NEC

MasterScope MCOperations/ SystemManager

WebAPI Reference

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Preface

Notation Rules of This Document

This document describes the precautions and related information as follows:

Note

A functional, operational, or configurational notice, warning, or complement is described.

Tip

Indicates the location of additional information or reference destination information

Notation list

The following notation rules are applied in this document.

Notation	How to use	Example
[ ] square brackets	Placed before and after an item (such as a text box, check box, or tab) on the screen	Enter the machine name in the [Machine Name] text box. The [All] check box
“” double quotes	Placed before and after a screen name (such as a dialog box window), or the name of a manual other than this one.	*“Setting”* window *“Installation Guide”*
[ ] square brackets in the command line	Indicates that the specification of the value in [ ] can be omitted.	add [/a] Gr1
Monospace font	Output from the command-line system (such as a message prompt)	Execute the following command: `replace Gr1`
Italicized monospace font	An item that should be replaced by users with a valid value If the value contains a space, surround it with " " (double quotes).	add *GroupName* `InstallPath= ”Install Path”`
Json example	Json examples are shown with breaks and indents added in order to improve the readability.	`{ "ID": [ "45ed3512" ], "Manager": { "ErrorMessage": "", "Name": "localhost", "Status": 200, "StatusCode": 200 } }`

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Chapter 1. Functional outline

Implement the following functions to Web API.

- Monitoring ON/OFF
  Starting/stopping monitoring categories set in the business view
  Stopping/restarting monitoring for each topology agent
  Moving/Deleting the agents
- Changing the report destination mail address
  Adding, changing, and deleting the report destination mail address of each category and filter set in the business view
- Setting the process monitoring function
  Adding, updating, and deleting the process monitoring definition
- Setting the Windows service monitoring function
  Adding, updating, and deleting the Windows service monitoring definition
- Setting the performance monitoring function
  Adding, updating, and deleting the performance monitoring definition
- Setting the application log monitoring function
  Adding, updating, and deleting the application log monitoring definition
  Adding, updating, and deleting the filter definition
- Setting the event log monitoring function
  Adding, updating, and deleting the filter definition
- Setting the system log monitoring function
  Adding, updating, and deleting the filter definition

This document assumes that providers and tenant administrators use the above functions.
Providers and tenant administrators are defined below.

- Provider
  A provider is the operation manager who manages the entire operation by using MasterScope MCOperations.
  A provider performs operations, such as setting filters, etc., on MCOperations in response to applications from the tenant administrators.
- Tenant administrator
  A tenant administrator is a person or organization utilizing the service. A tenant administrator also means the administrator, user, and operator of the provided computer.

Chapter 2. Prerequisites

- The provider manually creates or deletes the category (group), filter, and policy.
- The client controls the rights of referencing or updating the category (group), filter, and policy. Accordingly, MCOperations does not manage each user.

Chapter 3.
Common Specifications of API

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Note

This chapter describes the command lines for the Windows manager. If another OS is used, replace it accordingly.

3.1 HTTP method

The following HTTP methods are used according to the purpose.

HTTP method	Usage
GET	Obtains the existing resource information.
POST	Creates a new resource.
PUT	Edits the existing resource.
DELETE	Deletes the existing resource.

3.2 JSON

API supports the JSON format.

3.2.1 JSON specifications

The JSON specifications conform to RFC4627.
For items without values, the null value is stored without omitting the key.

3.2.2 Character encoding

UTF-8 is used for encoding of all character strings.

3.3 Request format

3.3.1 HTTP header

The following HTTP headers are used.

HTTP header	Setting value
X-FW-API-Version	This indicates the API version. Specify "1.0". * The character string may be changed. Specify it when executing the API common to Frameworks described below. "Chapter 4. External interface (common) (page 10)"
X-SYSMGR-API-Version	This indicates the API version. Specify "1.0". * The character string may be changed. Specify it when executing the API of SystemManager as described below. "4.12 Service port monitoring (page 337)"

Example 1:

```
X-FW-API-Version: 1.0
```

Example 2:

```
X-SYSMGR-API-Version: 1.0
```

3.3.2 URL

1. The URL and query character strings are case-sensitive.

3.3.3 HTTP message body

1. The HTTP message body is case-sensitive.

3.4 API Authentication Key

Create the authentication key for ServiceGovernor WebAPI Base Option.

1. Log into the manager under the Administrators privileges.
2. Open the Tools folder within the installation destination folder of the manager component.
3. Perform the following WebApiTool.bat command to create the access key.

```
> cd "< Installation directory>\Tools"
>WebApiTool.bat  createkey <UserName> -description "<Description>"
```

* Specify any value for <UserName> and <Description>.

Caution

- An ASCII character or numeric value can be specified for <UserName>.
- The character string specified for <UserName> will be displayed as the user name of the [Audit Log] view on the manager's monitoring terminal.

Confirm that the following is displayed as a standard output.

```
NORMAL END.

command exit code:0
COMMAND SUCCEEDED.
```

4. Confirm the created access key.

Perform the following command to display the created access key.

```
> cd "< Installation directory>\Tools"
>WebApiTool.bat showkey <UserName>
```

Confirm that the following is displayed in a standard output.

```
----------------------------------------------------------------
UserName : <UserName>
Description : <Description>
AccessKeyId : /TZfHsSFsdfsL3ghfE9hKyRYLW2ufSbcnYWf1m4RBVrw=
SecretAccessKey : rSQ2z2Yn/OgSHhL3R7j6IWuiErtMl1CBMJQWtWpE5rXuU=
```

```
-----------------------------------------------------------------
NORMAL END.

command exit code:0
COMMAND SUCCEEDED.
```

5. Specify the displayed AccessKeyId and SecretAccessKey as the portal products.

   Write down the values of the authentication access key (AccessKeyId) and authentication secret key (SecretAccessKey) and specify them to the portal products.

   To use WebAPI of ServiceGovernor WebAPI Base Option, it is necessary to include the assigned access key in the Http request header required to use WebAPI.

6. When the portal products use WebAPI, create the Http request header as follows.

   Use the following Http request header for authentication.

HTTP header	Description
Date	Specifies in the WebAPI request date (RFC1123 format).
Authorization	Specifies the created access key and signature described later. Specify "SharedKeyLite" as the authentication method.

   Use the following algorithm to create the Authorization header.

   - Read the access key generated with the WebApiTool.bat command on the manager.

```
AccessKeyId : /TZfHsSFsdfsL3ghfE9hKyRYLW2ufSbcnYWf1m4RBVrw=
SecretAccessKey : rSQ2z2Yn/OgSHhL3R7j6IWuiErtMl1CBMJQWtWpE5rXuU=
```

   - Determine the request date.

```
Date = "Wed, 19 Dec 2012 08:01:10 GMT"
```

   - Acquire the WebAPI path with the query character string ("?" or after) excluded.

```
CanonicalizedResource = "/umf/categories"
```

   Caution

   If you need URLencode, generate the target character string using the WebAPI path that results after encoding.

   - Concatenate the request date and path by using a line feed character (CRLF) and create the character strings to be authenticated.

```
CRLF = "¥x0D¥x0A"
StringToSign = Date + CRLF + CanonicalizedResource
```

   - Create the HMAC (SHA256) from the character strings to be authenticated and SecretAccessKey and encode it in Base64.

```
Signature = Base64(HmacSHA256(SecretAccessKey, StringToSign))
#=> "dSvqioC9hIUjnnDk7dhHcQ6oRCxJNlhc0Wdev393ZYc="
```

   - Create the HTTP request header.

     Example of Http request header:

```
Date: Wed, 19 Dec 2012 08:01:10 GMT
Authorization: SharedKeyLite /TZfHsSFsdfsL3ghfE9hKyRYLW2ufSbcnYWf1
m4RBVrw=:dSvqioC9hIUjnnDk7dhHcQ6oRCxJNlhc0Wdev393ZYc=
```

Caution

This procedure is required to perform setup on the portal product that uses WebAPI of ServiceGovernor WebAPI Base Option. If no signature is specified or the specified signature has a wrong value, WebAPI will fail to be executed.

7. To operate ServiceGovernor WebAPI Base Option in a cluster configuration, copy the following files from the active server to the standby server.

```
<Installation directory>\Tomcat\vDCApiKey.jks
```

3.5 Response format

3.5.1 Common HTTP status code

Success or failure in API is reported by the HTTP status code.
HTTP status codes common to all APIs are shown below.

Code	Meaning	Description
4xx system	Client Error	There was an error in the request from the client. There was no problem on the server side, the client correctly modified the request, and the request was issued again.
400	Bad Request	The syntax was not correct or the parameter exceeded the allowable range.
404	Not Found	This is returned if the specified resource is not found.
405	Method Not Allowed	This is returned if the requested resource uses the HTTP method that is not supported.
5xx system	Server Error	This is returned if an error occurs inside the server. Whether the request is issued again depends on the HTTP status code.
500	Internal Server Error	This is returned if an unexpected error occurs when executing API. The request cannot be issued again until the problem is resolved.
503	Service Unavailable	The service is temporarily overloaded and unavailable. If the load becomes smaller as time advances, reissue of the request is allowed.

Caution

Additionally, each API defines the HTTP status code. For errors unique to API, refer to the specifications of each API.

3.5.2 Error format

Information on the error is returned with JSON format.

```
HTTP/1.1 500 Internal Server Error
Content-Type: application/json; charset=utf-8
{
    "Error": "<Error messages> ",
    "Exception": "<Exception class name> ",
}
```

Exception class name	Description
ConnectException	Internal communication error
JsonParseException	Json encode/decode error
NotFoundException	Error occurring if the specified resource is not found
TimedOutException	Internal communication error (timeout)
UnsupportedRequestException	Error occurring if an HTTP method or URI that is not supported is requested
UnsupportedAPIVersionException	Error occurring if an API version that is not supported is specified
DuplicateException	Error occurring if more than one specified resource exists and it cannot be identified uniquely
MissingParameterException	Error occurring if the required parameter is insufficient
MissingManagerException	Error occurring if the specified manager is not found
OverloadException	Temporary communication error due to overloading
PluginException	Error in reading the internal plug-in file
InternalException	Fatal error other than errors described above

3.6 End point

The following URL is used as the end point of API.

```
https://<Host name>:<Port number>/umf/
```

3.7 Parameter description

3.7.1 How to View Parameters using methods other than API

Parameter	Reference method
Category ID and category group ID	Select the relevant category or category group from the business view of MasterScope Integrated Console, and display the category ID or group ID from the property view.
Category name and category group name	Display the category name and category group name of the relevant category from the business view of MasterScope Integrated Console.
Filter ID	Appears only in the API execution result.

Parameter	Reference method
Filter name	Right-click the relevant category in the business view of MasterScopeIntegrated Console, and select [Filter Setting]. Display the filter name on the "Filter Setting" screen.
Agent name	Display the corresponding agent name in the topology view of MasterScope Integrated Console.
Mail policy ID	Appears only in the API execution result.
Mail policy name	Right-click the relevant category in the business view of MasterScope Integrated Console, and select [Filter Setting]. Select the filter name on the "Filter Setting" screen, and press the [Update] button. Select the [Recovery Setting] tab on the "Filter Detail Setting" screen, and press the [Configuration] button in [Report]. Select the [E-Mail Setting] tab on the "Report Setting" screen, and press the [Update] button. Display the mail policy name, receiver address, subject, and mail server name on the [E-Mail Policy Setting] screen. Press the [Edit] button to view the mail text. The mail server ID appears only in the API execution result.
To: Mail receiver address	
Cc: Mail receiver address	
Bcc: Mail receiver address	
Subject	
Mail text	
Mail server ID	
Mail server name	

Chapter 4. External interface (common)

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4.1 Business

4.1.1 Obtaining the business tree structure

1. Process overview

   `Obtain the tree information on the category group and category.`

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/business/category/NodeID?ManagerName=ManagerName
   ```

   Specify the management ID of the category group to be obtained as ***NodeID***.

   If ***NodeID*** is omitted, the categories under the root node are output.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The business tree structure has been obtained successfully.
206	Partial Content	Obtaining the business tree structure has partially failed.
404	Not Found	The specified category group does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameter	Data type	Description	Valid value
(Root)	object	Root object	-
Business	object[]	Array of the business tree information	-
Business[n].TreeNode	object	Business tree information	-
Business[n].TreeNode.NodeID	string	* Node ID	-
Business[n].TreeNode.NodeType	string	Node type	Setting value: root — Description: Root Setting value: group — Description: Group

Parameter	Data type	Description	Valid value
			Setting value: category Description: Physical category
Business[n].TreeNode.DisplayName	string	Display name	Up to 64 characters
Business[n].TreeNode.IconName	string	Icon name	Up to 256 characters
Business[n].TreeNode.Schedule	number	Schedule definition status	`0: Invalid` `1: Valid`
Business[n].TreeNode.ScheduleID	string	Schedule ID	

Business[n].TreeNode.ScheduleStatus	number	Schedule status	`0: Stopping`
			`1: In operation`
			`* To be output only if the schedule definition status is "Valid".`

Business[n].TreeNode.ActiveStatus	number	Status	`0: Stopping`
			`1: Monitoring`
			`* To be output only if the node type is "category".`

Business[n].TreeNode.FilterID	object[]	Array of the filter information	* To be output only if the node type is "category".
Business[n].TreeNode.FilterID[m].ID	string	Filter ID	
Business[n].TreeNode.FilterID[m].FilterName	string	Filter name	Up to 256 characters

Business[n].TreeNode.ChildNode	object[]	Array of the child nodes	`* To be output only if the node type is "root" or "group".`
			
			`This has the same structure as the TreeNode object described above (recurrence structure).`

Business[n].Manager	object	Manager object	-
Business[n].Manager.Name	string	Name of the manager for which the category is managed	Name of the manager in which the category exists MoM name or RM name
Business[n].Manager.ErrorMessage	string	Error message	-
Business[n].Manager.Status	number	Communication error code	-
Business[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

[Request]

```
GET /umf/fw/business/category HTTP/1.1
x-fw-api-version: 1.0
if-modified-since: Thu, 01 Jun 1970 00:00:00 GMT
Date: Wed, 16 Mar 2016 02:44:15 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:418siIBm/GwGTfKfOeCkFqEOBHRoZpn25WYJkGwLvxY=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Transfer-Encoding: chunked
Date: Wed, 16 Mar 2016 02:40:20 GMT

{
  "Business": [
      {
        "Manager": {
          "ErrorMessage": "",
          "Name": "localhost",
          "Status": 200,
          "StatusCode": 200
        },
        "TreeNode": {
          "ChildNode": [
              {
                "ChildNode": [
                  {
                      "ActiveStatus": 1,
                      "DisplayName": "Application View",
                      "FilterID": [
                        {
                          "FilterName": "Message is not from Unified M
anagement Framework",
                          "ID": "4fdd5848"
                        },
                        {
                          "FilterName": "Message is not from Applicati
on View",
                          "ID": "4fdd5847"
                        },
                        {
                          "FilterName": "Message from Application View
",
                          "ID": "4fdd5844"
                        }
                      ],
                      "IconName": "%SYSTEM_FW_ROOT%¥¥Svc¥¥image¥¥Produ
ct¥¥applicationlogmonitor.ico",
```

```
                        "NodeID": "45ed34d4",
                        "NodeType": "category",
                        "Schedule": 0,
                        "ScheduleID": ""
                    },
                    {
                        "ActiveStatus": 1,
                        "DisplayName": "Application log",
                        "FilterID": [
                          {
                            "FilterName": "Message is not from Unified M
anagement Framework",
                            "ID": "460a4bdb"
                          },
                          {
                            "FilterName": "Message is not from monitorin
g of Application log",
                            "ID": "460a4bda"
                          },
                          {
                            "FilterName": "Message from monitoring of Ap
plication log",
                            "ID": "460a4bd8"
                          }
                        ],
                        "IconName": "%SYSTEM_FW_ROOT%¥¥Svc¥¥image¥¥Produ
ct¥¥applicationview.ico",
                        "NodeID": "45ed34df",
                        "NodeType": "category",
                        "Schedule": 0,
                        "ScheduleID": ""
                    },
                    {
                        "ActiveStatus": 1,
                        "DisplayName": "Business View",
                        "FilterID": [
                          {
                            "FilterName": "Message is not from Unified M
anagement Framework",
                            "ID": "460a4c12"
                          },
                          {
                            "FilterName": "Message is not from Business
View",
                            "ID": "460a4c11"
                          },
                          {
                            "FilterName": "Message from Business View",
                            "ID": "54e29bff"
                          }
                        ],
                        "IconName": "%SYSTEM_FW_ROOT%¥¥Svc¥¥image¥¥Produ
ct¥¥businessview.ico",
                        "NodeID": "45ed34ed",
                        "NodeType": "category",
                        "Schedule": 0,
                        "ScheduleID": ""
                    },
```

```
                    {
                        "ActiveStatus": 1,
                        "DisplayName": "Service Port Monitor",
                        "FilterID": [
                          {
                            "FilterName": "Message is not from Unified M
anagement Framework",
                            "ID": "53843fbb"
                          },
                          {
                            "FilterName": "Message is not from Service P
ort Monitor",
                            "ID": "53843fba"
                          },
                          {
                            "FilterName": "Message from Service Port Mon
itor",
                            "ID": "53843fb6"
                          }
                        ],
                        "IconName": "%SYSTEM_FW_ROOT%¥¥Svc¥¥image¥¥Produ
ct¥¥portmonitor.ico",
                        "NodeID": "538440ad",
                        "NodeType": "category",
                        "Schedule": 0,
                        "ScheduleID": ""
                    }
                  ],
                  "DisplayName": "Unified Management Framework",
                  "IconName": "%SYSTEM_FW_ROOT%¥¥Svc¥¥bin¥¥SysMonSvc.exe
",
                  "NodeID": "45ed349e",
                  "NodeType": "group",
                  "Schedule": 0,
                  "ScheduleID": ""
                }
            ],
            "DisplayName": "Business View",
            "IconName": "",
            "NodeID": "00000000",
            "NodeType": "root",
            "Schedule": 0,
            "ScheduleID": ""
          }
        }
    ]
}
```


4.1.2 Obtaining the business node information

1. Process overview

   Obtain the node information on the specified category group or category.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/business/category/node/NodeID?ManagerName=ManagerName
```

Specify the management ID of the category group or category to be obtained as ***NodeID***.

If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The business node information has been obtained successfully.
404	Not Found	The specified category group or category does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Data type	Description	Valid value
(Root)	object	Root object	-
TreeNode	object	Business tree information	-
TreeNode.NodeID	string	* Node ID	-
TreeNode.NodeType	string	Node type	Setting value / Description root / Root group / Group category / Physical category
TreeNode.DisplayName	string	Display name	Up to 64 characters
TreeNode.IconName	string	Icon name	Up to 256 characters
TreeNode.Schedule	number	Schedule definition status	0: Invalid 1: Valid
TreeNode.ScheduleID	string	Schedule ID	
TreeNode.ScheduleStatus	number	Schedule status	0: Stopping 1: In Operation * To be output only if the schedule definition status is "Valid".
TreeNode.ActiveStatus	number	Status	0: Stopping 1: Monitoring * To be output only if the node type is "category".
TreeNode.FilterID	object[]	Array of the filter information	* To be output only if the node type is "category".

