
User Name
Recovery target
Recovery target type

```
clpcfadm.py add mon wasw wasw1
clpcfadm.py mod -t monitor/wasw@wasw1/target --set <Target Resource
  ↪ (monitored when active)>
clpcfadm.py mod -t monitor/wasw@wasw1/parameters/username --set <User
  ↪ Name> --nocheck
clpcfadm.py mod -t monitor/wasw@wasw1/relation/name --set <Recovery
  ↪ target> --nocheck
clpcfadm.py mod -t monitor/wasw@wasw1/relation/type --set <Recovery
  ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.50.2 Setting WebSphere monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/wasw@wasw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)  
Default, 60 (minimum, 1; maximum, 999)  
`clpcfadm.py mod -t monitor/wasw@wasw1/polling/interval --set <Value>`
- Timeout (sec)  
Default, 120 (minimum, 5; maximum, 999)  
`clpcfadm.py mod -t monitor/wasw@wasw1/polling/timeout --set <Value>`
- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

`clpcfadm.py mod -t monitor/wasw@wasw1/emergency/dumpcollect/use --set  
    ↳<Value>`

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

`clpcfadm.py mod -t monitor/wasw@wasw1/emergency/timeout/  
    ↳notreconfirmation/use --set <Value>`

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

`clpcfadm.py mod -t monitor/wasw@wasw1/emergency/timeout/notrecovery/  
    ↳use --set <Value>`

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 2 (minimum, 0; maximum, 999)

`clpcfadm.py mod -t monitor/wasw@wasw1/polling/reconfirmation --set  
    ↳<Value>`

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

`clpcfadm.py mod -t monitor/wasw@wasw1/firstmonwait --set <Value>`

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/wasw@wasw1/target --set <Target Resource>
  ↳ (monitored when active) >
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/wasw@wasw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/wasw@wasw1/polling/servers@<ID>/name --set
  ↳ <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/wasw@wasw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- Application Server Name (Within 255 bytes)

Default: server1

```
clpcfadm.py mod -t monitor/wasw@wasw1/parameters/server --set
  ↳ <Application Server Name>
```

- Profile Name (Within 1023 bytes)

Default: default

```
clpcfadm.py mod -t monitor/wasw@wasw1/parameters/profile --set
  ↳ <Profile Name>
```

- User Name (Within 255 bytes)

```
clpcfadm.py mod -t monitor/wasw@wasw1/parameters/username --set <User Name>
  ↳ --nocheck
```

- Password (Within 255 bytes)

```
clpcfadm.py mod -t monitor/wasw@wasw1/parameters/password --set
  ↳ <Encrypted password>
```

```
clpcfadm.py mod -t monitor/wasw@wasw1/parameters/encrypwd --set 1
  ↳ --nocheck
```

**Note:**

Set an encrypted password string.

For details, see "[Retrieving an encrypted password string](#)".

---

- Install Path (Within 1023 bytes)

Install Path
/opt/IBM/WebSphere/AppServer (default)

```
clpcfadm.py mod -t monitor/wasw@wasw1/parameters/installpath --set  
→<Install Path>
```

---

**Note:** Specify it as an absolute path.

---

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/wasw@wasw1/relation/name --set <Recovery  
→target> --nocheck  
clpcfadm.py mod -t monitor/wasw@wasw1/relation/type --set <Recovery  
→target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/wasw@wasw1/emergency/threshold/restart  
→--set 0  
clpcfadm.py mod -t monitor/wasw@wasw1/emergency/threshold/fo --set  
→0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/wasw@wasw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/wasw@wasw1/emergency/threshold/restart  
→--set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

---