Parameters	Data type	Description	Valid value
TreeNode.FilterID[n].ID	string	Filter ID	
TreeNode.FilterID[n].FilterName	string	Filter name	Up to 256 characters
TreeNode.ChildGroup	object[]	Array of the child group information	* To be output only if the node type is "root" or "group".
TreeNode.ChildGroup[n].ID	string	Node ID of the child group	
TreeNode.ChildGroup[n].DisplayName	string	Display name of the child group	Up to 64 characters
TreeNode.ChildCategory	object[]	Array of the child category information	* To be output only if the node type is "root" or "group".
TreeNode.ChildCategory[n].ID	string	Node ID of the child category	
TreeNode.ChildCategory[n].DisplayName	string	Display name of the child category	Up to 64 characters
Manager	object	Manager object	-
Manager.Name	string	Name of the manager for which the category is managed	Name of the manager in which the category exists MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/business/category/node/45ed349e HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 03:08:04 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:kT9tmr+N3UiOCOdqTD+vazHxzMt+2CfcLJZevbNMPKI=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 1663
Date: Wed, 16 Mar 2016 03:04:09 GMT
```

```
{
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    },
    "TreeNode": {
        "ChildCategory": [
            {
                "DisplayName": "Application log",
                "ID": "45ed34d4"
            },
            {
                "DisplayName": "Application View",
                "ID": "45ed34df"
            },
            {
                "DisplayName": "Business View",
                "ID": "45ed34ed"
            },
            {
                "DisplayName": "Express Cluster",
                "ID": "45ed34fd"
            },
            {
                "DisplayName": "Windows Service",
                "ID": "45ed3512"
            },
            {
                "DisplayName": "Performance",
                "ID": "45ed351c"
            },
            {
                "DisplayName": "Process",
                "ID": "45ed3525"
            },
            {
                "DisplayName": "Topology View",
                "ID": "45ed3539"
            },
            {
                "DisplayName": "Event Correlation",
                "ID": "4647b9e1"
            },
            {
                "DisplayName": "Scenario View",
                "ID": "4647ba4f"
            },
            {
                "DisplayName": "File Monitor",
                "ID": "47623d95"
            },
            {
                "DisplayName": "Manager Linker",
                "ID": "47623da0"
            },
```

```
            {
                "DisplayName": "Operation View",
                "ID": "47ff15e3"
            },
            {
                "DisplayName": "Application Linker",
                "ID": "483101de"
            },
            {
                "DisplayName": "ServiceManager Linker",
                "ID": "49250745"
            },
            {
                "DisplayName": "Message Manager",
                "ID": "49409557"
            },
            {
                "DisplayName": "Invariant Analysis",
                "ID": "4b44228f"
            },
            {
                "DisplayName": "MultiGraph View",
                "ID": "4dd4fb60"
            },
            {
                "DisplayName": "Event Log",
                "ID": "4fd0b551"
            },
            {
                "DisplayName": "RemoteConnectCtl(API/WMI)",
                "ID": "4fd0b584"
            },
            {
                "DisplayName": "RemoteConnectCtl(SSH)",
                "ID": "50a49792"
            },
            {
                "DisplayName": "Syslog",
                "ID": "50a497d9"
            },
            {
                "DisplayName": "Service Port Monitor",
                "ID": "538440ad"
            }
        ],
        "ChildGroup": [],
        "DisplayName": "Unified Management Framework",
        "IconName": "%SYSTEM_FW_ROOT%¥¥Svc¥¥bin¥¥SysMonSvc.exe",
        "NodeID": "45ed349e",
        "NodeType": "group",
        "Schedule": 0,
        "ScheduleID": ""
    }
}
```


4.1.3 Obtaining the filter list

1. Process overview

```
Obtain the filter setting list set in the category of the specified
category ID.
```

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/business/category/filter/CategoryID?ManagerName=ManagerName
```

Specify the category ID obtained from the business tree structure and business node information in ***CategoryID***.

If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The filter list has been obtained successfully.
400	Bad Request	A resource ID other than the category ID is specified.
404	Not Found	The specified category ID does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Filter	object[]	Array of the filter information	-
Filter[n].FilterID	string	Filter ID	
Filter[n].CategoryID	string	Category ID	
Filter[n].FilterName	string	Filter name	Up to 256 characters
Filter[n].FilterType	number	Filter type	0: Storage filter 1: Deletion filter
Filter[n].NodeNot	number	Negative specification of the node name condition	0: Positive 1: Negative
Filter[n].Node	string	Node name condition	Up to 256 characters
Filter[n].CategoryNot	number	Negative specification of the category name condition	0: Positive 1: Negative
Filter[n].Category	string	Category name condition	Up to 32 characters

Parameters	Data type	Description	Valid value
Filter[n].ApplicationNot	number	Negative specification of the application name condition	0: Positive 1: Negative
Filter[n].Application	string	Application name condition	Up to 128 characters
Filter[n].ObjectNot	number	Negative specification of the object name condition	0: Positive 1: Negative
Filter[n].Object	string	Object name condition	Up to 128 characters
Filter[n].MessageIDNot	number	Negative specification of the message ID condition	0: Positive 1: Negative
Filter[n].MessageID	string	Message ID condition	Up to 128 characters
Filter[n].MessageTextNot	number	Negative specification of the message text condition	0: Positive 1: Negative
Filter[n].MessageText	string	Message text condition	Up to 1024 characters
Filter[n].SeverityNot	number	Negative specification of severity	0: Positive 1: Negative
Filter[n].Severity	number	Severity condition	Set to 0 if nothing is specified.
Filter[n].SelPos	object[]	Array of the SelPos conditions	
Filter[n].SelPos[m].Type	number	Negative specification	0: Positive 1: Negative
Filter[n].SelPos[m].Position	number	Comparison position	1 origin
Filter[n].SelPos[m].CompareType	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter[n].SelPos[m].Value	string	Comparison character string	Up to 64 characters
Filter[n].SelKey	object[]	Array of the SelKey conditions	
Filter[n].SelKey[m].Type	number	Negative specification	0: Positive 1: Negative
Filter[n].SelKey[m].Key	string	Key character string	Up to 64 characters
Filter[n].SelKey[m].CompareType	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter[n].SelKey[m].Value	string	Comparison character string	
Filter[n].OverWriteSeverity	number	Specifying the severity change	Set to 0 if nothing is specified.

Parameters	Data type	Description	Valid value
			* To be output only if the filter type is set to the storage filters.
Filter[n].DisplayPosition	number	Display position	1 origin * To be output only if the filter type is set to the storage filters.
Filter[n].AutoConfirm	number	Specifying auto confirmation on reception	0: Auto confirmation disabled 1: Auto confirmation enabled * To be output only if the filter type is set to the storage filters.
Filter[n].HelpApplication	string	Help application	Up to 256 characters * To be output only if the filter type is set to the storage filters.
Filter[n].HelpDirectory	string	Work directory at startup of the help application	Up to 256 characters * To be output only if the filter type is set to the storage filters.
Filter[n].HelpOption	string	Startup option of the help application	Up to 128 characters * To be output only if the filter type is set to the storage filters.
Filter[n].Relation1	number	Related information 1	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter[n].Relation1Def	object	Definition of Related information 1	* To be output only if the filter type is set to the storage filters.
Filter[n].Relation1Def.DisplayText	string	Display name	Up to 16 characters
Filter[n].Relation1Def.Application	string	Application	Up to 256 characters
Filter[n].Relation1Def.Directory	string	Work directory	Up to 256 characters
Filter[n].Relation1Def.Option	string	Option	Up to 128 characters
Filter[n].Relation2	number	Related information 2	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter[n].Relation2Def	object	Definition of Related information 2	* To be output only if the filter type is set to the storage filters.

Parameters	Data type	Description	Valid value
Filter[n].Relation2Def.DisplayText	string	Display name	Up to 16 characters
Filter[n].Relation2Def.Application	string	Application	Up to 256 characters
Filter[n].Relation2Def.Directory	string	Work directory	Up to 256 characters
Filter[n].Relation2Def.Option	string	Option	Up to 128 characters
Filter[n].Recovery	number	Recovery status	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter[n].RecoveryID	string	Recovery ID	* To be output only if the filter type is set to the storage filters.
Filter[n].RecoveryAutoConfirm	number	Specifying auto deletion when recovery is completed successfully	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter[n].Report	number	Report status	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter[n].ReportID	string	Report ID	* To be output only if the filter type is set to the storage filters.
Filter[n].ReportAutoConfirm	number	Specifying auto deletion when the report is completed successfully	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter[n].HelpDesk	number	Help desk status	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter[n].HelpDeskID	string	Help desk ID	* To be output only if the filter type is set to the storage filters.
Filter[n].HelpDeskAutoConfirm	number	Specifying auto deletion when the help desk is completed successfully	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter[n].HelpDeskManual	number	Specifying manual execution of the help desk	0: Invalid 1: Valid

Parameters	Data type	Description	Valid value
			* To be output only if the filter type is set to the storage filters.
Filter[n].Option1Def	object	Option definition 1	* To be output only if the filter type is set to the storage filters.
Filter[n].Option1Def.Title	string	Display title	Up to 32 characters
Filter[n].Option1Def.View Type	number	Display type	0: HTML view 1: Text
Filter[n].Option1Def.Text	string	Display character string	Up to 1024 characters
Filter[n].Option2Def	object	Option definition 2	* To be output only if the filter type is set to the storage filters.
Filter[n].Option2Def.Title	string	Display title	Up to 32 characters
Filter[n].Option2Def.View Type	number	Display type	0: HTML view 1: Text
Filter[n].Option2Def.Text	string	Display character string	Up to 1024 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Manager name, MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/business/category/filter/45ed3512 HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 06:56:02 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:ZuyR35Q5I2l1Vm6az7yDBhaDwz0XXI6Oe0ral/D+N2c=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 7750
Date: Wed, 16 Mar 2016 06:52:07 GMT
```

```
{
    "Filter": [
        {
            "Application": "",
            "ApplicationNot": 0,
            "Category": "Unified Management Framework",
            "CategoryID": "45ed3512",
            "CategoryNot": 1,
            "FilterID": "4fd0b364",
            "FilterName": "Unified Management Framework ",
            "FilterType": 1,
            "MessageID": "",
            "MessageIDNot": 0,
            "MessageText": "",
            "MessageTextNot": 0,
            "Node": "",
            "NodeNot": 0,
            "Object": "",
            "ObjectNot": 0,
            "SelKey": [],
            "SelPos": [],
            "Severity": 0,
            "SeverityNot": 0
        },
        {
            "Application": "",
            "ApplicationNot": 0,
            "Category": "",
            "CategoryID": "45ed3512",
            "CategoryNot": 0,
            "FilterID": "4fd0b363",
            "FilterName": "Windows",
            "FilterType": 1,
            "MessageID": "",
            "MessageIDNot": 0,
            "MessageText": "",
            "MessageTextNot": 0,
            "Node": "",
            "NodeNot": 0,
            "Object": "^NTServiceMonitor$",
            "ObjectNot": 1,
            "SelKey": [],
            "SelPos": [],
            "Severity": 0,
            "SeverityNot": 0
        },
        {
            "Application": "",
            "ApplicationNot": 0,
            "AutoConfirm": 0,
            "Category": "",
            "CategoryID": "45ed3512",
            "CategoryNot": 0,
            "DisplayPosition": 1,
            "FilterID": "4fd0b362",
            "FilterName": "Windows",
            "FilterType": 0,
```

```
            "HelpApplication": "",
            "HelpDesk": 0,
            "HelpDeskAutoConfirm": 0,
            "HelpDeskID": "",
            "HelpDeskManual": 0,
            "HelpDirectory": "",
            "HelpOption": "",
            "MessageID": "^0009000[1-3]$",
            "MessageIDNot": 0,
            "MessageText": "",
            "MessageTextNot": 0,
            "Node": "",
            "NodeNot": 0,
            "Object": "",
            "ObjectNot": 0,
            "Option1Def": {
                "Text": " $REPKEY(\"(NODE\")  $REPKEY(\"(SNAME\") $REP
KEY(\"(OLD\")$REPKEY(\"(NEW\")",
                "Title": "",
                "ViewType": 0
            },
            "Option2Def": {
                "Text": "",
                "Title": "",
                "ViewType": 0
            },
            "OverWriteSeverity": 0,
            "Recovery": 0,
            "RecoveryAutoConfirm": 0,
            "RecoveryID": "",
            "Relation1": 0,
            "Relation1Def": {
                "Application": "",
                "Directory": "",
                "DisplayText": "",
                "Option": ""
            },
            "Relation2": 0,
            "Relation2Def": {
                "Application": "",
                "Directory": "",
                "DisplayText": "",
                "Option": ""
            },
            "Report": 0,
            "ReportAutoConfirm": 0,
            "ReportID": "",
            "SelKey": [],
            "SelPos": [],
            "Severity": 0,
            "SeverityNot": 0
        },
        {
            "Application": "",
            "ApplicationNot": 0,
            "AutoConfirm": 0,
            "Category": "",
            "CategoryID": "45ed3512",
```

```
            "CategoryNot": 0,
            "DisplayPosition": 1,
            "FilterID": "4fd0b35d",
            "FilterName": "Windows",
            "FilterType": 0,
            "HelpApplication": "",
            "HelpDesk": 0,
            "HelpDeskAutoConfirm": 0,
            "HelpDeskID": "",
            "HelpDeskManual": 0,
            "HelpDirectory": "",
            "HelpOption": "",
            "MessageID": "^0019[0-9]{4}$",
            "MessageIDNot": 0,
            "MessageText": "",
            "MessageTextNot": 0,
            "Node": "",
            "NodeNot": 0,
            "Object": "",
            "ObjectNot": 0,
            "Option1Def": {
                "Text": "",
                "Title": "",
                "ViewType": 0
            },
            "Option2Def": {
                "Text": "",
                "Title": "",
                "ViewType": 0
            },
            "OverWriteSeverity": 0,
            "Recovery": 0,
            "RecoveryAutoConfirm": 0,
            "RecoveryID": "",
            "Relation1": 0,
            "Relation1Def": {
                "Application": "",
                "Directory": "",
                "DisplayText": "",
                "Option": ""
            },
            "Relation2": 0,
            "Relation2Def": {
                "Application": "",
                "Directory": "",
                "DisplayText": "",
                "Option": ""
            },
            "Report": 1,
            "ReportAutoConfirm": 0,
            "ReportID": "56de9150",
            "SelKey": [],
            "SelPos": [],
            "Severity": 0,
            "SeverityNot": 0
        },
        {
            "Application": "",
```

```
            "ApplicationNot": 0,
            "AutoConfirm": 0,
            "Category": "Application",
            "CategoryID": "45ed3512",
            "CategoryNot": 0,
            "DisplayPosition": 1,
            "FilterID": "56de7877",
            "FilterName": "testFilter",
            "FilterType": 0,
            "HelpApplication": "",
            "HelpDesk": 0,
            "HelpDeskAutoConfirm": 0,
            "HelpDeskID": "",
            "HelpDeskManual": 0,
            "HelpDirectory": "",
            "HelpOption": "",
            "MessageID": "",
            "MessageIDNot": 0,
            "MessageText": "",
            "MessageTextNot": 0,
            "Node": "",
            "NodeNot": 0,
            "Object": "",
            "ObjectNot": 0,
            "Option1Def": {
                "Text": "",
                "Title": "",
                "ViewType": 0
            },
            "Option2Def": {
                "Text": "",
                "Title": "",
                "ViewType": 0
            },
            "OverWriteSeverity": 0,
            "Recovery": 0,
            "RecoveryAutoConfirm": 0,
            "RecoveryID": "",
            "Relation1": 0,
            "Relation1Def": {
                "Application": "",
                "Directory": "",
                "DisplayText": "",
                "Option": ""
            },
            "Relation2": 0,
            "Relation2Def": {
                "Application": "",
                "Directory": "",
                "DisplayText": "",
                "Option": ""
            },
            "Report": 1,
            "ReportAutoConfirm": 1,
            "ReportID": "56de78ea",
            "SelKey": [],
            "SelPos": [],
            "Severity": 0,
```

```
            "SeverityNot": 0
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.1.4 Obtaining the filter details

1. Process overview

   Obtain the filter setting information of the specified filter ID.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/business/filter/FilterID?ManagerName=ManagerName
```

   Specify the filter ID obtained from the business tree structure, business node information, and filter list in ***FilterID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The filter details have been obtained successfully.
400	Bad Request	A resource ID other than the filter ID is specified.
404	Not Found	The specified filter ID does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object shape	-
Filter	object	Filter information	-
Filter.FilterID	string	Filter ID	

Parameter	Data type	Description	Valid value
Filter.CategoryID	string	Category ID	
Filter.FilterName	string	Filter name	Up to 256 characters
Filter.FilterType	number	Filter type	0: Storage filter 1: Deletion filter
Filter.NodeNot	number	Negative specification of the node name condition	0: Positive 1: Negative
Filter.Node	string	Node name condition	Up to 256 characters
Filter.CategoryNot	number	Negative specification of the category name condition	0: Positive 1: Negative
Filter.Category	string	Category name condition	Up to 32 characters
Filter.ApplicationNot	number	Negative specification of the application name condition	0: Positive 1: Negative
Filter.Application	string	Application name condition	Up to 128 characters
Filter.ObjectNot	number	Negative specification of the object name condition	0: Positive 1: Negative
Filter.Object	string	Object name condition	Up to 128 characters
Filter.MessageIDNot	number	Negative specification of the message ID condition	0: Positive 1: Negative
Filter.MessageID	string	Message ID condition	Up to 128 characters
Filter.MessageTextNot	number	Negative specification of the message text condition	0: Positive 1: Negative
Filter.MessageText	string	Message text condition	Up to 1024 characters
Filter.SeverityNot	number	Negative specification of severity	0: Positive 1: Negative
Filter.Severity	number	Severity condition	Set to 0 if nothing is specified.
Filter.SelPos	object[]	Array of the SelPos conditions	
Filter.SelPos[m].Type	number	Negative specification	0: Positive 1: Negative
Filter.SelPos[m].Position	number	Comparison position	1 origin
Filter.SelPos[m].Compare Type	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter.SelPos[m].Value	string	Comparison character string	Up to 64 characters
Filter.SelKey	object[]	Array of the SelKey conditions	
Filter.SelKey[m].Type	number	Negative specification	0: Positive 1: Negative
Filter.SelKey[m].Key	string	Key character string	Up to 64 characters

Parameter	Data type	Description	Valid value
Filter.SelKey[m].CompareType	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter.SelKey[m].Value	string	Comparison character string	Up to 64 characters
Filter.OverWriteSeverity	number	Specifying the severity change	Set to 0 if nothing is specified. * To be output only if the filter type is set to the storage filters.
Filter.DisplayPosition	number	Display position	1 origin * To be output only if the filter type is set to the storage filters.
Filter.AutoConfirm	number	Specifying auto confirmation on reception	0: Auto confirmation disabled. 1: Auto confirmation enabled. * To be output only if the filter type is set to the storage filters.
Filter.HelpApplication	string	Help application	Up to 256 characters * To be output only if the filter type is set to the storage filters.
Filter.HelpDirectory	string	Work directory at startup of the help application	Up to 256 characters * To be output only if the filter type is set to the storage filters.
Filter.HelpOption	string	Startup option of the help application	Up to 128 characters * To be output only if the filter type is set to the storage filters.
Filter.Relation1	number	Related information 1	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter.Relation1Def	object	Definition of Related information 1	* To be output only if the filter type is set to the storage filters.
Filter.Relation1Def.DisplayText	string	Display name	Up to 16 characters
Filter.Relation1Def.Application	string	Application	Up to 256 characters

Parameter	Data type	Description	Valid value
Filter.Relation1Def.Directory	string	Work directory	Up to 256 characters
Filter.Relation1Def.Option	string	Option	Up to 128 characters
Filter.Relation2	number	Related information 2	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter.Relation2Def	object	Definition of Related information 2	* To be output only if the filter type is set to the storage filters.
Filter.Relation2Def.DisplayText	string	Display name	Up to 16 characters
Filter.Relation2Def.Application	string	Application	Up to 256 characters
Filter.Relation2Def.Directory	string	Work directory	Up to 256 characters
Filter.Relation2Def.Option	string	Option	Up to 128 characters
Filter.Recovery	number	Recovery status	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter.RecoveryID	string	Recovery ID	* To be output only if the filter type is set to the storage filters.
Filter.RecoveryAutoConfirm	number	Specifying auto deletion when the recovery is completed successfully	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter.Report	number	Report status	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter.ReportID	string	Report ID	* To be output only if the filter type is set to the storage filters.
Filter.ReportAutoConfirm	number	Specifying auto deletion when the report is completed successfully	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter.HelpDesk	number	Help desk status	0: Invalid 1: Valid

Parameter	Data type	Description	Valid value
			* To be output only if the filter type is set to the storage filters.
Filter.HelpDeskID	string	Help desk ID	* To be output only if the filter type is set to the storage filters.
Filter.HelpDeskAutoConfirm	number	Specifying auto deletion when the help desk is completed successfully	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter.HelpDeskManual	number	Specifying manual execution of the help desk	0: Invalid 1: Valid * To be output only if the filter type is set to the storage filters.
Filter.Option1Def	object	Option definition 1	* To be output only if the filter type is set to the storage filters.
Filter.Option1Def.Title	string	Display title	Up to 32 characters
Filter.Option1Def.ViewType	number	Display type	0: HTML view 1: Text
Filter.Option1Def.Text	string	Display character string	Up to 1024 characters
Filter.Option2Def	object	Option definition 2	* To be output only if the filter type is set to the storage filters.
Filter.Option2Def.Title	string	Display title	Up to 32 characters
Filter.Option2Def.ViewType	number	Display type	0: HTML view 1: Text
Filter.Option2Def.Text	string	Display character string	Up to 1024 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Manager name, MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/business/filter/56de7877 HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 06:19:33 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:4rSevr5TD2O9u5KdaemyEXefIJZQvz0gsGDqyMUpEqU=
```

```
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 1000
Date: Wed, 16 Mar 2016 06:15:38 GMT

{
    "Filter": {
        "Application": "",
        "ApplicationNot": 0,
        "AutoConfirm": 0,
        "Category": "Application",
        "CategoryID": "45ed3512",
        "CategoryNot": 0,
        "DisplayPosition": 1,
        "FilterID": "56de7877",
        "FilterName": "testFilter",
        "FilterType": 0,
        "HelpApplication": "",
        "HelpDesk": 0,
        "HelpDeskAutoConfirm": 0,
        "HelpDeskID": "",
        "HelpDeskManual": 0,
        "HelpDirectory": "",
        "HelpOption": "",
        "MessageID": "",
        "MessageIDNot": 0,
        "MessageText": "",
        "MessageTextNot": 0,
        "Node": "",
        "NodeNot": 0,
        "Object": "",
        "ObjectNot": 0,
        "Option1Def": {
            "Text": "",
            "Title": "",
            "ViewType": 0
        },
        "Option2Def": {
            "Text": "",
            "Title": "",
            "ViewType": 0
        },
        "OverWriteSeverity": 0,
        "Recovery": 0,
        "RecoveryAutoConfirm": 0,
        "RecoveryID": "",
        "Relation1": 0,
        "Relation1Def": {
```

```
            "Application": "",
            "Directory": "",
            "DisplayText": "",
            "Option": ""
        },
        "Relation2": 0,
        "Relation2Def": {
            "Application": "",
            "Directory": "",
            "DisplayText": "",
            "Option": ""
        },
        "Report": 1,
        "ReportAutoConfirm": 1,
        "ReportID": "56de78ea",
        "SelKey": [],
        "SelPos": [],
        "Severity": 0,
        "SeverityNot": 0
    },
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.1.5 Starting/Stopping the monitoring (by Specifying the Categories)

1. Process overview

   Start/Stop monitoring the categories under the specified business nodes.
   If the root or group is specified on requesting, all the physical categories under it are monitored, and the node ID of the category for which the monitoring process is actually started or stopped is reported.

2. HTTP method

```
PUT
```

3. URL

```
/umf/fw/business/category/(active | hold)
```

URL	Description
/umf/fw/business/category/active	Start monitoring the categories.
/umf/fw/business/category/hold	Stop monitoring the categories.

4. Parameters

Parameter	Data type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
ID	string	Node ID to be started or stopped	Not possible	Specify the node IDs of the root, group, and physical categories
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The monitoring process has been started or stopped successfully.`
404	Not Found	`The specified node ID for starting or stopping the monitoring process does not exist.` The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Data type	Description	Valid value
(Root)	object	Root object	-
ID	string[]	* Node ID	`The node IDs of the categories for which the monitoring process is actually started or stopped are enumerated.` `* The IDs of the categories for which the monitoring process had already been started or stopped are not included.`
Manager	object	Manager object	-
Manager.Name	string	Manager name	Manager name, MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history

- X-FW-API-Version: 1.0
  - Newly added

8. JSON Example

Example: Start monitoring the "Windows service monitoring" category of the manager "MoM1".

a. Obtain the business tree structure, and check the status of the "Windows service monitoring" category and management ID.

   For details, see "Obtaining the business tree structure (page 11)".

b. Start monitoring the category.
   Specify the following parameters, and execute the request.

   - Specify /umf/fw/business/category/active as the URL.
   - Specify the management ID of the "Windows service monitoring" category obtained when obtaining the business tree structure in the request JSON.

[Request]

```
PUT /umf/fw/business/category/active HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 06:10:11 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:/gz1WdhASdySpk3/OgOKczOQ+pYewgOhHLgX90O7is8=
Host: 192.168.21.4:12080
Content-Length: 52

{
    "ID": "45ed3512",
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 98
Date: Wed, 16 Mar 2016 06:06:16 GMT

{
    "ID": [
        "45ed3512"
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
```

```
    }
}
```

4.2 Topology

4.2.1 Obtaining the topology tree configuration

1. Process overview

   `Obtain the managed agent list.`

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/topology/agent/NodeID?ManagerName=ManagerName
   ```

   Specify the management ID of the group to be obtained in ***NodeID***.

   If ***NodeID*** is omitted, the categories under the root node are output.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The topology tree configuration has been obtained successfully.
206	Partial Content	Obtaining the topology tree configuration has partially failed.
400	Bad Request	The management ID of other groups is specified as the management ID of the target group.
404	Not Found	The management ID of the specified group does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Topology	object[]	Array of topology tree information	-
Topology[n].TreeNode	object	Topology tree information	-
Topology[n].TreeNode.NodeID	string	* Node ID	-

Parameters	Type	Description	Valid value
Topology[n].TreeNode.NodeType	string	Node type	<table><tr><th>Setting value</th><th>Description</th></tr><tr><td>root</td><td>Root</td></tr><tr><td>group</td><td>Group</td></tr><tr><td>unknownGroup</td><td>Unregistered agent group</td></tr><tr><td>agent</td><td>Agent</td></tr><tr><td>unknownAgent</td><td>Unregistered agent</td></tr></table>
Topology[n].TreeNode.DisplayName	string	Agent name	Up to 64 characters
Topology[n].TreeNode.IconName	string	Icon name	Up to 256 characters * To be output only if the node type is not "unknownGroup" or "unknownAgent".
Topology[n].TreeNode.IP Address	string	IP address	Up to 15 characters * To be output only if the node type is "agent" or "unknownAgent".
Topology[n].TreeNode.Probe	number	Identification of the probe agent	0: Normal agent 1: Probe agent * To be output only if the node type is "agent" or "unknownAgent".
Topology[n].TreeNode.RemoteAgent	number	Identification of the remote agent	0: Normal agent 1: Remote host * To be output only if the node type is "agent" or "unknownAgent".
Topology[n].TreeNode.VAppliance Agent	number	Identification of the virtual appliance agent	0: Normal agent 1: Virtual appliance agent * To be output only if the node type is "agent" or "unknownAgent".
Topology[n].TreeNode.OS Type	number	OS type	0: Other than 1 to 4, or error 1: OS with a system name including “Windows” 2: OS with a system name including “Linux” 3: OS with a system name including “HP-UX” 4: OS with a system name including “Sun-Blade” * To be output only if the node type is "agent" or "unknownAgent".

Parameters	Type	Description	Valid value
Topology[n].TreeNode.OSName	string	OS name	Up to 127 characters * To be output only if the node type is "agent" or "unknownAgent".
Topology[n].TreeNode.OSSubName	string	OS subname	Up to 127 characters * To be output only if the node type is "agent" or "unknownAgent".
Topology[n].TreeNode.OSMajorVersion	number	OS major version	* To be output only if the node type is "agent" or "unknownAgent".
Topology[n].TreeNode.OSMinorVersion	number	OS minor version	* To be output only if the node type is "agent" or "unknownAgent".
Topology[n].TreeNode.Schedule	number	Schedule definition status	0: Invalid 1: Valid * To be output only if the node type is not "unknownGroup" or "unknownAgent".
Topology[n].TreeNode.ScheduleConfigID	string	Schedule definition ID	* To be output only if the node type is not "unknownGroup" or "unknownAgent".
Topology[n].TreeNode.ScheduleStatus	number	Schedule status	0: Stop 1: In operation * To be output only if the schedule definition status is "Valid".
Topology[n].TreeNode.ActiveStatus	number	Status	0: Stop 1: Monitoring * To be output only if the node type is "agent" or "unknownAgent".
Topology[n].TreeNode.Severity	number	Severity	Severity * To be output only if the node type is "agent" or "unknownAgent".
Topology[n].TreeNode.ChildNode[m]	object[]	Array of the child nodes	* To be output only if the node type is "root", "group", or "unknownGroup". This is a recursive structure with the same structure as TreeNode object described above.
Topology[n].Manager	object	Manager object	-
Topology[n].Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name

Parameters	Type	Description	Valid value
Topology[n].Manager.ErrorMessage	string	Error message	-
Topology[n].Manager.Status	number	Communication error code	-
Topology[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/topology/agent HTTP/1.1
x-fw-api-version: 1.0
Date: Tue, 15 Mar 2016 10:20:25 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:4jCHuXWyF4muk509+s7TIMcX4RmxNdZCkoeJarUu6fo=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 1230
Date: Tue, 15 Mar 2016 10:16:29 GMT

{
    "Topology": [
        {
            "Manager": {
                "ErrorMessage": "",
                "Name": "localhost",
                "Status": 200,
                "StatusCode": 200
            },
            "TreeNode": {
                "ChildNode": [
                    {
                        "ChildNode": [
                            {
                                "ActiveStatus": 1,
                                "DisplayName": "WIN2008R2-M",
                                "IPAddress": "192.168.17.55",
                                "NodeID": "06d6df78",
                                "NodeType": "unknownAgent",
                                "OSMajorVersion": 6,
```

```
                                "OSMinorVersion": 1,
                                "OSName": "Windows Server 2008 R2 Stan
dard",
                                "OSSubName": "Service Pack 1",
                                "OSType": 1,
                                "Probe": 0,
                                "RemoteAgent": 0,
                                "VApplianceAgent": 0
                            }
                        ],
                        "DisplayName": "Unregistered Host",
                        "NodeID": "00000001",
                        "NodeType": "unknownGroup"
                    },
                    {
                        "ActiveStatus": 1,
                        "DisplayName": "MOM1",
                        "IPAddress": "192.168.21.4",
                        "IconName": "",
                        "NodeID": "06d0081b",
                        "NodeType": "agent",
                        "OSMajorVersion": 6,
                        "OSMinorVersion": 2,
                        "OSName": "Windows Server 2012 Datacenter",
                        "OSSubName": "",
                        "OSType": 1,
                        "Probe": 0,
                        "RemoteAgent": 0,
                        "Schedule": 0,
                        "ScheduleID": "",
                        "VApplianceAgent": 0
                    },
                    {
                        "ActiveStatus": 1,
                        "DisplayName": "AgentHost",
                        "IPAddress": "192.168.21.4",
                        "IconName": "",
                        "NodeID": "06e7e015",
                        "NodeType": "agent",
                        "OSMajorVersion": 6,
                        "OSMinorVersion": 2,
                        "OSName": "Windows Server 2012 Datacenter",
                        "OSSubName": "",
                        "OSType": 1,
                        "Probe": 0,
                        "RemoteAgent": 0,
                        "Schedule": 0,
                        "ScheduleID": "",
                        "VApplianceAgent": 0
                    }
                ],
                "DisplayName": "TopologyService",
                "IconName": "",
                "NodeID": "00000000",
                "NodeType": "root",
                "Schedule": 0,
                "ScheduleID": ""
            }
```

```
            }
        ]
}
```

4.2.2 Obtaining the topology node information

1. Process overview

   Obtain the node information on the specified group or agent.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/topology/agent/node/NodeID?ManagerName=ManagerName
```

   Specify the report ID to be obtained in ***NodeID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The topology node information has been obtained successfully.
404	Not Found	The specified group or agent does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
TreeNode	object	Topology tree information	-
TreeNode.NodeID	string	* Node ID	-
TreeNode.NodeType	string	Node type	Setting value / Description root / Root group / Group unknownGroup / Unregistered agent group agent / Agent unknownAgent / Unregistered agent
TreeNode.DisplayName	string	Agent name	Up to 64 characters

Parameters	Type	Description	Valid value
TreeNode.IconName	string	Icon name	Up to 256 characters * To be output only if the node type is not "unknownGroup" or "unknownAgent".
TreeNode.IPAddress	string	IP address	Up to 15 characters * To be output only if the node type is "agent" or "unknownAgent".
TreeNode.Probe	number	Identification of the probe agent	0: Normal agent 1: Probe agent * To be output only if the node type is "agent" or "unknownAgent".
TreeNode.RemoteAgent	number	Identification of the remote agent	0: Normal agent 1: Remote (AG-less) agent * To be output only if the node type is "agent" or "unknownAgent".
TreeNode.VApplianceAgent	number	Identification of the virtual appliance agent	0: Normal agent 1: Virtual appliance agent * To be output only if the node type is "agent" or "unknownAgent".
TreeNode.OSType	number	OS type	0: Other than 1 to 4, or error 1: OS with a system name that contains “Windows” 2: OS with a system name that contains “Linux” 3: OS with a system name that contains “HP-UX” 4: OS with a system name that contains “Sun-Blade” * To be output only if the node type is "agent" or "unknownAgent".
TreeNode.OSName	string	OS name	Up to 127 characters * To be output only if the node type is "agent" or "unknownAgent".
TreeNode.OSSubName	string	OS subname	Up to 127 characters * To be output only if the node type is "agent" or "unknownAgent".
TreeNode.OSMajorVersion	number	OS major version	* To be output only if the node type is "agent" or "unknownAgent".
TreeNode.OSMinorVersion	number	OS minor version	* To be output only if the node type is "agent" or "unknownAgent".

Parameters	Type	Description	Valid value
TreeNode.Schedule	number	Schedule definition status	0: Invalid 1: Valid * To be output only if the node type is not "unknownGroup" or "unknownAgent".
TreeNode.ScheduleConfigID	string	Schedule definition ID	* To be output only if the node type is not "unknownGroup" or "unknownAgent".
TreeNode.ScheduleStatus	number	Schedule status	0: Stop 1: In operation * To be output only if the schedule definition status is "Valid".
TreeNode.ActiveStatus	number	Status	0: Stop 1: Monitoring * To be output only if the node type is "agent" or "unknownAgent".
TreeNode.Severity	number	Severity	Severity * To be output only if the node type is "agent" or "unknownAgent".
TreeNode.ChildGroup	object[]	Array of child group information	* To be output only if the node type is "root" or "group".
TreeNode.ChildGroup[n].ID	string	Node ID of the child group	* To be output only if the node type is "root" or "group".
TreeNode.ChildGroup[n].DisplayName	string	Display name of the child group	Up to 64 characters * To be output only if the node type is "root" or "group".
TreeNode.ChildAgent	object[]	Array of child agent information	* To be output only if the node type is "root", "group", or "unknownGroup".
TreeNode.ChildAgent[n].ID	string	Node ID of the child agent	* To be output only if the node type is "root", "group", or "unknownGroup".
TreeNode.ChildAgent[n].DisplayName	string	Display name of the child agent	Up to 64 characters * To be output only if the node type is "root", "group", or "unknownGroup".
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/topology/agent/node/06e7e015 HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 06:32:53 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:hI5jN6l5CHxtxMPIlu7bUE/FBPS82YLmENXxYGfxm+Y=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 397
Date: Wed, 16 Mar 2016 06:28:57 GMT

{
    "TreeNode": {
        "ActiveStatus": 1,
        "DisplayName": "AgentHost",
        "IPAddress": "192.168.21.4",
        "IconName": "",
        "NodeID": "06e7e015",
        "NodeType": "agent",
        "OSMajorVersion": 6,
        "OSMinorVersion": 2,
        "OSName": "Windows Server 2012 Datacenter",
        "OSSubName": "",
        "OSType": 1,
        "Probe": 0,
        "RemoteAgent": 0,
        "Schedule": 0,
        "ScheduleID": "",
        "VApplianceAgent": 0
    },
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.2.3 Starting/Stopping monitoring (Specifying the agents)

1. Process overview

```
Start/Stop monitoring the agents under the specified topology nodes.
If the root or group is specified on requesting, all the agents under
it are monitored, and the node ID of the agent for which the
monitoring process is actually started or stopped is reported.
```

2. HTTP method

```
PUT
```

3. URL

```
/umf/fw/topology/agent/(active | hold)
```

URL	Description
/umf/fw/topology/agent/active	Start agent monitoring.
/umf/fw/topology/agent/hold	Stop agent monitoring.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
ID	string	Target node ID		Specify the node IDs of the root, group, and agents Both ID and AgentName cannot be omitted. Specify either of ID or AgentName. If both of them are specified, AgentName is selected.
AgentName	string	Agent name		Specify the agent name Both ID and AgentName cannot be omitted. Specify either of ID or AgentName. If both of them are specified, AgentName is selected.
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring process has been started or stopped successfully.
404	Not Found	The specified node does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
ID	string[]	* Node ID	The node IDs of the agents for which the monitoring process is actually started or stopped are enumerated. * The node IDs of the agents for which the monitoring process had already been started or stopped are not included.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Manager name, MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

Example: Start monitoring the "AgentHost" node of the manager "MoM1".

a. Obtain the topology tree configuration, and confirm the status of the "AgentHost" node and management ID.

   For details, see "Obtaining the topology tree configuration (page 38)".

b. Start monitoring the nodes.
   Specify the following parameters, and execute the request.
   - Specify /umf/fw/topology/agent/active as the URL.
   - Specify the management ID of the "AgentHost" node obtained when obtaining the topology tree configuration in the request JSON.

[Request]

```
PUT /umf/fw/topology/agent/active HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 06:44:16 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
```

```
5o=:cJeTiOjv75G80lHv1RxrjufXU+YvW+L7cn6Ezh/6Gkg=
Host: 192.168.21.4:12080
Content-Length: 52

{
    "ID": "06e7e015",
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 98
Date: Wed, 16 Mar 2016 06:40:20 GMT

{
    "ID": [
        "06e7e015"
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.2.4 Adding the host group

1. Process overview

   `Add the group to the node ID specified on requesting.`

2. HTTP method

   ```
   POST
   ```

3. URL

   `/umf/fw/topology/group/`***`NodeID`***

   Specify the parent node ID to be added in ***`NodeID`***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

   The name of the existing group can be registered.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
DisplayName	string	Added monitoring group name	Not possible	Up to 64 characters
Schedule	number	Setting the schedule		0: Not set 1: Set * If ScheduleConfigID that does not exist when setting the schedule is specified, an error occurs. Default value: 0: Not set
ScheduleConfigID	string	Schedule definition ID		Eight-digit hexadecimal character
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

* The name of the existing group can be registered.

Specify the schedule definition ID obtained in "Obtaining a schedule list (page 288)".

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The group has been added successfully.
404	Not Found	The specified manager does not exist. The specified agent does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
ID	string	Management ID of the added monitoring group	Eight-digit hexadecimal character
DisplayName	string	Added monitoring group name	Up to 64 characters
Schedule	number	Schedule setting	0: Not set 1: Set

Parameters	Type	Description	Valid value
ScheduleConfigID	string	Schedule definition ID	`Eight-digit hexadecimal character`
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
POST /umf/fw/topology/group/00000000 HTTP/1.1
Content-Type:  application/json; charset=utf-8
Accept: application/json, */*
Date: Fri, 13 May 2016 02:18:45 GMT
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:zrs9XSanG7XwOpBBWWSqj4pRbZubfx3406he5C3jY38=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
Content-Length: 75

{
    "DisplayName": "GroupX",
    "Schedule": 1,
    "ScheduleConfigID": "57353d02"
}
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 162
Date: Fri, 13 May 2016 02:35:20 GMT

{
  "Schedule" : 1,
  "ScheduleConfigID" : "57353d02",
  "ID" : "57353d68",
  "DisplayName" : "GroupX",
```

```
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.2.5 Deleting the host group

1. Process overview

   Delete the group of the node ID specified on requesting.
   Perform this work after deleting all the agents under the group.

2. HTTP method

```
DELETE
```

3. URL

```
/umf/fw/topology/group/NodeID?ManagerName=ManagerName
```

   Specify the node ID (group) of the group to be deleted in ***NodeID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The group has been deleted successfully.
403	Forbidden	The agent exists under the specified group.
404	Not Found	The specified host does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
ID	string	Node ID of the deleted group	Eight-digit hexadecimal character
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-

Parameters	Type	Description	Valid value
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
DELETE /umf/fw/topology/group/57353d68 HTTP/1.1
Accept: application/json, */*
Date: Fri, 13 May 2016 02:41:09 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:lpX9QD43Pi7JDRuuDoywjPUtHPP57d+cM0Kfs91kxYw=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 96
Date: Fri, 13 May 2016 02:57:44 GMT

{
  "ID" : "57353d68",
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.2.6 Updating the host group

1. Process overview

   Update the group of the node ID specified on requesting.
2. HTTP method

```
PUT
```

3. URL

```
/umf/fw/topology/group/NodeID
```

Node ID (group) to be updated in ***NodeID***

If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

The same name as the existing group name can be registered.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
DisplayName	string	Updated monitoring group name		Up to 64 characters Specifying blank characters is not allowed.
Schedule	number	Schedule setting		`0: Not set` `1: Set`
ScheduleConfigID	string	Schedule definition ID		* If "1: Setting" is specified to the schedule setting (Schedule) and if the schedule definition ID (ScheduleConfigID) is not set to the existing node, the schedule definition ID (ScheduleConfigID) must be specified. `Eight-digit hexadecimal character`
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The group has been updated successfully.`
404	Not Found	The specified host does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
ID	string	Management ID of the renewed monitoring group	`Eight-digit hexadecimal character`

Parameters	Type	Description	Valid value
DisplayName	string	Renewed monitoring group name	Up to 64 characters
ScheduleConfigID	string	Schedule definition ID	`Eight-digit hexadecimal character`
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
PUT /umf/fw/topology/group/57353d68 HTTP/1.1
Content-Type:  application/json; charset=utf-8
Accept: application/json, */*
Date: Fri, 13 May 2016 02:33:11 GMT
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:ynj3aF+obTeN49E3DxoQVvPndlbLAwgsDw/eu1D+7iM=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
Content-Length: 69

{
  "DisplayName" : "GroupX",
  "Schedule" : 0,
  "ScheduleConfigID" : null
}
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 162
Date: Fri, 13 May 2016 02:49:46 GMT

{
  "Schedule" : 0,
  "ScheduleConfigID" : "57353d02",
```

```
  "ID" : "57353d68",
  "DisplayName" : "GroupX",
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
}
```

4.2.7 Moving the agents

1. Process overview

   Move the agents specified on requesting to the location under the node ID.