```
clpcfadm.py mod -t monitor/wasw@wasw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/wasw@wasw1/emergency/threshold/script
  ↵--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/wasw@wasw1/emergency/preaction/userrestart
  ↵--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/wasw@wasw1/emergency/threshold/restart
  ↵--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/wasw@wasw1/emergency/preaction/usefailover
  ↵--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/wasw@wasw1/emergency/threshold/fo --set
  ↵<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/wasw@wasw1/emergency/preaction/use --set
```

↪<Value>

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1
Stop resource <sup>90</sup>	16
Stop group <sup>91</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

clpcfadm.py mod -t monitor/wasw@wasw1/emergency/action --set <Value>

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

clpcfadm.py mod -t monitor/wasw@wasw1/emergency/preaction/default ↪--set <Value>

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

clpcfadm.py mod -t monitor/wasw@wasw1/emergency/preaction/path ↪--set <File> --nocheck

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

<sup>90</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>91</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/wasw@wasw1/emergency/preaction/path  
↳--set preaction.sh --nocheck
```

---

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/wasw@wasw1/emergency/preaction/timeout  
↳--set <Value>
```

### 8.50.3 Deleting a WebSphere monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon wasw wasw1
```

## 8.51 WebLogic monitor resource

---

**Note:**

The command lines in this section use **wlsw1** as the monitor resource name.  
Change it to suit your environment.

---

### 8.51.1 Adding a WebLogic monitor resource

Be sure to set the following items. For details, see "*Setting WebLogic monitor resource parameters*".

Item (mandatory)
Monitor resource name
Target Resource (monitored when active)
Recovery target
Recovery target type

```
clpcfadm.py add mon wlsw wlsw1
clpcfadm.py mod -t monitor/wlsw@wlsw1/target --set <Target Resource
    ↪ (monitored when active)>
clpcfadm.py mod -t monitor/wlsw@wlsw1/relation/name --set <Recovery
    ↪ target> --nocheck
clpcfadm.py mod -t monitor/wlsw@wlsw1/relation/type --set <Recovery
    ↪ target type> --nocheck
```

---

**Note:** If you configure a cluster only with the above mandatory items, other parameters are set to their default values.

---

### 8.51.2 Setting WebLogic monitor resource parameters

#### Basic information

- Monitor resource name (Within 31 bytes)

**This is set when the resource is added. To change the monitor resource name, delete the resource and set it again.**

- Comment (Within 127 bytes)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/comment --set <Comment>
```

---

**Note:** Enclose in double quotes a string including spaces (e.g., "Sample Comment").

---

## Monitor (common)

- Interval (sec)

Default, 60 (minimum, 1; maximum, 999)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/polling/interval --set <Value>
```

- Timeout (sec)

Default, 120 (minimum, 5; maximum, 999)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/polling/timeout --set <Value>
```

- Collect the dump file of the monitor process at timeout occurrence

Collect the dump file of the monitor process at timeout occurrence	Value
Collect	1
Do not collect (default)	0

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/dumpcollect/use --set
↳<Value>
```

- Do Not Retry at Timeout Occurrence

Do Not Retry at Timeout Occurrence	Value
Retry (default)	0
Do not retry	1

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/timeout/
↳notreconfirmation/use --set <Value>
```

- Action at Timeout Occurrence

Action at Timeout Occurrence	Value
Recover (default)	0
Do not recover	1
Keepalive Panic	3
Sysrq Panic	4

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/timeout/notrecovery/
↳use --set <Value>
```

---

**Note:** Set as above with "Do Not Retry at Timeout Occurrence" set to "Do not retry".

---

- Retry Count

Default, 2 (minimum, 0; maximum, 999)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/polling/reconfirmation --set
↳<Value>
```

- Wait Time to Start Monitoring (sec)

Default, 0 (minimum, 0; maximum, 9999)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/firstmonwait --set <Value>
```

- Target Resource (monitored when active)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/target --set <Target Resource>  
→ (monitored when active)>
```

---

**Note:** You can specify only an EXEC resource for this monitor resource.

---

- Nice Value

Default, 0 (minimum, -20; maximum, 19)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/proctrl/priority --set <Value>
```