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/topology/agent/move
   ```

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
ID	string	Target node ID		Specifying the node IDs of the agents Both ID and AgentName cannot be omitted. Specify either of ID or AgentName. If both of them are specified, AgentName is selected.
AgentName	string	Agent name		Specifying the agent name Both ID and AgentName cannot be omitted. Specify either of ID or AgentName. If both of them are specified, AgentName is selected.
DestinationID	string	Destination node ID	No	-
Manager	object	Manager object		-

Parameters	Type	Description	Omission	Valid value
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The agent node information has been obtained successfully.`
404	Not Found	The specified manager does not exist. The specified agent does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
ID	string	Node ID to be moved	-
DestinationID	string	Destination node ID	-
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
POST /umf/fw/topology/agent/move HTTP/1.1
Content-Type:  application/json; charset=utf-8
Accept: application/json, */*
Date: Fri, 13 May 2016 02:46:24 GMT
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:pJE1v8bMBgYiw4iSleYM83dqPPnk2aH82Da6l0KRgjU=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

```
Content-Length: 49

{
  "ID" : "07353708",
  "DestinationID" : "57353d68"
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 123
Date: Fri, 13 May 2016 03:02:59 GMT

{
  "ID" : "07353708",
  "DestinationID" : "57353d68",
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.2.8 Deleting the agents

1. Process overview

   `Delete the agents specified on request.`

   Caution

   If an agent that is not stopped is specified as the deletion target in this API, an error occurs.

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/topology/agent/delete
   ```

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
ID	string	Target node ID		`Specifying the node IDs of the agents`

Parameters	Type	Description	Omission	Valid value
				Both ID and AgentName cannot be omitted. Specify either of ID or AgentName. If both of them are specified, AgentName is selected.
AgentName	string	Agent name		Specifying the agent name Both ID and AgentName cannot be omitted. Specify either of ID or AgentName. If both of them are specified, AgentName is selected.
Mode	number	Deletion mode	Not possible	0: Deleting agent nodes only (corresponding to [Delete] in the right-click menu of the topology view agent) 1: Deleting agent setting data entirely (corresponding to the AgentDelete command)
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The agent node has been deleted successfully.
403	Forbidden	The agent to be deleted is not stopped.
404	Not Found	The specified agent does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
ID	string	Node ID of the deleted agent	-
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-

Parameters	Type	Description	Valid value
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
POST /umf/fw/topology/agent/delete HTTP/1.1
Content-Type:  application/json; charset=utf-8
Accept: application/json, */*
Date: Fri, 13 May 2016 03:24:39 GMT
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:Vf3wuMwh7wAI5sW4AqsCJXdbuKYyzH7yqC1uBlCMJ/E=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
Content-Length: 31

{
  "ID" : "07353708",
  "Mode" : 0
}
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 96
Date: Fri, 13 May 2016 03:51:11 GMT

{
  "ID" : "07353708",
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.2.9 Updating the agents

1. Process overview

   Update the agents specified on requesting.

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/topology/agent/update
```

If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
ID	string	Target node ID		Specifying the node IDs of the agents Both ID and AgentName cannot be omitted. Specify either of ID or AgentName. If both of them are specified, AgentName is selected.
AgentName	string	Agent name		Specifying the agent name Both ID and AgentName cannot be omitted. Specify either of ID or AgentName. If both of them are specified, AgentName is selected.
Schedule	number	Schedule setting		0: Not set 1: Set * If ScheduleConfigID that does not exist when setting the schedule is specified, an error occurs.
ScheduleConfigID	string	Schedule definition ID (eight-digit hexadecimal character)		* If "1: Set" is specified to the schedule setting (Schedule) and if the schedule definition ID (ScheduleConfigID) is not set to the existing node, the schedule definition ID (ScheduleConfigID) must be specified.
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

* If the contents of the agent information (Schedule, ScheduleConfigID) were not updated, the monitoring group information (ID, Schedule, ScheduleConfigID) is not output.

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The agent node information has been obtained successfully.`
404	Not Found	The specified manager does not exist. The specified agent does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Data type	Description	Valid value
(Root)	object	Root object	-
ID	string	Node ID of the renewed agent	(eight-digit hexadecimal character)
ScheduleConfigID	string	Updated schedule definition ID	-
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history

- X-FW-API-Version: 1.0
  - `Newly added`

8. JSON Example

[Request]

```
POST /umf/fw/topology/agent/update HTTP/1.1
Content-Type:  application/json; charset=utf-8
Accept: application/json, */*
Date: Fri, 13 May 2016 03:28:58 GMT
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:IeA+rVRkD3F6phF9ZCqsPkL5d5lrlVK8kGDwvQYw0do=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
Content-Length: 68

{
```

```
  "ID" : "07353708",
  "Schedule" : 1,
  "ScheduleConfigID" : "57353d02"
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 139
Date: Fri, 13 May 2016 03:45:33 GMT

{
  "Schedule" : 1,
  "ScheduleConfigID" : "57353d02",
  "ID" : "07353708",
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.3 Reporting

4.3.1 Obtaining the report information

1. Process overview

   `Obtain the report setting information on the specified report ID.`

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/report/ID?ManagerName=ManagerName
   ```

   Specify the report ID to be obtained in ***ID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The report information has been obtained successfully`
404	Not Found	The specified report ID does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object	-
ReportID	object[]	Array of the report information	
ReportID[n].ID	string	Report ID	
ReprotID[n].Patlite	number	Patlite report status	`0: Invalid` `1: Valid`
ReportID[n].PatlitePolicy	object[]	Array of the Patlite policy information	
ReportID[n].PatlitePolicy[m].PolicyID	string	Patlite policy ID	
ReportID[n].PatlitePolicy[m].PolicyName	string	Patlite policy name	Up to 64 characters
ReportID[n].Mail	number	Mail report status	`0: Invalid` `1: Valid`
ReportID[n].MailPolicy	object[]	Array of the mail policy information	
ReportID[n].MailPolicy[m].PolicyID	string	Mail policy ID	
ReportID[n].MailPolicy[m].PolicyName	string	Mail policy name	Up to 64 characters
ReportID[n].Action	number	Action report status	`0: Invalid` `1: Valid`
ReportID[n].ActionPolicy	object[]	Array of the action policy information	
ReportID[n].ActionPolicy[m].PolicyID	string	Action policy ID	
ReportID[n].ActionPolicy[m].PolicyName	string	Action policy name	Up to 64 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Manager name, MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

[Request]

```
GET /umf/fw/report/56de78ea HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 07:00:43 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:7prnuI1wYQiekPdtzG8E/Dijl9QMQ7jW0AZUGA/9SSw=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 369
Date: Wed, 16 Mar 2016 06:56:48 GMT

{
    "ReportID": [
        {
            "Action": 1,
            "ActionPolicy": [
                {
                    "PolicyID": "56de9126",
                    "PolicyName": "bbbb"
                }
            ],
            "ID": "56de78ea",
            "Mail": 1,
            "MailPolicy": [
                {
                    "PolicyID": "56e7c1bb",
                    "PolicyName": "running out of disk space on the se
rver"
                }
            ],
            "Patlite": 1,
            "PatlitePolicy": [
                {
                    "PolicyID": "56de9118",
                    "PolicyName": "aaaa"
                }
            ]
        }
    ],
    "Manager": {
        "ErrorMessage": "",
```

```
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.3.2 Obtaining the mail policy list

1. Process overview

   Obtain the mail policy list.

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/report/mail/policy?ManagerName=ManagerName
   ```

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The mail policy information has been obtained successfully.
206	Partial Content	Obtaining the mail policy information has partially failed.
404	Not Found	The specified manager does not exist.

6. Response

Parameter	Data type	Description	Valid value
(Root)	object	Root object	-
Policy	object[]	Array of the policy information per manager	-
Policy[n].MailPolicy	object[]	Array of the mail policy information	-
Policy[n].MailPolicy[m].ID	string	Mail policy ID	-
Policy[n].MailPolicy[m].PolicyName	string	Policy name	Up to 64 characters
Policy[n].MailPolicy[m].SendTo	string[]	Array of the mail address of the receiver (To)	Up to 256 characters Up to 768 characters in the overall SendTo array
Policy[n].MailPolicy[m].SendCc	string[]	Array of the mail address of the receiver (Cc)	Up to 256 characters Up to 768 characters in the overall SendCc array

Parameter	Data type	Description	Valid value
Policy[n].MailPolicy[m].SendBcc	string[]	Array of the mail address of the receiver (Bcc)	Up to 256 characters Up to 768 characters in the overall SendBcc array
Policy[n].MailPolicy[m].Encode	number	Character code for encoding	<table><tr><th>Setting value</th><th>Description</th></tr><tr><td>65001</td><td>utf-8</td></tr><tr><td>932</td><td>shift_jis</td></tr><tr><td>50220</td><td>iso-2022-jp</td></tr><tr><td>936</td><td>gb2312</td></tr><tr><td>950</td><td>big5</td></tr><tr><td>54936</td><td>GB18030</td></tr></table>
Policy[n].MailPolicy[m].Subject	string	Subject	Up to 128 characters
Policy[n].MailPolicy[m].MailText	string	Text	Up to 2048 characters
Policy[n].MailPolicy[m].MailServerID	string	Mail server ID	-
Policy[n].Manager	object	Manager object	-
Policy[n].Manager.Name	string	Manager name	Manager name, MoM name or RM name
Policy[n].Manager.ErrorMessage	string	Error message	-
Policy[n].Manager.Status	number	Communication error code	-
Policy[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/report/mail/policy HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 07:16:38 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:kr+SbfoX90iORYJhNgPKmjXWZUqWUjkQBeaMH5q3GzM=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
```

```
Content-Type: application/json;charset=UTF-8
Content-Length: 1662
Date: Wed, 16 Mar 2016 07:12:42 GMT

{
    "Policy": [
        {
            "MailPolicy": [
                {
                    "Encode": 50220,
                    "ID": "56de78e5",
                    "MailServerID": "56de78b9",
                    "MailText": "A auto broadcast mail.",
                    "PolicyName": "testPolicyA",
                    "SendBcc": [
                        "testpolicyBcc@policy.com",
                        "testpolicyBcc2@policy.com"
                    ],
                    "SendCc": [
                        "testpolicyCC@policy.com",
                        "testpolicyCC2@policy.com"
                    ],
                    "SendTo": [
                        "testpolicy@policy.com",
                        "testpolicy2@policy.com",
                        "testpolicy3@policy.com"
                    ],
                    "Subject": "Test?I"
                },
                {
                    "Encode": 50220,
                    "ID": "56de8fb9",
                    "MailServerID": "56de78b9",
                    "MailText": "A auto broadcast mail.",
                    "PolicyName": "testPolicyB",
                    "SendBcc": [
                        "testpolicyBcc@policy.com"
                    ],
                    "SendCc": [],
                    "SendTo": [
                        "testpolicy@policy.com",
                        "testpolicy2@policy.com",
                        "testpolicy3@policy.com"
                    ],
                    "Subject": "Test?I"
                },
                {
                    "Encode": 65001,
                    "ID": "56e7c1bb",
                    "MailServerID": "56e7c162",
                    "MailText":"This mail transmitted by the automati
c operation from MCOperations.\r\n\r\n--------------------------------
-----------\r\n$GENERATEDDATE :$GENERATEDDATE$\r\nGENERATEDTIME :$GENE
RATEDTIME$\r\n-------------------------------------------\r\n\r\n-----
--------------------------------------\r\nNODE :$NODE$\r\nSEVERITY : $S
EVERITY$\r\nAPPLICATION :$APPLICATION$\r\nOBJECT :$OBJECT$\r\n-------
-----------------------------------\r\n\r\n---------------------------
----------------\r\nMESSAGEID :$MESSAGEID$\r\nMESSAGETEXT :$MESSAGETEX
```

```
T$\r\n-----------------------------------------",
                    "PolicyName": "running out of disk space on the se
rver",
                    "SendBcc": [
                        "director_mco@nec.com"
                    ],
                    "SendCc": [
                        "member_mco@nec.com"
                    ],
                    "SendTo": [
                        "admin_mco@nec.com"
                    ],
                    "Subject": "running out of disk space on the serve
r"
                }
            ],
            "Manager": {
                "ErrorMessage": "",
                "Name": "localhost",
                "Status": 200,
                "StatusCode": 200
            }
        }
    ]
}
```

4.3.3 Obtaining the detailed mail policy

1. Process overview

   `Obtain the mail policy of the specified mail policy ID.`

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/report/mail/policy/ID?ManagerName=ManagerName
   ```

   Specify the mail policy ID to be obtained in ***ID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The mail policy information has been obtained successfully.`
404	Not Found	The specified mail policy does not exist. The specified manager does not exist.

HTTP status code	Meaning	Description
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameter	Data type	Description	Valid value
(Root)	object	Root object	-
MailPolicy	object[]	Array of the mail policy information	
MailPolicy[n].ID	string	Mail policy ID	
MailPolicy[n].PolicyName	string	Policy name	Up to 64 characters
MailPolicy[n].SendTo	string[]	Array of the mail address of the receiver (To)	Up to 256 characters Up to 768 characters in the overall SendTo array
MailPolicy[n].SendCc	string[]	Array of the mail address of the receiver (Cc)	Up to 256 characters Up to 768 characters in the overall SendCc array
MailPolicy[n].SendBcc	string[]	Array of the mail address of the receiver (Bcc)	Up to 256 characters Up to 768 characters in the overall SendBcc array
MailPolicy[n].Encode	number	Character code for encoding	Setting value / Description 65001 / utf-8 932 / shift_jis 50220 / iso-2022-jp 936 / gb2312 950 / big5 54936 / GB18030
MailPolicy[n].Subject	string	Subject	Up to 128 characters
MailPolicy[n].MailText	string	Text	Up to 2048 characters
MailPolicy[n].MailServerID	string	Mail server ID	
Manager	object	Manager object	-
Manager.Name	string	Manager name	Manager name, MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added

8. JSON Example

[Request]

```
GET /umf/fw/report/mail/policy/56e7c1bb HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 07:07:33 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:j/SZV/UglaTTL8PcZOg7M7hgdp4mPDsgdE4hZoXUaMQ=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 1015
Date: Wed, 16 Mar 2016 07:03:37 GMT

{
    "MailPolicy": [
        {
            "Encode": 65001,
            "ID": "56e7c1bb",
            "MailServerID": "56e7c162",
            "MailText":"This mail transmitted by the automatic operati
on from MCOperations.\r\n\r\n----------------------------------------
--\r\n$GENERATEDDATE :$GENERATEDDATE$\r\nGENERATEDTIME :$GENERATEDTIME
$\r\n-------------------------------------------\r\n\r\n--------------
-----------------------------\r\nNODE :$NODE$\r\nSEVERITY : $SEVERITY$\
r\nAPPLICATION :$APPLICATION$\r\nOBJECT :$OBJECT$\r\n-----------------
--------------------------\r\n\r\n-----------------------------------
-------\r\nMESSAGEID :$MESSAGEID$\r\nMESSAGETEXT :$MESSAGETEXT$\r\n---
----------------------------------------",
            "PolicyName": "running out of disk space on the server",
            "SendBcc": [
                "director_mco@nec.com"
            ],
            "SendCc": [
                "member_mco@nec.com"
            ],
            "SendTo": [
                "admin_mco@nec.com"
            ],
            "Subject": "running out of disk space on the server"
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.3.4 Obtaining the mail server list

1. Process overview

   `Obtain the mail server list.`

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/report/mail/server?ManagerName=ManagerName
   ```

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The mail server information has been obtained successfully.`
206	Partial Content	`Obtaining the mail server information has partially failed.`
404	Not Found	The specified manager does not exist.

6. Response

Parameter	Data type	Description	Valid value
(Root)	object	Root object	-
Server	object[]	Array of the server information per manager	-
Server[n].MailServer	object[]	Array of the mail server information	
Server[n].MailServer[m].ID	string	Mail server ID	
Server[n].MailServer[m].MailServerName	string	Mail server name	Up to 64 characters
Server[n].MailServer[m].HostName	string	Host name or IP address of the mail server	Up to 64 characters
Server[n].MailServer[m].Port	number	Port number of the mail server	1 or more and 32767 or less
Server[n].MailServer[m]MailFrom	string	Sender mail address	Up to 128 characters
Server[n].Manager	object	Manager object	-
Server[n].Manager.Name	string	Manager name	Manager name, MoM name or RM name
Server[n].Manager.ErrorMessage	string	Error message	-

Parameter	Data type	Description	Valid value
Server[n].Manager.Status	number	Communication error code	-
Server[n].Manager.Status Code	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/report/mail/server HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 07:26:46 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:+qyHHXYAjrHkCkk7vrwzYbqeBnFfavsrYfaVbtZrrgg=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 651
Date: Wed, 16 Mar 2016 07:22:51 GMT

{
    "Server": [
        {
            "MailServer": [
                {
                    "Authentication": 0,
                    "HostName": "testMailServer",
                    "ID": "56de78b9",
                    "LoginName": "",
                    "MailFrom": "testMailServer@server.com",
                    "MailServerName": "testMailServer",
                    "Password": "",
                    "Port": 25
                },
                {
                    "Authentication": 0,
                    "HostName": "testMailServerB",
                    "ID": "56de8f8c",
                    "LoginName": "",
                    "MailFrom": "testMailServerB@server.com",
                    "MailServerName": "testMailServerB",
                    "Password": "",
                    "Port": 25
```

```
                },
                {
                    "Authentication": 0,
                    "HostName": "mail.mco.nec.co.jp",
                    "ID": "56e7c162",
                    "LoginName": "",
                    "MailFrom": "admin_mco@nec.com",
                    "MailServerName": "Mail server for fault analysis"
,
                    "Password": "",
                    "Port": 25
                }
            ],
            "Manager": {
                "ErrorMessage": "",
                "Name": "localhost",
                "Status": 200,
                "StatusCode": 200
            }
        }
    ]
}
```

4.3.5 Obtaining the detailed mail server

1. Process overview

   Obtain the mail server information of the specified mail server ID.

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/report/mail/server/ID?ManagerName=ManagerName
   ```

   Specify the mail server ID to be obtained in ***ID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The mail server information has been obtained successfully.
404	Not Found	The specified mail server ID does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameter	Data type	Description	Valid value
(Root)	object	Root object	-
MailServer	object[]	Array of the mail server information	-
MailServer[n].ID	string	Mail server ID	-
MailServer[n].MailServer Name	string	Mail server name	Up to 64 characters
MailServer[n].HostName	string	Host name or IP address of the mail server	Up to 64 characters
MailServer[n].Port	number	Port number of the mail server	1 or more and 32767 or less
MailServer[n].MailFrom	string	Sender mail address	Up to 128 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Manager name, MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history

- X-FW-API-Version: 1.0
  - Newly added

8. JSON Example

[Request]

```
GET /umf/fw/report/mail/server/56e7c162 HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 07:31:32 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:s/M/vU5GRLTL+HRu+Wb/QezgwGnyw3Vyprclxj9WCRY=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 281
Date: Wed, 16 Mar 2016 07:27:37 GMT

{
    "MailServer": [
        {
```

```
            "Authentication": 0,
            "HostName": "mail.mco.nec.co.jp",
            "ID": "56e7c162",
            "LoginName": "",
            "MailFrom": "admin_mco@nec.com",
            "MailServerName": "Mail server for fault analysis",
            "Password": "",
            "Port": 25
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.3.6 Adding the mail policy

1. Process overview

   Add the mail policy information.
   Specifying ManagerName is required for this API.

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/report/mail/policy
   ```

4. Parameters

Parameter	Data type	Description	Omission	Valid value
(Root)	object	Root object	No	-
MailPolicy	object	Mail policy information	No	-
MailPolicy.PolicyName	string	Policy name	No	Up to 64 characters
MailPolicy.SendTo	string[]	Array of the mail address of the receiver (To)		Up to 256 characters Up to 768 characters in the overall SendTo array (If more than one address is specified, the number of characters in the entire array includes 2-byte line feed characters (\r\n) used as a delimiter of addresses. This is the same condition as Svc.) The description method supports the address specification (local part@ domain).

<table>
<tr><th>Parameter</th><th>Data type</th><th>Description</th><th>Omission</th><th>Valid value</th></tr>
<tr><td></td><td></td><td></td><td></td><td>Commas (,) cannot be used.

Example:
SendTo=AAA@mail.com
SendTo=BBB@mail.com
* Either of SendTo, SendCc, or SendBcc must be specified.
Default value:
: left blank</td></tr>
<tr><td>MailPolicy.SendCc</td><td>string[]</td><td>Array of the mail address of the receiver (Cc)</td><td></td><td>Up to 256 characters
Up to 768 characters in the overall SendCc array
The description method supports the address specification (local part@ domain).
* Either of SendTo, SendCc, or SendBcc must be specified.
Default value:
: left blank</td></tr>
<tr><td>MailPolicy.SendBcc</td><td>string[]</td><td>Array of the mail address of the receiver (Bcc)</td><td></td><td>Up to 256 characters
Up to 768 characters in the overall SendBcc array
The description method supports the address specification (local part@ domain).
* Either of SendTo, SendCc, or SendBcc must be specified.
Default value:
: left blank</td></tr>
<tr><td>MailPolicy.Encode</td><td>number</td><td>Character code for encoding</td><td>-</td><td><table><tr><th>Setting value</th><th>Description</th></tr><tr><td>65001</td><td>utf-8</td></tr><tr><td>932</td><td>shift_jis</td></tr><tr><td>50220</td><td>iso-2022-jp</td></tr><tr><td>936</td><td>gb2312</td></tr><tr><td>950</td><td>big5</td></tr><tr><td>54936</td><td>GB18030</td></tr></table>Default value:<table><tr><th>Setting value</th><th>Description</th></tr><tr><td>65001</td><td>utf-8</td></tr></table></td></tr>
<tr><td>MailPolicy.Subject</td><td>string</td><td>Subject</td><td>-</td><td>Up to 128 characters
Default value:
: left blank</td></tr>
<tr><td>MailPolicy.MailText</td><td>string</td><td>Text</td><td>-</td><td>Up to 2048 characters</td></tr>
</table>

Parameter	Data type	Description	Omission	Valid value
				Default value: A space left
MailPolicy.MailServerID	string	Mail server ID	No	`Eight-digit hexadecimal character` `Not case sensitive`
Manager	object	Manager object	No	-
Manager.Name	string	Manager name	No	Manager name, MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The mail policy information has been added successfully.`
400	Bad Request	`The manager is not specified.`
404	Not Found	The specified report ID does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameter	Data type	Description	Valid value
(Root)	object	Root object	-
MailPolicy	object	Mail policy information	
MailPolicy.ID	string	Mail policy ID	
MailPolicy.PolicyName	string	Policy name	
MailPolicy.SendTo	string[]	Array of the mail address of the receiver (To)	
MailPolicy.SendCc	string[]	Array of the mail address of the receiver (Cc)	
MailPolicy.SendBcc	string[]	Array of the mail address of the receiver (Bcc)	
MailPolicy.Encode	number	Character code for encoding	Setting value / Description 65001 / utf-8 932 / shift_jis 50220 / iso-2022-jp 936 / gb2312 950 / big5 54936 / GB18030
MailPolicy.Subject	string	Subject	Up to 128 characters

Parameter	Data type	Description	Valid value
MailPolicy.MailText	string	Text	Up to 2048 characters
MailPolicy.MailServerID	string	Mail server ID	Eight-digit hexadecimal character
Manager	object	Manager object	-
Manager.Name	string	Manager name	Manager name, MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
POST /umf/fw/report/mail/policy HTTP/1.1
Content-Type:  application/json; charset=utf-8
Accept: application/json, */*
Date: Fri, 13 May 2016 03:49:59 GMT
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:D2GWn31vuaMG5hf+NJz0Kicv/8wAFZu8yIj8vos0x6Y=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
Content-Length: 406

{
  "MailPolicy" : {
    "PolicyName" : "testPolicyB",
    "SendTo" : [ "testpolicy@policy.com", "testpolicy2@policy.com", "t
estpolicy3@policy.com" ],
    "SendCc" : [ ],
    "SendBcc" : [ "testpolicyBcc@policy.com" ],
    "Encode" : 50220,
    "Subject" : "Test?I",
    "MailText" : "A auto broadcast mail.",
    "MailServerID" : "56de78b9"
  },
  "Manager" : {
    "Name" : "localhost"
  }
}
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
```

```
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 370
Date: Fri, 13 May 2016 04:06:34 GMT

{
  "MailPolicy" : {
    "SendTo" : [ "testpolicy@policy.com", "testpolicy2@policy.com", "t
estpolicy3@policy.com" ],
    "Encode" : 50220,
    "SendCc" : [ ],
    "MailText" : "A auto broadcast mail.",
    "MailServerID" : "5735514b",
    "ID" : "56de8fb9",
    "PolicyName" : "testPolicyB",
    "Subject" : "Test?I",
    "SendBcc" : [ "testpolicyBcc@policy.com" ]
  },
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.3.7 Updating the mail policy

1. Process overview

   Update the mail policy of the specified mail policy ID.
   The contents that have been set are inherited if the parameters are omitted.

2. HTTP method

   ```
   PUT
   ```

3. URL

   ```
   /umf/fw/report/mail/policy/ID
   ```

   Specify the mail policy ID to be updated in ***ID***.

4. Parameters

Parameter	Data type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-

Parameter	Data type	Description	Omission	Valid value
MailPolicy	object	Mail policy information	Not possible	-
MailPolicy.PolicyName	string	Policy name		`Up to 64 characters` `Leaving blank characters is prohibited since this setting is required when adding the policy.`

MailPolicy.SendTo	string[]	Receiver (To)		`Up to 256 characters`
				`Up to 768 characters in the overall SendTo array`
				The description method supports the address specification (local part@domain).
				* Either of SendTo, SendCc, or SendBcc must be specified.
				It is not permitted to specify blank characters for all of them.

MailPolicy.SendCc	string[]	Receiver (Cc)		`Up to 256 characters`
				`Up to 768 characters in the overall SendCc array`
				The description method supports the address specification (local part@domain).
				* Either of SendTo, SendCc, or SendBcc must be specified.
				It is not permitted to specify blank characters for all of them.

MailPolicy.SendBcc	string[]	Receiver (Bcc)		`Up to 256 characters`
				`Up to 768 characters in the overall SendBcc array`
				The description method supports the address specification (local part@domain).
				* Either of SendTo, SendCc, or SendBcc must be specified.
				It is not permitted to specify blank characters for all of them.

MailPolicy.Encode	number	Character code for encoding		**Setting value** / **Description** 65001 / utf-8 932 / shift_jis 50220 / iso-2022-jp 936 / gb2312 950 / big5 54936 / GB18030

Parameter	Data type	Description	Omission	Valid value
MailPolicy.Subject	string	Subject		Up to 128 characters
MailPolicy.MailText	string	Text		Up to 2048 characters
MailPolicy.MailServerID	string	Mail server ID		`Eight-digit hexadecimal character` `Not case sensitive`
Manager	object	Manager object		-
Manager.Name	string	Manager name		Manager name, MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The mail policy information has been renewed successfully.`
404	Not Found	The specified mail policy does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameter	Data type	Description	Valid value
(Root)	object	Root object	-
MailPolicy	object	Mail policy information on the result of update	
MailPolicy.ID	string	Mail policy ID	
MailPolicy.PolicyName	string	Policy name	
MailPolicy.SendTo	string[]	Array of the mail address of the receiver (To)	
MailPolicy.SendCc	string[]	Array of the mail address of the receiver (Cc)	
MailPolicy.SendBcc	string[]	Array of the mail address of the receiver (Bcc)	
MailPolicy.Encode	number	Character code for encoding	Setting value / Description 65001 / utf-8 932 / shift_jis 50220 / iso-2022-jp 936 / gb2312 950 / big5 54936 / GB18030
MailPolicy.Subject	string	Subject	

Parameter	Data type	Description	Valid value
MailPolicy.MailText	string	Text	
MailPolicy.MailServerID	string	Mail server ID	
Manager	object	Manager object	-
Manager.Name	string	Manager name	Manager name, MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

`Example: Update the mail policy setting of the manager "MoM1" according to the following procedure.`

- Add "director_mco@nec.com" to the receiver (To) "admin_mco@nec.com".
- Delete the receiver (Bcc).
- Change the character code for encoding to shift_jis.

a. `Obtain the mail policy list, and confirm the management ID of the mail policy to be updated.`

   For details, see "Obtaining the mail policy list (page 66)".

b. `Update the mail policy settings.`
   `Specify the following parameters, and execute the request.`
   - Specify the mail policy ID to be updated (this ID was obtained when obtaining the mail policy list) as the ID of the URL of this API.
   - Specify the receiver (To), receiver (Bcc), and character code for encoding in the request JSON.

[Request]

```
PUT /umf/fw/report/mail/policy/56e7c1bb HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 01:59:30 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:st3m78ISzeAegglrka3WfuLxLHT5OeO0rJ7ye2Fdwzk=
Host: 192.168.21.4:12080
Content-Length: 134

{
    "MailPolicy": {
        "Encode": 932,
        "SendBcc": [],
        "SendTo": [
            "admin_mco@nec.com",
            "director_mco@nec.com"
```

```
        ]
    },
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 1012
Date: Fri, 18 Mar 2016 01:55:36 GMT

{
    "MailPolicy": {
        "Encode": 932,
        "ID": "56e7c1bb",
        "MailServerID": "56e7c162",
        "MailText":"MCOperations \r\n\r\n-----------------------------
--------------\r\n$GENERATEDDATE$\r\n$GENERATEDTIME$\r\n--------------
-----------------------------\r\n\r\n---------------------------------
----------\r\n$NODE$\r\n$SEVERITY$\r\n$APPLICATION$\r\n$OBJECT$\r\n---
----------------------------------------\r\n\r\n----------------------
--------------------\r\nID$MESSAGEID$\r\n$MESSAGETEXT$\r\n-----------
--------------------------------",
        "PolicyName": "",
        "SendBcc": [],
        "SendCc": [
            "member_mco@nec.com"
        ],
        "SendTo": [
            "admin_mco@nec.com",
            "director_mco@nec.com"
        ],
        "Subject": ""
    },
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.3.8 Deleting the mail policy

1. Process overview

```
Delete the mail policy setting information of the specified mail
policy ID.
The specified mail policy can be deleted.
If the specified mail policy is deleted, an error is reported.
```

2. HTTP method

```
DELETE
```

3. URL

```
/umf/fw/report/mail/policy/ID?ManagerName=ManagerName
```

Specify the mail policy ID to be deleted in ***ID***.

If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The mail policy information has been deleted successfully.`
404	Not Found	The specified mail policy does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object	–
MailPolicy	object	Mail policy information	
MailPolicy.ID	string	Mail policy ID	
Manager	object	Manager object	-
Manager.Name	string	Manager name	Manager name, MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history

- X-FW-API-Version: 1.0
  - `Newly added`

8. JSON Example

[Request]

```
DELETE /umf/fw/report/mail/policy/56de8fb9 HTTP/1.1
Accept: application/json, */*
Date: Fri, 13 May 2016 03:56:30 GMT
Content-Type:  application/json; charset=utf-8
```

```
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:Xi/HRG4EgMVTPhj6LRo5QD99i18yVR6vT78MWlcpD5M=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 111
Date: Fri, 13 May 2016 04:13:05 GMT

{
  "MailPolicy" : {
    "ID" : "56de8fb9"
  },
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.4 Process monitoring

4.4.1 Obtaining the process monitoring tree configuration

1. Process overview

   `Obtain the process monitoring tree configuration of the specified agent.`

2. HTTP method

   ```
   GET
   ```

3. URL

   `/umf/fw/process/group/`***`AgentName`***`?ManagerName=`***`ManagerName`***

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The process monitoring tree configuration has been obtained successfully.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(ROOT)	object	Root object	-
Agent	object[]	Array of agent information	-
Agent[n].Name	string	Agent name	Up to 64 characters Agent name displayed in the topology view
Agent[n].NodeID	string	Management ID of the agent	Eight-digit hexadecimal character Unique character string that identifies the agent
Agent[n].ProcessGroup	object[]	Array of process group information	
Agent[n].ProcessGroup[m].Name	string	Process group name	Up to 64 characters Process group name displayed in the topology view
Agent[n].ProcessGroup[m].NodeID	string	Management ID of the process group	Eight-digit hexadecimal character Unique character string that identifies the process group
Agent[n].ProcessGroup[m].Process	object[]	Array of process information being monitored	-
Agent[n].ProcessGroup[m].Process[l].Name	string	Process name	Up to 64 characters
Agent[n].ProcessGroup[m].Process[l].NodeID	string	Management ID of the process	Eight-digit hexadecimal character
Agent[n].ProcessGroup[m].Process[l].Severity	number	Severity	-
Agent[n].ProcessGroup[m].ProcessGroup	object[]	Array of process group information	This is a recursive structure with the same structure as ProcessGroup object described above.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-

Parameters	Type	Description	Valid value
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

[Request]

```
GET /umf/fw/process/group/AgentHost HTTP/1.1
x-fw-api-version: 1.0
Date: Tue, 15 Mar 2016 23:42:03 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:XVllvFvwfBUezusSoB8iAXgdrW01sk/qlsiunZUdPHE=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 311
Date: Tue, 15 Mar 2016 23:38:07 GMT

{
    "Agent": [
        {
            "Name": "AgentHost",
            "NodeID": "06e7e015",
            "ProcessGroup": [
                {
                    "Name": "ProcessGroupA",
                    "NodeID": "56e7e048",
                    "Process": [
                        {
                            "Name": "postgres.exe",
                            "NodeID": "56e89a2b",
                            "Severity": 275
                        }
                    ]
                },
                {
                    "Name": "APServerMonitor",
                    "NodeID": "06e89b69"
                }
            ]
        }
    ],
    "Manager": {
```

```
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.4.2 Obtaining the monitoring process setting information

1. Process overview

   Obtain the monitoring process setting information of the specified process group or process.

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/process/monitor/AgentName/NodeID?ManagerName=ManagerName
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the process group to be obtained or monitoring process in ***NodeID***.

   If the management ID of the process group is specified in ***NodeID***, all information of the monitoring process located under the specified group is output.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring process setting information has been obtained successfully.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The management ID of the specified process group or process does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(ROOT)	object	Root object	-

Parameters	Type	Description	Valid value
Process	object[]	Array of process information being monitored	-
Process[n].Name	string	Process name	Up to 64 characters
Process[n].NodeID	string	Management ID of the process	Eight-digit hexadecimal character
Process[n].Type	number	Process monitoring method	0: Monitoring the process path 1: Monitoring the command line
Process[n].CommandLine	string	Path used when monitoring the command line	Up to 256 characters
Process[n].ProcessPath	string	Path used when monitoring the process path	Up to 256 characters
Process[n].LowThreshold	number	Lower limit of process count	A value should be within the range of 1 to 9999 and equal to or less than the upper limit process count
Process[n].HighThreshold	number	Upper limit of process count	A value should be within the range from 1 to 9999 and equal to or more than the lower limit process count
Process[n].MonitorProcessID	number	Monitoring change of process ID	0: Not monitored 1: Monitored
Process[n].StartCommand	string	Application of the startup command	Up to 256 characters
Process[n].StartDirectory	string	Working directory of the startup command	Up to 256 characters
Process[n].StartOption	string	Option of the startup command	Up to 256 characters
Process[n].StopCommand	string	Application of the stop command	Up to 256 characters
Process[n].StopDirectory	string	Working directory of the stop command	Up to 256 characters
Process[n].StopOption	string	Option of the stop command	Up to 256 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

[Request]

```
GET /umf/fw/process/monitor/AgentHost/06e8a3d9 HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 00:24:50 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:vVGD9E0PKHXHplqkHt0r5uyGIAG/3rnANOs8ZLEUgQw=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 415
Date: Wed, 16 Mar 2016 00:20:54 GMT

{
    "Process": [
        {
            "CommandLine": "",
            "HighThreshold": 9999,
            "LowThreshold": 1,
            "MonitorProcessID": 0,
            "Name": "tomcat8.exe",
            "NodeID": "06e8a3d9",
            "ProcessPath": "C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Operati
ons¥¥Tomcat¥¥bin¥¥tomcat8.exe",
            "StartCommand": "",
            "StartDirectory": "",
            "StartOption": "",
            "StopCommand": "",
            "StopDirectory": "",
            "StopOption": "",
            "Type": 0
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.4.3 Adding the process group

1. Process overview

   `Add the process group.`

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/process/group/AgentName/NodeID
```

Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the node ID (agent/group) to be added in ***NodeID***.

Tip

If the node ID of the agent is specified, use NodeID obtained in "4.4.1 Obtaining the process monitoring tree configuration (page 86)".

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Name	string	Monitoring group name to be added	Not possible	Up to 64 characters * You can specify a group node to be added only if that node does not have any child node which is set as a group node.
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response

HTTP status code	Meaning	Description
200	OK	The process group has been added successfully.
400	Bad Request	The node to be added is the group node where process monitoring for the child nodes is set. The monitoring group name to be added is not specified. A node other than agent/group is specified as the node ID to be added.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified node does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(ROOT)	object	Root object	-
NodeID	string	Management ID of the added monitoring group	Eight-digit hexadecimal character
Name	string	Added monitoring group name	Up to 64 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	-
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

```
* A group with the same name as the existing monitoring group can be
registered.
```

7. Change history

- X-FW-API-Version: 1.0
  - Newly added

8. JSON Example

[Request]

```
POST /umf/fw/process/group/AgentHost/06e7e015 HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Tue, 15 Mar 2016 23:35:49 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:KXEzmnjvBFsWdIUtjA2LiDwYk5nmCqqCnoAjrSYqTdc=
Host: 192.168.21.4:12080
Content-Length: 58

{
    "Name": "APServerMonitor",
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 125
Date: Tue, 15 Mar 2016 23:31:53 GMT

{
```

```
    "Name": "APServerMonitor",
    "NodeID": "06e89b69",
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.4.4 Deleting the process group

1. Process overview

   Delete the specified process group.
   The process monitoring settings located under the monitoring group are also deleted.