- Choose servers that execute monitoring

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/polling/servers@<ID>/name --set  
→ <Server name> --nocheck
```

---

**Note:**

With only one server to be monitored, specify 0 for ID.

With more than one server to be monitored, specify consecutive numbers (e.g., 0, 1, 2...).

---

- Send polling time metrics

Send polling time metrics	Value
Send	1
Do not send (default)	0

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/perf/metrics/use --set <Value>
```

## Monitor (special)

- IP Address

Default: 127.0.0.1

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/ipaddress --set <IP>  
→ <Address>
```

- Port Number

Default, 7002 (minimum, 1; maximum, 65535)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/port --set <Value>
```

- Monitor Method

Monitor Method	Value
RESTful API (default)	3
WLST	2

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/checkmethod --set  
→ <Value>
```

- Protocol

Protocol	Value
HTTP (default)	0
HTTPS	1

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/https --set <Value>
```

- User Name (Within 255 bytes)

Default: weblogic

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/restusername --set
  ↪<User Name>
```

---

**Note:** You can set this parameter with "Monitor Method" set to "RESTful API".

---

- Password (Within 255 bytes)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/restpassword --set
  ↪<Encrypted password>
```

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/encrypwd --set 1
  ↪--nocheck
```

---

**Note:** You can set this parameter with "Monitor Method" set to "RESTful API".

---

**Note:**

Set an encrypted password string.

For details, see "[Retrieving an encrypted password string](#)".

---

### Account Shadow

---

**Note:** To set the following items, set "Monitor Method" to "WLST" in advance.

---

- Account Shadow

Account Shadow	Value
On	1
Off (default)	0

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/shadow --set
  ↪<Value>
```

- Config File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/configfile --set
  ↪<Config File>
```

---

**Note:** Set as above with "Account Shadow" set to "On".

---

---

**Note:** Specify it as an absolute path.

---

- Key File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/keyfile --set  
→<Key File>
```

---

**Note:** Set as above with "Account Shadow" set to "On".

---

---

**Note:** Specify it as an absolute path.

---

- User Name (Within 255 bytes)

Default: weblogic

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/username --set  
→<User Name>
```

---

**Note:** Set as above with "Account Shadow" set to "Off".

---

- Password (Within 255 bytes)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/password --set  
→<Encrypted password>  
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/encrypwd --set 1  
→--nocheck
```

---

**Note:** Set as above with "Account Shadow" set to "Off".

---

---

**Note:**

Set an encrypted password string.

For details, see "[Retrieving an encrypted password string](#)".

---

#### **Authentication Method**

---

**Note:** To set the following items, set "Monitor Method" to "WLST" in advance.

---

- Authority Method

Authority Method	Value
Not Use SSL	0
DemoTrust (default)	1
CustomTrust	2

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/authority --set
```

→<Value>

- Key Store File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/keystorefile
→--set <Key Store File>
```

---

**Note:** Set as above with "Authority Method" set to "CustomTrust".

---



---

**Note:** Specify it as an absolute path.

---

- Domain Environment File (Within 1023 bytes)

<b>Domain Environment File</b>
--------------------------------

<pre>/home/Oracle/product/Oracle_Home/user_projects/domains/base_domain/bin/setDomainEnv.sh (default) /home/Oracle/Middleware/wlserver_10.3/samples/domains/wl_server/bin/setDomainEnv.sh</pre>
---

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/domainenv --set
→<Domain Environment File>
```

---

**Note:** Specify it as an absolute path.

---

- Add command option (Within 1023 bytes)

Default: -Dwlst.offline.log=disable -Duser.language=en\_US

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/parameters/option --set <Add
→command option>
```

## Recovery Action

- Recovery target

	Recovery target	Recovery target type
Local server	LocalServer	cls
All groups([All Groups])	""	grp
Failover group name	(Failover group name)	grp
Group resource name	(Group resource name)	rsc