2. HTTP method

   ```
   DELETE
   ```

3. URL

   /umf/fw/process/group/***AgentName***/***NodeID***?ManagerName=***ManagerName***

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the monitoring group to be deleted in ***NodeID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The process group has been deleted successfully.
400	Bad Request	A node other than the management ID of the monitoring group to be deleted is specified as the node ID to be deleted.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified monitoring group does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(ROOT)	object	Root object	-
NodeID	string	Management ID of the deleted monitoring group	`Eight-digit hexadecimal character`
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
DELETE /umf/fw/process/group/AgentHost/06e89b69 HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 00:52:56 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:8OTRT/OdV7uNbtUWRLdHSiulLbckVsZvEihlm9JXxmc=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 100
Date: Wed, 16 Mar 2016 00:49:01 GMT

{
    "NodeID": "06e89b69",
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.4.5 Updating the process group

1. Process overview

   `Update the specified process group.`

2. HTTP method

```
PUT
```

3. URL

```
/umf/fw/process/group/AgentName/NodeID
```

Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the node ID (monitoring group node) to be updated in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Name	string	Monitoring group name to be renewed	Not possible	Up to 64 characters
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The process group has been updated successfully.
400	Bad Request	The monitoring group name to be updated is not specified. A node other than the management ID of the monitoring group to be updated is specified as the node ID to be updated.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified node does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(ROOT)	object	Root object	-
NodeID	string	Management ID of the updated monitoring group	`Eight-digit hexadecimal character`
Name	string	Updated monitoring group name	Up to 64 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

```
* A group with the same name as the existing monitoring group can be
registered.
* If the monitoring group information (Name) is not updated, the
monitoring group information (NodeID, Name) is not output.
* If the same NodeID is specified for more than one setting, the
setting registered later is valid, and an error does not occur.
```

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
PUT /umf/fw/process/group/AgentHost/56e7e048 HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Tue, 15 Mar 2016 23:47:28 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:KxWvpdlj2cNjAvMFyzWAdsVj68rflrgAUlZmTvPYsQM=
Host: 192.168.21.4:12080
Content-Length: 52

{
    "Name": "DBMonitor",
    "Manager": {
        "Name": "localhost"
    }
}
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 119
```

```
Date: Tue, 15 Mar 2016 23:43:32 GMT

{
    "Name": "DBMonitor",
    "NodeID": "56e7e048",
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.4.6 Adding the monitoring process settings

1. Process overview

   Add the process monitoring settings under the specified process group.

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/process/monitor/AgentName/NodeID/add
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the process group to be added in ***NodeID***.

   * You can specify a group node to be added only if that node does not have any child node which is set as a group node.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Process	object[]	Object of the process information to be added	Not possible	-
Process[n].Name	string	Process name	Not possible	Up to 64 characters

Parameters	Type	Description	Omission	Valid value
Process[n].Type	number	Process monitoring method	Not possible	0: Monitoring the process path 1: Monitoring the command line
Process[n].TargetPath	string	Path for monitoring the process path or path for monitoring the command line	Not possible	Up to 256 characters * The destination reflected varies according to the setting of Type. In the case of Type = 0, the process path is monitored. Specify the monitoring process by using the absolute path. In the case of Type = 1, the command line is monitored. Describe this key using a regular expression. (When using meta characters such as a period (.) or yen mark (\) (characters with special meanings for regular expression) as normal characters, add "\" immediately before the meta character to escape.)
Process[n].LowThreshold	number	Lower limit of process count		A value should be within the range of 1 to 9999 and equal to or less than the upper limit process count Default value: 1
Process[n].HighThreshold	number	Upper limit of process count		A value should be within the range from 1 to 9999 and equal to or more than the lower limit process count Default value: 9999
Process[n].MonitorProcessID	number	Monitoring change of process ID		0: Not monitored 1: Monitored Default value: 0: Not monitoring
Process[n].StartCommand	string	Application of the startup command		Up to 256 characters Default value: Blank: The application of the startup command is not registered.
Process[n].StartDirectory	string	Working directory of the startup command		Up to 256 characters Default value:

Parameters	Type	Description	Omission	Valid value
				Blank: The working directory of the startup command is not registered.
Process[n].StartOption	string	Option of the startup command		Up to 256 characters Default value: Blank: The option of the startup command is not registered.
Process[n].StopCommand	string	Application of the stop command		Up to 256 characters Default value: Blank: The application of the stop command is not registered.
Process[n].StopDirectory	string	Working directory of the stop command		Up to 256 characters Default value: Blank: The working directory of the stop command is not registered.
Process[n].StopOption	string	Option of the stop command		Up to 256 characters Default value: Blank: The option of the stop command is not registered.
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The process monitoring setting has been added successfully.
400	Bad Request	The node to be added is the group node which has a child node set as a group node. The process name is not specified. The process monitoring method is not specified. The path for monitoring the process path or path for monitoring the command line is not specified. The management ID for groups other than the process group is specified as the management ID of the process group to be added.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified process group to be monitored does not exist. The specified manager does not exist.

HTTP status code	Meaning	Description
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(ROOT)	object	Root object	-
NodeID	string	Management ID of the process group	Eight-digit hexadecimal character
Process	object[]	Array of added process information	* Only the added process information is enumerated.
Process[n].Name	string	Process name	Up to 64 characters
Process[n].NodeID	string	Management ID of the process	Eight-digit hexadecimal character
Process[n].Type	number	Process monitoring method	0: Monitoring the process path 1: Monitoring the command line
Process[n].CommandLine	string	Path used when monitoring the command line	Up to 256 characters
Process[n].ProcessPath	string	Path used when monitoring the process path	Up to 256 characters
Process[n].LowThreshold	number	Lower limit of process count	A value should be within the range of 1 to 9999 and equal to or less than the upper limit process count
Process[n].HighThreshold	number	Upper limit of process count	A value should be within the range from 1 to 9999 and equal to or more than the lower limit process count
Process[n].MonitorProcessID	number	Monitoring change of process ID	0: Not monitored 1: Monitored
Process[n].StartCommand	string	Application of the startup command	Up to 256 characters
Process[n].StartDirectory	string	Working directory of the startup command	Up to 256 characters
Process[n].StartOption	string	Option of the startup command	Up to 256 characters
Process[n].StopCommand	string	Application of the stop command	Up to 256 characters
Process[n].StopDirectory	string	Working directory of the stop command	Up to 256 characters
Process[n].StopOption	string	Option of the stop command	Up to 256 characters
Process[n].Existence	boolean	Whether the process exists or not in the agent when adding	false: Does not exist. true: Exists.

Parameters	Type	Description	Valid value
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

Example: Adding the monitoring definition setting of the "tomcat8.exe" process to the process group of the agent "AgentHost"

a. Obtain the topology tree configuration, and confirm the Agent name to be added.

   For details, see "Obtaining the topology tree configuration (page 38)".

b. Confirm the management ID of the process group to be the destination to which the monitoring definition setting is added. Obtain the process tree configuration, and then obtain the management ID of the process group to be the destination to which the monitoring definition setting is added.

   For details, see "Obtaining the process monitoring tree configuration (page 86)".

c. Confirm the process name to which the monitoring definition setting is added and the path for monitoring.
   Obtain the list of the process being started up, and obtain the process name to which you want to add the monitoring definition setting, the path for monitoring the command line, or the path for monitoring the process.

   For details, see "Obtaining the list of the process being started up (page 111)".

d. Add the monitoring process definition.
   Specify the following parameters, and execute the request.
   - Specify "AgentHost" obtained when obtaining the topology tree configuration as AgentName of the URL of this API.
   - Specify the management ID of the process group obtained when obtaining the process tree configuration as NodeID of the URL of this API.
   - Specify the process name and path for monitoring obtained when obtaining the list of the process being started up in the request JSON.

[Request]

```
POST /umf/fw/process/monitor/AgentHost/06e89b69/add HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 00:11:48 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
```

```
5o=:+8xWwFph+vK4bjZBKEg4Nwrgg4hMc45cAX2sgBNN88c=
Host: 192.168.21.4:12080
Content-Length: 168

{
    "Process": [
        {
            "Name": "tomcat8.exe",
            "TargetPath": "C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Operatio
ns¥¥Tomcat¥¥bin¥¥tomcat8.exe",
            "Type": 0
        }
    ],
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 452
Date: Wed, 16 Mar 2016 00:07:53 GMT

{
    "NodeID": "06e89b69",
    "Process": [
        {
            "CommandLine": "",
            "Existence": true,
            "HighThreshold": 9999,
            "LowThreshold": 1,
            "MonitorProcessID": 0,
            "Name": "tomcat8.exe",
            "NodeID": "06e8a3d9",
            "ProcessPath": "C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Operati
ons¥¥Tomcat¥¥bin¥¥tomcat8.exe",
            "StartCommand": "",
            "StartDirectory": "",
            "StartOption": "",
            "StopCommand": "",
            "StopDirectory": "",
            "StopOption": "",
            "Type": 0
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
```

```
    }
}
```

4.4.7 Deleting the monitoring process settings

1. Process overview

   Delete the specified monitoring process settings.

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/process/monitor/AgentName/NodeID/remove
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the process group including the process to be deleted in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Process	object[]	Array of process information to be deleted	Not possible	
Process[n].NodeID	string	Management ID of the process to be deleted	Not possible	Eight-digit hexadecimal character
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The process monitoring setting has been deleted successfully.
400	Bad Request	The management ID of the process is not specified. The management ID for groups other than the

HTTP status code	Meaning	Description
		process group is specified as the management ID of the process group including the process to be deleted.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The management ID of the specified process group does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(ROOT)	object	Root object	-
NodeID	string	Management ID of the process group including the process to be deleted	Eight-digit hexadecimal character
Process	object[]	Array of process information to be deleted	* Only the deleted process information is enumerated.
Process[n].NodeID	string	Management ID of the process to be deleted	Eight-digit hexadecimal character
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

* NodeID of the process that does not exist is skipped, and an error does not occur.

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added

8. JSON Example

Example: Deleting the monitoring definition setting of the "postgres.exe" process from the process group of the agent "AgentHost"

a. Obtain the topology tree configuration, and confirm the Agent name to be deleted.

   For details, see "Obtaining the process monitoring tree configuration (page 38)".

b. Confirm the management ID of the process group where the process to be added exists and management ID of the process to be added. Obtain the process tree configuration, and obtain the management ID of the process group that manages the postgres.exe process and the management ID of the process to be deleted.

For details, see "Obtaining the process monitoring tree configuration (page 86)".

c. Delete the monitoring process definition setting.
Specify the following parameters, and execute the request.

- Specify "AgentHost" obtained when obtaining the topology tree configuration as AgentName of the URL of this API.
- Specify the management ID of the process group obtained when obtaining the process tree configuration as NodeID of the URL of this API.
- Specify the management ID of the process to be deleted obtained when obtaining the process tree configuration in the request JSON.

[Request]

```
POST /umf/fw/process/monitor/AgentHost/56e7e048/remove HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 00:48:56 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:ILkJUUoqxRF2oXW19pjIcuQ6oblfbB2JKpU9FFqfXVM=
Host: 192.168.21.4:12080
Content-Length: 69

{
    "Process": [
        {
            "NodeID": "56e89a2b"
        }
    ],
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 134
Date: Wed, 16 Mar 2016 00:45:02 GMT

{
    "NodeID": "56e7e048",
    "Process": [
        {
            "NodeID": "56e89a2b"
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
```

```
    }
}
```

4.4.8 Updating the monitoring process settings

1. Process overview

   Update the specified monitoring process settings.

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/process/monitor/AgentName/NodeID/update
```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the process group to be updated in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Process	object[]	Process information to be updated	Not possible	-
Process[n].NodeID	string	Management ID of the process to be updated	Not possible	Eight-digit hexadecimal character
Process[n].Name	string	Process name		Up to 64 characters
Process[n].Type	number	Process monitoring method		0: Monitoring the process path 1: Monitoring the command line * If the path to be monitored is not saved (or specified by this command), an error occurs.
Process[n].TargetPath	string	Path for monitoring the process path or path for monitoring the command line		Up to 256 characters In the case of Type = 0, the process path is monitored. Specify the monitoring process by using the absolute path. In the case of Type = 1, the

Parameters	Type	Description	Omission	Valid value
				command line is monitored. Describe this key using a regular expression. (When using meta characters such as a period (.) or yen mark (\) (characters with special meanings for regular expression) as normal characters, add "\" immediately before the meta character to escape.)
Process[n].LowThreshold	number	Lower limit of process count		A value should be within the range of 1 to 9999 and equal to or less than the upper limit process count
Process[n].HighThreshold	number	Upper limit of process count		A value should be within the range from 1 to 9999 and equal to or more than the lower limit process count
Process[n].MonitorProcessID	number	Monitoring change of process ID		0: Not monitored 1: Monitored
Process[n].StartCommand	string	Application of the startup command		Up to 256 characters
Process[n].StartDirectory	string	Working directory of the startup command		Up to 256 characters
Process[n].StartOption	string	Option of the startup command		Up to 256 characters
Process[n].StopCommand	string	Application of the stop command		Up to 256 characters
Process[n].StopDirectory	string	Working directory of the stop command		Up to 256 characters
Process[n].StopOption	string	Option of the stop command		Up to 256 characters
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The process monitoring setting has been updated successfully.
400	Bad Request	The management ID of the process to be updated is not specified. The management ID for groups other than the process group is specified as the management ID of the process group including the process to be updated.
404	Not Found	The specified agent does not exist.

HTTP status code	Meaning	Description
		The specified agent is being stopped. The specified process group to be updated does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(ROOT)	object	Root object	-
NodeID	string	Management ID of the process group	`Eight-digit hexadecimal character`
Process	object[]	Array of process information being monitored	-
Process[n].Name	string	Process name	Up to 64 characters
Process[n].NodeID	string	Management ID of the process	`Eight-digit hexadecimal character`
Process[n].Type	number	Process monitoring method	`0: Monitoring the process path` `1: Monitoring the command line`
Process[n].CommandLine	string	Path used when monitoring the command line	Up to 256 characters
Process[n].ProcessPath	string	Path used when monitoring the process path	Up to 256 characters
Process[n].LowThreshold	number	Lower limit of process count	`A value should be within the range of 1 to 9999 and equal to or less than the upper limit process count`
Process[n].HighThreshold	number	Upper limit of process count	`A value should be within the range from 1 to 9999 and equal to or more than the lower limit process count`
Process[n].MonitorProcessID	number	Monitoring change of process ID	`0: Not monitored` `1: Monitored`
Process[n].StartCommand	string	Application of the startup command	Up to 256 characters
Process[n].StartDirectory	string	Working directory of the startup command	Up to 256 characters
Process[n].StartOption	string	Option of the startup command	Up to 256 characters
Process[n].StopCommand	string	Application of the stop command	Up to 256 characters
Process[n].StopDirectory	string	Working directory of the stop command	Up to 256 characters

Parameters	Type	Description	Valid value
Process[n].StopOption	string	Option of the stop command	Up to 256 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

```
* If the same NodeID is specified as more than one setting, the
setting registered later is valid, and an error does not occur.
```

7. Change history

- X-FW-API-Version: 1.0

  - Newly added

8. JSON Example

[Request]

```
POST /umf/fw/process/monitor/AgentHost/06e89b69/update HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 00:41:03 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:82paHmz6GiupnpkTqaHV5194THb8wNQDKC4hiAgxH8M=
Host: 192.168.21.4:12080
Content-Length: 303

{
    "Process": [
        {
            "HighThreshold": 1000,
            "LowThreshold": 10,
            "MonitorProcessID": 1,
            "NodeID": "06e8a3d9",
            "StartCommand": "C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Operat
ions¥¥Tomcat¥¥bin¥¥startup.bat",
            "StartDirectory": "C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Oper
ations¥¥Tomcat¥¥bin"
        }
    ],
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
```

```
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 565
Date: Wed, 16 Mar 2016 00:37:08 GMT

{
    "NodeID": "06e89b69",
    "Process": [
        {
            "CommandLine": "",
            "HighThreshold": 1000,
            "LowThreshold": 10,
            "MonitorProcessID": 1,
            "Name": "tomcat8.exe",
            "NodeID": "06e8a3d9",
            "ProcessPath": "C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Operati
ons¥¥Tomcat¥¥bin¥¥tomcat8.exe",
            "StartCommand": "C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Operat
ions¥¥Tomcat¥¥bin¥¥startup.bat",
            "StartDirectory": "C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Oper
ations¥¥Tomcat¥¥bin",
            "StartOption": "",
            "StopCommand": "",
            "StopDirectory": "",
            "StopOption": "",
            "Type": 0
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.4.9 Obtaining the list of the process being started up

1. Process overview

   Obtain the list of the process that can be monitored of the specified agent.

2. HTTP method

   ```
   GET
   ```

3. URL

   /umf/fw/process/object/***AgentName***?ManagerName=***ManagerName***

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The list of the process being started up has been obtained successfully.`
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(ROOT)	object	Root object	-
Process	object[]	Array of the process being started up	-
Process[n].Name	string	Process name	Up to 64 characters
Process[n].MonitorProcessID	number	Process ID	-
Process[n].ParentProcessID	number	Parent process ID	-
Process[n].CommandLine	string	Path used when monitoring the command line	Up to 256 characters
Process[n].ProcessPath	string	Path used when monitoring the process path	Up to 256 characters
Process[n].UserName	string	User name	Up to 64 characters
Process[n].Priority	number	Priority	-
Process[n].StartupTime	string	Startup time	`"YYYY/mm/DD/ HH:MM:SS" format` `* An empty string is returned if the startup time cannot be obtained.`
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history

- X-FW-API-Version: 1.0
  - `Newly added`

8. JSON Example

[Request]

```
GET /umf/fw/process/object/AgentHost HTTP/1.1
x-fw-api-version: 1.0
Date: Tue, 15 Mar 2016 23:50:51 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:8y/gNz1atNwnX0auC0ktnRxxcEz4LDKdFvAGWIO71R0=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Transfer-Encoding: chunked
Date: Tue, 15 Mar 2016 23:46:55 GMT

{
    "Process": [
        {
            "CommandLine": "System Idle Process",
            "MonitorProcessID": 0,
            "Name": "System Idle Process",
            "ParentProcessID": 0,
            "Priority": 0,
            "ProcessPath": "System Idle Process",
            "StartupTime": "",
            "UserName": "SYSTEM"
        },
        {
            "CommandLine": "System",
            "MonitorProcessID": 4,
            "Name": "System",
            "ParentProcessID": 0,
            "Priority": 8,
            "ProcessPath": "System",
            "StartupTime": "",
            "UserName": "SYSTEM"
        },
        {
            "CommandLine": "¥"C:/Program Files (x86)/NEC/UMF/Operation
s/Manager/bin/dbms1/bin/postgres.exe¥" ¥"--forkbackend¥" ¥"4444¥"",
            "MonitorProcessID": 2196,
            "Name": "postgres.exe",
            "ParentProcessID": 4040,
            "Priority": 8,
            "ProcessPath": "C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Operati
ons¥¥Manager¥¥bin¥¥dbms1¥¥bin¥¥postgres.exe",
            "StartupTime": "2016/03/15 19:12:42",
            "UserName": "SYSTEM"
        },
        {
            "CommandLine": "¥"C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Opera
```

```
tions¥¥Agent¥¥bin¥¥SysMonAgt.exe¥"",
            "MonitorProcessID": 2344,
            "Name": "SysMonAgt.exe",
            "ParentProcessID": 476,
            "Priority": 8,
            "ProcessPath": "C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Operati
ons¥¥Agent¥¥bin¥¥SysMonAgt.exe",
            "StartupTime": "2016/03/15 19:12:36",
            "UserName": "SYSTEM"
        },
        {
            "CommandLine": "¥"C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Opera
tions¥¥Tomcat¥¥bin¥¥tomcat8.exe¥" //RS//ServiceGovernor",
            "MonitorProcessID": 3988,
            "Name": "tomcat8.exe",
            "ParentProcessID": 476,
            "Priority": 8,
            "ProcessPath": "C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Operati
ons¥¥Tomcat¥¥bin¥¥tomcat8.exe",
            "StartupTime": "2016/03/15 09:18:05",
            "UserName": "SYSTEM"
        },
        {
            "CommandLine": "¥"C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Opera
tions¥¥Manager¥¥bin¥¥SysMonMgr.exe¥"",
            "MonitorProcessID": 1848,
            "Name": "SysMonMgr.exe",
            "ParentProcessID": 476,
            "Priority": 8,
            "ProcessPath": "C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Operati
ons¥¥Manager¥¥bin¥¥SysMonMgr.exe",
            "StartupTime": "2016/03/15 19:12:40",
            "UserName": "SYSTEM"
        },
        {
            "CommandLine": "¥"C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Opera
tions¥¥Svc¥¥bin¥¥SysMonSvc.exe¥" ",
            "MonitorProcessID": 3224,
            "Name": "SysMonSvc.exe",
            "ParentProcessID": 2360,
            "Priority": 8,
            "ProcessPath": "C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Operati
ons¥¥Svc¥¥bin¥¥SysMonSvc.exe",
            "StartupTime": "2016/03/15 19:12:42",
            "UserName": "Administrator"
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.5 Windows service monitoring

4.5.1 Obtaining the Windows service monitoring tree configuration

1. Process overview

   `Obtain the Windows service monitoring tree information of the specified agent.`

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/ntservice/group/AgentName?ManagerName=ManagerName
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The Windows service monitoring tree configuration has been obtained successfully.`
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Agent	object[]	Array of agent information	-
Agent[n].Name	string	Agent name	Up to 64 characters
Agent[n].NodeID	string	Management ID of the agent	`Eight-digit hexadecimal character`
Agent[n].ServiceGroup	object[]	Array of Windows service groups	
Agent[n].ServiceGroup[m].Name	string	Windows service group name	Up to 64 characters

Parameters	Type	Description	Valid value
Agent[n].ServiceGroup[m].NodeID	string	Management ID of the Windows service group	`Eight-digit hexadecimal character`
Agent[n].ServiceGroup[m].Service	object[]	Windows service object to be monitored	-
Agent[n].ServiceGroup[m].Service[l].Name	string	Windows service display name	Up to 256 characters
Agent[n].ServiceGroup[m].Service[l].ServiceName	string	Windows service name	Up to 256 characters
Agent[n].ServiceGroup[m].Service[l].NodeID	string	Management ID of the service being monitored	`Eight-digit hexadecimal character`
Agent[n].ServiceGroup[m].Service[l].Severity	number	Severity	-
Agent[n].ServiceGroup[m].ServiceGroup	object[]	Array of Windows service groups	This is a recursive structure with the same structure as ServiceGroup object described above.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
GET /umf/fw/ntservice/group/AgentHost HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 01:22:53 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:BFV85nlPWkZzxmO9N+NQghbyRlisOCEHoHgrHl2AEZE=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 338
Date: Wed, 16 Mar 2016 01:18:57 GMT

{
```

```
    "Agent": [
        {
            "Name": "AgentHost",
            "NodeID": "06e7e015",
            "ServiceGroup": [
                {
                    "Name": "NTServiceGroupA",
                    "NodeID": "56e7e053",
                    "Service": [
                        {
                            "Name": "Wfdb_wfdb1",
                            "NodeID": "56e8b32b",
                            "ServiceName": "Wfdb_wfdb1",
                            "Severity": 276
                        }
                    ]
                },
                {
                    "Name": "APServerMonitor",
                    "NodeID": "06e8b3be"
                }
            ]
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.5.2 Obtaining the Windows service monitoring settings

1. Process overview

   Obtain the Windows service monitoring setting information of the specified service group and service.

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/ntservice/monitor/AgentName/NodeID?ManagerName=ManagerName
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the Windows service group to be obtained or the management ID of the Windows service monitoring setting in ***NodeID***.

   If the management ID of the Windows service group is specified in ***NodeID***, all information about monitoring service information located under the specified group is output .

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The Windows service monitoring setting information has been obtained successfully.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified service group or service does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Service	object[]	Array of Windows services to be monitored	-
Service[n].NodeID	string	Management ID of the service being monitored	Eight-digit hexadecimal character
Service[n].Name	string	Windows service display name	Up to 256 characters
Service[n].ServiceName	string	Windows service name	Up to 256 characters
Service[n].Startup	number	Type of startup	1: System 2: Auto 3: Manual 4: Invalid 0: Unknown * 2: Auto for services that do not exist
Service[n].Status	number	Service status	1: Stop 2: Start process is being executed 3: Stop process is being executed 4: Start 5: Restart process is being executed 6: Suspension process is being executed 7: Suspended 0: Unknown
Service[n].LogonName	string	Logon name	Up to 64 characters * Blank characters are specified for services that do not exist
Service[n].Description	string	Service description	Up to 512 characters * Blank characters are specified for services that do not exist
Manager	object	Manager object	-

Parameters	Type	Description	Valid value
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
GET /umf/fw/ntservice/monitor/AgentHost/06e8b3be HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 02:26:02 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:+9lmNG0TKPULdIkvaq99YC5z1vltmM9GtoZyHRjlOgw=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 310
Date: Wed, 16 Mar 2016 02:22:07 GMT

{
    "Service": [
        {
            "Description": "Apache Tomcat 8.0.30 Server - http://tomca
t.apache.org/",
            "LogonName": "LocalSystem",
            "Name": "Apache Tomcat 8.0 ServiceGovernor",
            "NodeID": "06e8c03c",
            "ServiceName": "ServiceGovernor",
            "Startup": 2,
            "Status": 4
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.5.3 Adding the Windows service group

1. Process overview

   Add the Windows service group.

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/ntservice/group/AgentName/NodeID
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the node ID (agent/group) to be added in ***NodeID***.

   Tip

   When specifying the node ID of the agent, use NodeID obtained in "4.5.1 Obtaining the Windows service monitoring tree configuration (page 115)".

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Name	string	Monitoring group name to be added	Not possible	Up to 64 characters * Only group nodes where Windows service monitoring for the child nodes is not set can be added.
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring group has been added successfully.
400	Bad Request	The node to be added is the group node where Windows service monitoring for the child nodes is set. The monitoring group name to be added is not specified. The management ID for objects other than agent/

HTTP status code	Meaning	Description
		group is specified as the node ID (agent/group) to be added.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified node does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	Management ID of the added monitoring group	Eight-digit hexadecimal character
Name	string	Added monitoring group name	Up to 64 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	-
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

* A group with the same name as the existing monitoring group can be registered.

7. Change history

- X-FW-API-Version: 1.0
  - Newly added

8. JSON Example

[Request]

```
POST /umf/fw/ntservice/group/AgentHost/06e7e015 HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 01:19:38 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:7JnAu6y8N/yE3HdBeCn8v1/r5kF18sf/r7QjX8U3oKA=
Host: 192.168.21.4:12080
Content-Length: 58

{
    "Name": "APServerMonitor",
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 125
Date: Wed, 16 Mar 2016 01:15:42 GMT

{
    "Name": "APServerMonitor",
    "NodeID": "06e8b3be",
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.5.4 Deleting the Windows service group

1. Process overview

   Delete the specified Windows service group.
   The Windows service monitoring settings located under the monitoring group are also deleted.

2. HTTP method

   ```
   DELETE
   ```

3. URL

   /umf/fw/ntservice/group/***AgentName***/***NodeID***?ManagerName=***ManagerName***

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the monitoring group to be deleted in ***NodeID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring group has been deleted successfully.

HTTP status code	Meaning	Description
400	Bad Request	The management ID for other groups is specified as the management ID of the monitoring group to be deleted.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified monitoring group does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	Management ID of the deleted monitoring group	Eight-digit hexadecimal character
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

[Request]

```
DELETE /umf/fw/ntservice/group/AgentHost/06e8b3be HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 02:39:48 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:rwdBE++skAKhIJQ1sWleqXN5pgxzBVkVheVpyiZ4TtE=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 100
Date: Wed, 16 Mar 2016 02:35:52 GMT
```

```
{
    "NodeID": "06e8b3be",
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.5.5 Updating the Windows service group

1. Process overview

   `Update the specified Windows service group.`

2. HTTP method

   ```
   PUT
   ```

3. URL

   `/umf/fw/ntservice/group/`***`AgentName`***`/`***`NodeID`***

   Specify the target agent name in ***`AgentName`***. Specify the agent name by using up to 64 characters.

   Specify the node ID (monitoring group node) to be updated in ***`NodeID`***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Name	string	Monitoring group name	Not possible	Up to 64 characters
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The monitoring group has been updated successfully.`

HTTP status code	Meaning	Description
400	Bad Request	The monitoring group name is not specified. The management ID for groups other than the monitoring group is specified as the node ID (monitoring group node) to be updated.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified node does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	Management ID of the updated monitoring group	Eight-digit hexadecimal character
Name	string	Updated monitoring group name	Up to 64 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

```
* A group with the same name as the existing monitoring group can be
registered.
* If the monitoring group information (Name) is not updated, the
monitoring group information (NodeID, Name) is not output.
* If the same NodeID is specified for more than one setting, the
setting registered later is valid, and an error does not occur.
```

7. Change history

- X-FW-API-Version: 1.0
  - Newly added

8. JSON Example

[Request]

```
PUT /umf/fw/ntservice/group/AgentHost/56e7e053 HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 01:26:20 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:BfnNuIvAY6hoMo3kvEuk1xVsi3UAfzsNsnYKIK91Ou8=
Host: 192.168.21.4:12080
Content-Length: 52
```

```
{
    "Name": "DBMonitor",
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 119
Date: Wed, 16 Mar 2016 01:22:24 GMT

{
    "Name": "DBMonitor",
    "NodeID": "56e7e053",
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.5.6 Adding the Windows service monitoring settings

1. Process overview

   `Add the Windows service monitoring settings under the specified Windows service group.`

2. HTTP method

   ```
   POST
   ```

3. URL

   `/umf/fw/ntservice/monitor/`***`AgentName`***`/`***`NodeID`***`/add`

   Specify the target agent name in ***`AgentName`***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the Windows service group to be monitored in ***`NodeID`***.

   * You can specify a group node to be added only if that node does not have any child node which is set as a group node.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Service	object[]	Array of Windows services to be monitored	Not possible	-
Service[n]Name	string	Windows service display name	Not possible	`Up to 256 characters` `* To be updated to the actual service display name at the start of monitoring`
Service[n]ServiceName	string	Windows service name	Not possible	Up to 256 characters
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The Windows service monitoring setting has been added successfully.`

400	Bad Request	`The node to be added is the group node where the group nodes are set as child nodes.`
		`The Windows service display name is not specified.`
		`The Windows service name is not specified.`
		`The management ID for groups other than the Windows service group is specified as the management ID of the Windows service group to be monitored.`

404	Not Found	The specified agent does not exist. The specified agent is being stopped. The management ID of the specified Windows service group to be monitored does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	Management ID of the Windows service group to be added	`Eight-digit hexadecimal character`
Service	object[]	Array of Windows service information to be added	* Only the added Windows services are enumerated.
Service[n].NodeID	string	Management ID of the Windows service to be added	`Eight-digit hexadecimal character`
Service[n].Name	string	Windows service display name	Up to 256 characters
Service[n].ServiceName	string	Windows service name	Up to 256 characters
Service[n].Startup	number	Type of startup	<table><tr><th>Setting value</th><th>Description</th></tr><tr><td>1</td><td>System</td></tr><tr><td>2</td><td>Auto</td></tr><tr><td>3</td><td>Manual</td></tr><tr><td>4</td><td>Invalid</td></tr><tr><td>0</td><td>Unknown</td></tr></table> `* 2: Auto for services that do not exist`
Service[n].Existence	boolean	Whether the service exists or not in the agent when adding	false: Does not exist. true: Exists.
Manager	object	Manager object	-
Manager.Name	string	Manager name	-
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

`* If overlapping with the service names (ServiceName) that have already been set, the overlapping name is skipped and an error does not occur.`

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

`Example: Adding the monitoring definition setting of the "ServiceGovernor" to the Windows service group of the agent "AgentHost”`

a. `Obtain the topology tree configuration, and confirm the Agent name to be added.`

For details, see "Obtaining the topology tree configuration (page 38)".

b. Obtain the Windows service monitoring tree configuration, and confirm the management ID of the Windows service group to be the destination to which the monitoring definition setting is added.

   For details, see "Obtaining the Windows service monitoring tree configuration (page 115)".

c. Obtain the Windows service list, and confirm the Windows service display name and Windows service name to which the monitoring definition setting is added.

   For details, see "Obtaining the Windows service list (page 133)".

d. Add the Windows service monitoring definition setting.
   Specify the following parameters, and execute the request.

   - Specify "AgentHost" obtained when obtaining the topology tree configuration as AgentName of the URL of this API.
   - Specify the management ID of the Windows service group obtained when obtaining the Windows service monitoring tree configuration as NodeID of the URL of this API.
   - Specify the Windows service display name and Windows service name obtained when obtaining the Windows service list in the request Json.

[Request]

```
POST /umf/fw/ntservice/monitor/AgentHost/06e8b3be/add HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 02:12:55 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:qS4zBfEBNOTzmx638fuwtrRVPLsXAsrrX/W1oAE5KlE=
Host: 192.168.21.4:12080
Content-Length: 122

{
    "Service": [
        {
            "Name": "Apache Tomcat 8.0 ServiceGovernor",
            "ServiceName": "ServiceGovernor"
        }
    ],
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 238
Date: Wed, 16 Mar 2016 02:09:00 GMT
```

```
{
    "NodeID": "06e8b3be",
    "Service": [
        {
            "Existence": true,
            "Name": "Apache Tomcat 8.0 ServiceGovernor",
            "NodeID": "06e8c03c",
            "ServiceName": "ServiceGovernor",
            "Startup": 2
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.5.7 Deleting the Windows service monitoring settings

1. Process overview

   `Delete the specified Windows service monitoring settings.`

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/ntservice/monitor/AgentName/NodeID/remove
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the Windows service group including the services to be deleted in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Service	object[]	Array of management IDs of the Windows services to be deleted	Not possible	

Parameters	Type	Description	Omission	Valid value
Service[n].NodeID	string	Management ID of the Windows service to be deleted	Not possible	`Eight-digit hexadecimal character`
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The Windows service monitoring setting has been deleted successfully.`
400	Bad Request	`The management ID of the Windows service is not specified.` `The management ID for groups other than the Windows service group is specified as the management ID of the Windows service group including the services to be deleted.`
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The management ID of the specified group does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	Management ID of the Windows service group including the services to be deleted	`Eight-digit hexadecimal character`
Service	object[]	Array of Windows services to be deleted	* Only the deleted Windows services are enumerated.
Service[n].NodeID	string	Management ID of the Windows service to be deleted	`Eight-digit hexadecimal character`
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-

Parameters	Type	Description	Valid value
Manager.StatusCode	number	Internal error code	-

* NodeID of a service that does not exist is skipped, and an error does not occur.

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

Example: Deleting the monitoring definition setting of the "Wfdb_wfdb1" from the Windows service group of the agent "AgentHost"

a. Obtain the topology tree configuration, and confirm the Agent name to be deleted.

   For details, see "Obtaining the topology tree configuration (page 38)".

b. Confirm the management ID of the Windows service group including the Windows service to be deleted and the management ID of the Windows service to be deleted.
   Obtain the Windows service monitoring tree configuration, and obtain the management ID of the Windows service group that manages the Windows services to be deleted and the management ID of the Windows service to be deleted.

   For details, see "Obtaining the Windows service monitoring tree configuration (page 115)".

c. Delete the Windows service monitoring definition setting.
   Specify the following parameters, and execute the request.
   - Specify "AgentHost" obtained when obtaining the topology tree configuration as AgentName of the URL of this API.
   - Specify the management ID of the Windows service group obtained when obtaining the Windows service monitoring tree configuration as NodeID of the URL of this API.
   - Specify the management ID of the Windows service to be deleted obtained when obtaining the Windows service monitoring tree configuration in the request JSON.

[Request]

```
POST /umf/fw/ntservice/monitor/AgentHost/56e7e053/remove HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 02:34:49 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:eja9k6x5fqnwsLCD9ZLZUuIHZ8cMgv4/Lg7NtPKJ/+0=
Host: 192.168.21.4:12080
Content-Length: 67

{
    "Service": [
        {
            "NodeID": "56e8b32b"
        }
    ],
```

```
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 134
Date: Wed, 16 Mar 2016 02:30:54 GMT

{
    "NodeID": "56e7e053",
    "Service": [
        {
            "NodeID": "56e8b32b"
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.5.8 Obtaining the Windows service list

1. Process overview

   `Obtain the Windows service list that can monitor the specified Windows service group.`

2. HTTP method

   ```
   GET
   ```

3. URL

   `/umf/fw/ntservice/object/`***`AgentName`***`/`***`NodeID`***`?ManagerName=`***`ManagerName`***

   Specify the target agent name in ***`AgentName`***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the Windows service group to be obtained in ***`NodeID`***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The Windows service list has been obtained successfully.
404	Not Found	The agent name is not specified. The specified agent is being stopped. The specified host does not exist. The specified manager does not exist. The management ID for groups other than the Windows service group is specified as the management ID of the Windows service group to be obtained.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Service	object[]	Array of Windows services	-
Service[n].Name	string	Windows service display name	Up to 256 characters
Service[n].ServiceName	string	Windows service name	Up to 256 characters
Service[n].NodeID	string	Management ID of the service being monitored	Eight-digit hexadecimal character Secure a space for an object not to be monitored.
Service[n].Startup	number	Type of startup	1: System 2: Auto 3: Manual 4: Invalid 0: Unknown
Service[n].Status	number	Service status	1: Stop 2: Start process is being executed 3: Stop process is being executed 4: Start 5: Restart process is being executed 6: Suspension process is being executed 7: Suspended 0: Unknown
Service[n].LogonName	string	Logon name	Up to 64 characters
Service[n].Description	string	Service description	Up to 512 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/ntservice/object/AgentHost/06e8b3be HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 01:34:45 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:CYR33UZPnUucupVJNIdQY+p3+IR+UMi7jGDFK+AUfl0=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Transfer-Encoding: chunked
Date: Wed, 16 Mar 2016 01:30:49 GMT

{
    "Service": [
        {
            "Description": "",
            "LogonName": "LocalSystem",
            "Name": "MasterScope UMF Operations Manager_1",
            "NodeID": "",
            "ServiceName": "MasterScope UMF Operations Manager_1",
            "Startup": 2,
            "Status": 4
        },
        {
            "Description": "Apache Tomcat 8.0.30 Server - http://tomca
t.apache.org/",
            "LogonName": "LocalSystem",
            "Name": "Apache Tomcat 8.0 ServiceGovernor",
            "NodeID": "",
            "ServiceName": "ServiceGovernor",
            "Startup": 2,
            "Status": 4
        },
        {
            "Description": "",
            "LogonName": "LocalSystem",
            "Name": "MasterScope UMF Operations Agent_1",
            "NodeID": "",
            "ServiceName": "MasterScope UMF Operations Agent_1",
            "Startup": 2,
            "Status": 4
        },
```

```
        {
            "Description": "",
            "LogonName": "LocalSystem",
            "Name": "Wfdb_wfdb1",
            "NodeID": "",
            "ServiceName": "Wfdb_wfdb1",
            "Startup": 2,
            "Status": 4
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6 Performance monitoring

4.6.1 Obtaining the performance monitoring tree configuration

1. Process overview

   `Obtain the performance monitoring list of the specified agent.`

2. HTTP method

   ```
   GET
   ```

3. URL

   `/umf/fw/performance/monitor/`***`AgentName`***`?ManagerName=`***`ManagerName`***

   Specify the target agent name in ***`AgentName`***. Specify the agent name by using up to 64 characters.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The performance monitoring tree configuration has been obtained successfully.`
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Agent	object[]	Array of the agent information	-
Agent[n].Name	string	Agent name	Up to 64 characters
Agent[n].NodeID	string	* Node ID	`Eight-digit hexadecimal character`
Agent[n].Object	object[]	Array of the object information being monitored	-
Agent[n].Object[m].NodeID	string	Management ID of the object being monitored	`Eight-digit hexadecimal character`
Agent[n].Object[m].ObjectType	number	Object type	`0: With instance` `1: Without instance`
Agent[n].Object[m].Name	string	Object name	Up to 128 characters
Agent[n].Object[m].ServiceID	number	ID of the collection service that provides the counter	-
Agent[n].Object[m].Instance	object[]	Array of the instance information being monitored	* To be output only if the object type is set to 0.
Agent[n].Object[m].Instance[l].NodeID	string	Management ID of the instance being monitored	`Eight-digit hexadecimal character`
Agent[n].Object[m].Instance[l].Name	string	Instance name	Up to 128 characters
Agent[n].Object[m].Instance[l].Counter	object[]	Array of the counter information being monitored	-
Agent[n].Object[m].Instance[l].Counter[o].NodeID	string	Management ID of the counter being monitored	`Eight-digit hexadecimal character`
Agent[n].Object[m].Instance[l].Counter[o].Name	string	Counter name	Up to 128 characters
Agent[n].Object[m].Instance[l].Counter[o].Severity	number	Severity	-
Agent[n].Object[m].Counter	object[]	Array of the counter information being monitored	-
Agent[n].Object[m].Counter[l].NodeID	string	Management ID of the counter being monitored	`Eight-digit hexadecimal character`
Agent[n].Object[m].Counter[l].Name	string	Counter name	Up to 128 characters
Agent[n].Object[m].Counter[l].Severity	number	Severity	-
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name

Parameters	Type	Description	Valid value
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/performance/monitor/AgentHost HTTP/1.1
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 04:05:06 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:pAEovNPjViJ+cYu0S3Ii3XXRvQESaZ3iCvVyWkEFNhI=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 514
Date: Fri, 18 Mar 2016 04:01:13 GMT

{
    "Agent": [
        {
            "Name": "AgentHost",
            "NodeID": "06e7e015",
            "Object": [
                {
                    "Instance": [
                        {
                            "Counter": [
                                {
                                    "Name": "% User Time",
                                    "NodeID": "56e911ba",
                                    "Severity": 277
                                }
                            ],
                            "Name": "_Total",
                            "NodeID": "56e911b4"
                        }
                    ],
                    "Name": "Processor",
                    "NodeID": "56e7e065",
                    "ObjectType": 0,
```

```
                    "ServiceID": 21
                },
                {
                    "Instance": [
                        {
                            "Name": "postgres.exe",
                            "NodeID": "56eb8dc9"
                        }
                    ],
                    "Name": "Extend Process",
                    "NodeID": "06e92882",
                    "ObjectType": 0,
                    "ServiceID": 106
                }
            ]
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.2 Obtaining the monitoring object information

1. Process overview

   `Obtain the monitoring object information of the specified agent.`

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/performance/object/AgentName?ManagerName=ManagerName
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The monitoring object settings have been obtained successfully.`
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified manager does not exist.