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/relation/name --set <Recovery
→target> --nocheck
clpcfadm.py mod -t monitor/wlsw@wlsw1/relation/type --set <Recovery
→target type> --nocheck
```

---

**Important:** If you set "Recovery target" to "Local server"

Set "Maximum Reactivation Count" and "Maximum Failover Count" to 0 (times).

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/threshold/restart
→--set 0
```

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/threshold/fo --set ↴  
    ↴0
```

If the current setting for "Final Action" is "Stop resource (16)" or "Stop Group (2)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/action --set 1
```

---

**Important:** If you set "Recovery target" to "All groups ([All Groups])"

Set "Maximum Reactivation Count" to 0 (times).

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/threshold/restart ↴  
    ↴--set 0
```

If the current setting for "Final Action" is "Stop resource (16)", change it to "No operation (1)".

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/action --set 1
```

---

- Recovery Script Execution Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/threshold/script ↴  
    ↴--set <Value>
```

- Execute Script before Reactivation

Execute Script before Reactivation	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/preaction/userrestart ↴  
    ↴--set <Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Reactivation Count

Default, 0 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/threshold/restart ↴  
    ↴--set <Value>
```

- Execute Script before Failover

Execute Script before Failover	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/preaction/usefailover ↴  
    ↴--set <Value>
```

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Maximum Failover Count

Default, 1 (minimum, 0; maximum, 99)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/threshold/fo --set
→<Value>
```

- Execute Script before Final Action

Execute Script before Final Action	Value
Check	1
Do not check (default)	0

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/preaction/use --set
→<Value>
```

---

**Note:** If "Execute" is set, specify the file. (See "Script Settings" -> "File".)

---

- Final Action

Final Action	Value
Do nothing	1
Stop resource <sup>92</sup>	16
Stop group <sup>93</sup>	2
Stop the cluster service	3
Stop the cluster service and shutdown OS (default)	4
Stop the cluster service and reboot OS	5
Sysrq Panic	8
Keepalive Reset	9
Keepalive Panic	10
BMC Reset	11
BMC Power Off	12
BMC Power Cycle	13
BMC NMI	14

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/action --set <Value>
```

#### Script Settings

- File type

Script file type	Value
Script created with this product (default)	1
User Application	0

<sup>92</sup> Cannot be specified with "Recovery target type" set to "cls" or "grp".

<sup>93</sup> Cannot be specified with "Recovery target type" set to "cls".

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/preaction/default  
→--set <Value>
```

---

**Note:** If you change the value of this parameter, also change that of "File".

---

- File (Within 1023 bytes)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/preaction/path  
→--set <File> --nocheck
```

---

**Note:** When specifying "User Application" (any script file on the cluster server), specify the file in an absolute path.

---

---

**Note:** If you specify "Script created with this product", specify **preaction.sh**.

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/preaction/path  
→--set preaction.sh --nocheck
```

- Timeout (sec)

Default, 5 (minimum, 1; maximum, 9999)

```
clpcfadm.py mod -t monitor/wlsw@wlsw1/emergency/preaction/timeout  
→--set <Value>
```

### 8.51.3 Deleting a WebLogic monitor resource

Delete a resource by specifying the monitor resource type and monitor resource name.

```
clpcfadm.py del mon wlsw wlsw1
```

## RETRIEVING AN ENCRYPTED PASSWORD STRING

The clpcfadm.py command cannot retrieve encrypted password strings.

See "Reference" in the following table, then carry out the applicable procedure.

Authentication password	Reference
Cluster WebUI authentication (for operation) Cluster WebUI authentication (for reference)	<i>Retrieving an encrypted password string with Cluster WebUI/Cluster WebUI Offline</i>
Other than the above	<i>Retrieving an encrypted password string with the clpencrypt command</i>

## 9.1 Retrieving an encrypted password string with Cluster WebUI/Cluster WebUI Offline

Retrieve an encrypted password string as follows:

1. Import any set of cluster configuration data through Cluster WebUI or Cluster WebUI Offline.
2. On Cluster WebUI or Cluster WebUI Offline, set relevant passwords.
3. Click **Export**, then save the cluster configuration data to any directory.
4. Extract the zip file that you saved above, and then open clp.conf with a text editor.
5. Check relevant path values.

**Example: Cluster WebUI authentication**

```
<root>
  <webmgr>
    <security>
      <adminpwd>
        ↳ca978112ca1bbdcafac231b39a23dc4da786eff8147c4e72b9807785afee48bb</
        ↳adminpwd>
        <userpwd>
          ↳3e23e8160039594a33894f6564e1b1348bbd7a0088d42c4acb73eeaed59c009d</
        </userpwd>
      </security>
    </webmgr>
  </root>
```

Password for operation

**ca978112ca1bbdcafac231b39a23dc4da786eff8147c4e72b9807785afee48bb**

Password for reference

**3e23e8160039594a33894f6564e1b1348bbd7a0088d42c4acb73eeaed59c009d**

## 9.2 Retrieving an encrypted password string with the clpencrypt command

Retrieve an encrypted password string by executing the following command:

```
clpencrypt <password (plaintext)>
```



## NOTES AND RESTRICTIONS

- For strings that can be entered for parameters, and for prohibited strings, see the corresponding chapters of "EXPRESSCLUSTER X Reference Guide"
- When specifying a file (e.g., script file), place the file in the same path on each server.

**Example** Desired script file specific in the Recovery Action of a monitor resource

```
clpcfadm.py mod -t monitor/<Monitor resource type>@<Monitor_
→resource name>/emergency/preaction/path --set <Desired script_
→file>
```

- The command execution examples provided in this guide may require escape characters, which depends on the shell that you execute.



---

**CHAPTER  
ELEVEN**

---

**LEGAL NOTICE**

### **11.1 Disclaimer**

- Information in this document is subject to change without notice.
- No part of this document may be reproduced or transmitted in any form by any means, electronic or mechanical, for any purpose, without the express written permission of NEC Corporation.

## 11.2 Trademark Information

- EXPRESSCLUSTER® is a registered trademark of NEC Corporation.
- Linux is a registered trademark of Linus Torvalds in the United States and other countries.
- Microsoft, Windows, Windows Server, Internet Explorer, Azure, and Hyper-V are registered trademarks of Microsoft Corporation in the United States and other countries.
- Amazon Web Services and all AWS-related trademarks, as well as other AWS graphics, logos, page headers, button icons, scripts, and service names are trademarks, registered trademarks or trade dress of AWS in the United States and/or other countries.
- Oracle, Oracle Database, MySQL, Tuxedo, WebLogic Server, Java, and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle Corporation and/or its affiliates.
- JBoss is a registered trademark of Red Hat, Inc. or its subsidiaries in the United States and other countries.
- Apache Tomcat, Tomcat, and Apache are registered trademarks or trademarks of Apache Software Foundation.
- Python is a registered trademark of the Python Software Foundation.
- VMware, vCenter Server, and vSphere is registered trademarks or trademarks of VMware, Inc. in the United States and/or other jurisdictions.
- WebOTX is a registered trademark of NEC Corporation.
- IBM, DB2, and WebSphere are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both.
- PostgreSQL is a registered trademark of the PostgreSQL Global Development Group.
- WebSAM is a registered trademark of NEC Corporation.
- Google Cloud is a trademark or a registered trademark of Google LLC.
- Other product names and slogans written in this manual are trademarks or registered trademarks of their respective companies.

---

**CHAPTER  
TWELVE**

---

**REVISION HISTORY**

Edition	Revised Date	Description
1st	Apr 26, 2024	New manual

© Copyright NEC Corporation 2024. All rights reserved.