HTTP status code	Meaning	Description
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Object	object[]	Array of the monitoring object information	-
Object[n].NodeID	string	Management ID of the monitoring object	Eight-digit hexadecimal character An empty string is set if the object is not monitored.
Object[n].ObjectType	number	Object type	0: With instance 1: Without instance
Object[n].Name	string	Object name	-
Object[n].ServiceID	number	ID of the collection service that provides the counter	-
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history

- X-FW-API-Version: 1.0
  - Newly added

8. JSON Example

[Request]

```
GET /umf/fw/performance/object/AgentHost HTTP/1.1
x-fw-api-version: 1.0
Date: Wed, 16 Mar 2016 08:04:01 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:i2xoocBPs+Q2ALrGo0nGElaTfbfXBvMhOZaou1MG290=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
```

```
Content-Type: application/json;charset=UTF-8
Transfer-Encoding: chunked
Date: Wed, 16 Mar 2016 08:00:07 GMT

{
    "Object": [
        {
            "Name": "Database",
            "NodeID": "",
            "ObjectType": 0,
            "ServiceID": 21
        },
        {
            "Name": "LogicalDisk",
            "NodeID": "",
            "ObjectType": 0,
            "ServiceID": 21
        },
        {
            "Name": "PhysicalDisk",
            "NodeID": "",
            "ObjectType": 0,
            "ServiceID": 21
        },
        {
            "Name": "Server",
            "NodeID": "",
            "ObjectType": 1,
            "ServiceID": 21
        },
        {
            "Name": "Browser",
            "NodeID": "",
            "ObjectType": 1,
            "ServiceID": 21
        },
        {
            "Name": "Cache",
            "NodeID": "",
            "ObjectType": 1,
            "ServiceID": 21
        },
        {
            "Name": "Processor",
            "NodeID": "56e7e065",
            "ObjectType": 0,
            "ServiceID": 21
        },
        {
            "Name": "Memory",
            "NodeID": "",
            "ObjectType": 1,
            "ServiceID": 21
        },
        {
            "Name": "Objects",
            "NodeID": "",
            "ObjectType": 1,
```

```
            "ServiceID": 21
        },
        {
            "Name": "System",
            "NodeID": "",
            "ObjectType": 1,
            "ServiceID": 21
        },
        {
            "Name": "Process",
            "NodeID": "",
            "ObjectType": 0,
            "ServiceID": 21
        },
        {
            "Name": "Thread",
            "NodeID": "",
            "ObjectType": 0,
            "ServiceID": 21
        },
        {
            "Name": "VM Memory",
            "NodeID": "",
            "ObjectType": 1,
            "ServiceID": 21
        },
        {
            "Name": "Extend Process",
            "NodeID": "",
            "ObjectType": 0,
            "ServiceID": 106
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.3 Adding the monitoring object settings

1. Process overview

   `Add the monitoring object settings to the specified agent.`

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/performance/object/AgentName/add
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Object	object[]	Array of the object information	Not possible	-
Object[n].Name	string	Object name to be added	Not possible	Up to 128 characters
Object[n].ServiceID	number	ID of the collection service that provides the counter	Not possible	-
Object[n].ObjectType	number	Object type	Not possible	`0: With instance` `1: Without instance`
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The monitoring object settings have been added successfully.`

400	Bad Request	`The object information is not specified.`
		`The object name to be added is not specified.`
		`The ID of the collection service that provides the counter is not specified.`
		`The object type is not specified.`

404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Object	object[]	Array of the object information to be added	* Only the added objects are enumerated.
Object[n].NodeID	string	Management ID of the object to be added	`Eight-digit hexadecimal character`
Object[n].Name	string	Object name	Up to 128 characters
Object[n].Existence	boolean	Whether the object exists or not in the agent when adding	false: Does not exist. true: Exists.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

```
* If more than one request of the same specified object name exists,
the setting registered later is valid.
* If overlapping with the object names that have already been set,
the overlapping request is skipped and an error does not occur.
* The objects that do not exist are also registered.
```

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
POST /umf/fw/performance/object/AgentHost/add HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 04:34:39 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:vR2J23LQnFuSCHAHmGTvi0v/x46oUx8qU0nyZ5NzRMg=
Host: 192.168.21.4:12080
Content-Length: 101

{
    "Object": [
        {
            "Name": "LogicalDisk",
            "ObjectType": 0,
            "ServiceID": 21
        }
    ],
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 151
Date: Fri, 18 Mar 2016 04:30:47 GMT

{
    "Object": [
        {
            "Existence": true,
            "Name": "LogicalDisk",
            "NodeID": "06eb8477"
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.4 Deleting the monitoring object settings

1. Process overview

   `Delete the monitoring object settings located under the specified agent.`

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/performance/object/AgentName/remove
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-

Parameters	Type	Description	Omission	Valid value
Object	object[]	Array of the objects to be deleted	Not possible	-
Object[n].NodeID	string	Management ID of the object to be deleted	Not possible	`Eight-digit hexadecimal character`
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The monitoring object settings have been deleted successfully.`
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Object	object[]	Array of the object information to be deleted	* Only the deleted objects are enumerated.
Object[n].NodeID	string	Management ID of the object to be deleted	`Eight-digit hexadecimal character`
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

```
* If the instance/counter being monitored is set under a deleted
object, the lower instance/counter is deleted (deleted from the tree
configuration) while it is being monitored.
* NodeID that does not exist is skipped and an error does not occur.
```

7. Change history

- X-FW-API-Version: 1.0
  - Newly added

8. JSON Example

[Request]

```
POST /umf/fw/performance/object/AgentHost/remove HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 05:02:08 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:WhvWQJrRhb0dpiwD/RdFkzhfdHJexaUMeSZTaye+lbU=
Host: 192.168.21.4:12080
Content-Length: 66

{
    "Object": [
        {
            "NodeID": "56e7e065"
        }
    ],
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 113
Date: Fri, 18 Mar 2016 04:58:15 GMT

{
    "Object": [
        {
            "NodeID": "56e7e065"
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.5 Obtaining the monitoring instance information

1. Process overview

```
Obtain the list of the instance that can be monitored of the
specified monitoring object.
In the object information obtained when obtaining the performance
monitoring tree configuration, only the object in which
"Agent[n].Object[m].ServiceID" is set to 21 must be obtained.
```

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/performance/instance/AgentName/NodeID?ManagerName=ManagerName
```

Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the management ID of the object to be obtained as ***NodeID***.

If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The instance information has been obtained successfully.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified object to be monitored does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Instance	object[]	Instance information being monitored	-
Instance[n].NodeID	string	Management ID of the instance being monitored	Eight-digit hexadecimal character An empty string is set if the instance is not monitored.
Instance[n].Name	string	Instance name	Up to 128 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-

Parameters	Type	Description	Valid value
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/performance/instance/AgentHost/06eb8477 HTTP/1.1
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 04:36:54 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:5isl9i5EgUi+6jl5JGwIb6TERHqILxRwFMgqI8Te+8I=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 149
Date: Fri, 18 Mar 2016 04:33:02 GMT

{
    "Instance": [
        {
            "Name": "_Total",
            "NodeID": ""
        },
        {
            "Name": "C:",
            "NodeID": ""
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.6 Adding the monitoring instance settings

1. Process overview

```
Add the monitoring instance settings to the specified monitoring
object.
(The higher objects must be monitored here.)
In the object information obtained when obtaining the performance
monitoring tree configuration, only the object in which
"Agent[n].Object[m].ServiceID" is set to 21 must be added.
```

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/performance/instance/AgentName/NodeID/add
```

Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the object ID to be added as ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Instance	object[]	Array of the instance information to be added	Not possible	-
Instance[n].Name	string	Name of the instance to be added	Not possible	Up to 128 characters
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring instance settings have been added successfully.
400	Bad Request	The instance name to be added is not specified. The resource object out of the Performance service management target is specified.
404	Not Found	The specified agent does not exist.

HTTP status code	Meaning	Description
		The specified agent is being stopped. The specified object does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	Object ID to be added	Eight-digit hexadecimal character
Instance	object[]	Array of the instance information to be added	* Only the added instances are enumerated.
Instance[n].NodeID	string	Management ID of the instance to be added	Eight-digit hexadecimal character
Instance[n].Name	string	Instance name	Up to 128 characters
Instance[n].Existence	boolean	Whether the instance exists or not in the object when adding	false: Does not exist. true: Exists.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

```
* If more than one request of the same specified instance name
exists, the setting registered later is valid.
* If overlapping with the instances that have already been set, the
overlapping request is skipped and an error does not occur.
* The instances that do not exist are also registered.
```

7. Change history

- X-FW-API-Version: 1.0
  - Newly added

8. JSON Example

[Request]

```
POST /umf/fw/performance/instance/AgentHost/06eb8477/add HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 04:39:02 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:+8mlDQLPw2RJb91qUJtcA7r3DTzMIEjlzikogoRvthA=
Host: 192.168.21.4:12080
Content-Length: 65
```

```
{
    "Instance": [
        {
            "Name": "_Total"
        }
    ],
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 168
Date: Fri, 18 Mar 2016 04:35:10 GMT

{
    "NodeID": "06eb8477",
    "Instance": [
        {
            "Existence": true,
            "Name": "_Total",
            "NodeID": "06eb857e"
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.7 Deleting the monitoring instance settings

1. Process overview

   `Delete the specified monitoring instance settings.`

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/performance/instance/AgentName/NodeID/remove
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the parent node ID of the instance to be deleted in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Instance	object[]	Array of the instance information to be deleted	Not possible	-
Instance[n].NodeID	string	Management ID of the instance to be deleted	Not possible	`Eight-digit hexadecimal character`
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The monitoring instance settings have been deleted successfully.`
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The parent node ID of the specified instance to be deleted does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	Parent node ID of the instance to be deleted	`Eight-digit hexadecimal character`
Instance	object[]	Array of the instance information to be deleted	* Only the deleted instances are enumerated.
Instance[n].NodeID	string	Management ID of the instance to be deleted	`Eight-digit hexadecimal character`
Manager	object	Manager object	-

Parameters	Type	Description	Valid value
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

```
* If the counter being monitored is set under a deleted instance, the
lower counter is deleted (deleted from the tree configuration) while
it is being monitored.
* NodeID of the instance that does not exist is skipped and an error
does not occur.
```

7. Change history

- X-FW-API-Version : 1.0

  - Newly added

8. JSON Example

[Request]

```
POST /umf/fw/performance/instance/AgentHost/56e7e065/remove HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 04:59:50 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:3wgUd0KAlR0oFB+/MlkHb13zs4BUIdVRS2WOtso2FE0=
Host: 192.168.21.4:12080
Content-Length: 70

{
    "Instance": [
        {
            "NodeID": "56e911b4"
        }
    ],
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 135
Date: Fri, 18 Mar 2016 04:55:57 GMT

{
    "NodeID": "56e7e065",
    "Instance": [
```

```
        {
            "NodeID": "56e911b4"
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.8 Obtaining the monitoring counter information

1. Process overview

   Obtain the list of the counter that can be monitored of the object or instance under the specified agent.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/performance/counter/AgentName/NodeID?ManagerName=ManagerName
```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the object ID or instance ID to be obtained in ***NodeID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring counter information list has been obtained successfully.
400	Bad Request	A management ID other than the object/instance is specified as the object ID or instance ID to be obtained.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified object or instance to be monitored does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Counter	object[]	Array of the monitoring counter information	-
Counter[n].NodeID	string	Management ID of the monitoring counter	Eight-digit hexadecimal character Secure a space for the counter not to be monitored.
Counter[n].Name	string	Counter name	Up to 128 characters
Counter[n].Description	string	Counter description	Up to 1024 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

[Request]

```
GET /umf/fw/performance/counter/AgentHost/06eb857e HTTP/1.1
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 04:41:16 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:vZPZjGJ2cdGASyXGlHoSNILRpFc5tTzgmbF4Hog6uT0=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 5101
Date: Fri, 18 Mar 2016 04:37:24 GMT

{
    "Counter": [
        {
            "Description": "% Free Space is the percentage of total us
able space on the selected logical disk drive that was free.",
            "Name": "% Free Space",
            "NodeID": ""
```

```
        },
        {
            "Description": "Free Megabytes displays the unallocated sp
ace, in megabytes, on the disk drive in megabytes. One megabyte is equ
al to 1,048,576 bytes.",
            "Name": "Free Megabytes",
            "NodeID": ""
        },
        {
            "Description": "Current Disk Queue Length is the number o
f requests outstanding on the disk at the time the performance data i
s collected. It also includes requests in service at the time of the c
ollection. This is a instantaneous snapshot, not an average over the t
ime interval. Multi-spindle disk devices can have multiple requests th
at are active at one time, but other concurrent requests are awaiting
service. This counter might reflect a transitory high or low queue len
gth, but if there is a sustained load on the disk drive, it is likely
that this will be consistently high. Requests experience delays propor
tional to the length of this queue minus the number of spindles on th
e disks. For good performance, this difference should average less tha
n two.",
            "Name": "Current Disk Queue Length",
            "NodeID": ""
        },
        {
            "Description": "% Disk Time is the percentage of elapsed t
ime that the selected disk drive was busy servicing read or write requ
ests.",
            "Name": "% Disk Time",
            "NodeID": ""
        },
        {
            "Description": "% Disk Read Time is the percentage of elap
sed time that the selected disk drive was busy servicing read requests
.",
            "Name": "% Disk Read Time",
            "NodeID": ""
        },
        {
            "Description": "% Disk Write Time is the percentage of ela
psed time that the selected disk drive was busy servicing write reques
ts.",
            "Name": "% Disk Write Time",
            "NodeID": ""
        },
        {
            "Description": "Disk Transfers/sec is the rate of read an
d write operations on the disk.",
            "Name": "Disk Transfers/sec",
            "NodeID": ""
        },
        {
            "Description": "Disk Reads/sec is the rate of read operati
ons on the disk.",
            "Name": "Disk Reads/sec",
            "NodeID": ""
        },
        {
```

```
            "Description": "Disk Writes/sec is the rate of write opera
tions on the disk.",
            "Name": "Disk Writes/sec",
            "NodeID": ""
        },
        {
            "Description": "Disk Bytes/sec is the rate bytes are trans
ferred to or from the disk during write or read operations.",
            "Name": "Disk Bytes/sec",
            "NodeID": ""
        },
        {
            "Description": "Disk Read Bytes/sec is the rate at which b
ytes are transferred from the disk during read operations.",
            "Name": "Disk Read Bytes/sec",
            "NodeID": ""
        },
        {
            "Description": "Disk Write Bytes/sec is rate at which byte
s are transferred to the disk during write operations.",
            "Name": "Disk Write Bytes/sec",
            "NodeID": ""
        },
        {
            "Description": "% Idle Time reports the percentage of tim
e during the sample interval that the disk was idle.",
            "Name": "% Idle Time",
            "NodeID": ""
        },
        {
            "Description": "Split IO/Sec reports the rate at which I/O
s to the disk were split into multiple I/Os. A split I/O may result fr
om requesting data of a size that is too large to fit into a single I/
O or that the disk is fragmented.",
            "Name": "Split IO/Sec",
            "NodeID": ""
        },
        {
            "Description": "Showing the percentage of the allocated sp
ace.",
            "Name": "% Used Ex",
            "NodeID": ""
        },
        {
            "Description": "Showing the size of allocated space in kil
obytes(KB).",
            "Name": "Used Ex",
            "NodeID": ""
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "en-manager2",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.9 Adding the monitoring counter settings

1. Process overview

```
Add the monitoring counter settings to the specified monitoring
instances.
(The higher objects must be monitored here.)
```

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/performance/counter/AgentName/NodeID/add
```

Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the ID (object ID or instance ID) of the parent node to be added in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Counter	object[]	Array of the counter information to be added	Not possible	-
Counter[n].Name	string	Counter name to be added	Not possible	Up to 128 characters

Counter[n].Log	number	Log specification		`0: Not recorded`
				`1: Recorded`
				Default value:
				0: Not recorded

Counter[n].Scale	number	Counter multiplication factor		x -10: 0.0000000001 x -9: 0.000000001 x -8: 0.00000001 x -7: 0.0000001 x -6: 0.000001 x -5: 0.00001 x -4: 0.0001 x -3: 0.001 x -2: 0.01

Parameters	Type	Description	Omission	Valid value
				x -1: 0.1 0: Not multiplied x 1: 10 x 2: 100 x 3: 1000 x 4: 10000 x 5: 100000 x 6: 1000000 x 7: 10000000 x 8: 100000000 x 9: 1000000000 Default value: 0: Same size
Counter[n].Color	number	Display color		Decimal RGB value Default value: 0: Black
Counter[n].Width	number	Display line width		1: Narrow 2: Medium 3: Wide Default value: 1: Narrow
Counter[n].MonitorType	number	Monitoring type		0: Sequential 1: Continuous 2: Average Default value: 0: Sequential
Counter[n].Count	number	Judgment count		Values within the range of 2 to 16 To be specified if the monitoring type is not set to "Sequential". Displays the continuous count if the monitoring type is set to "Continuous". Displays the average count if the monitoring type is set to "Average". Default value: Twice
Counter[n].UpperError	number	Abnormal upper limit monitoring		0: Not monitored 1: Monitored Default value: 0: Not monitoring
Counter[n].UpperErrorLimit	number	Threshold of abnormal upper limit		Values within the range from -99999999999999 to 999999999999999 Default value: 0

Parameters	Type	Description	Omission	Valid value
Counter[n].UpperWarning	number	Upper limit warning monitoring		0: Not monitored 1: Monitored Default value: 0: Not monitored
Counter[n].UpperWarningLimit	number	Threshold of upper limit warning		Values within the range from -99999999999999 to 999999999999999 Default value: 0
Counter[n].LowerWarning	number	Monitoring lower limit warning		0: Not monitored 1: Monitored Default value: 0: Not monitored
Counter[n].LowerWarningLimit	number	Threshold lower limit warning		Values within the range from -99999999999999 to 999999999999999 Default value: 0
Counter[n].LowerError	number	Abnormal lower limit monitoring		0: Not monitored 1: Monitored Default value: 0: Not monitoring
Counter[n].LowerErrorLimit	number	Abnormal threshold lower limit		Values within the range from -99999999999999 to 999999999999999 Default value: 0
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

```
* Other than the values not to be monitored, each value of the upper
limit error threshold, upper warning threshold, lower warning
threshold, and lower limit error threshold is valid only if the
following relationship is met.
If an invalid value is set, a request error occurs.
```

Upper limit error threshold > Upper warning threshold > Lower warning threshold > lower limit error threshold

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring counter settings have been added successfully.
400	Bad Request	The counter name to be monitored is not specified. A management ID other than the parent node ID is specified as the ID (object ID or instance ID) of the parent node to be added.

HTTP status code	Meaning	Description
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified object or instance ID to be monitored does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	(Object or instance) ID of parent node to be added	`Eight-digit hexadecimal character`
Counter	object[]	Array of the counter information to be added	* Only the added counters are enumerated.
Counter[n].NodeID	string	Management ID of the counter to be added	`Eight-digit hexadecimal character`
Counter[n].Name	string	Counter name	Up to 128 characters
Counter[n].Log	number	Log specification	`0: Not recorded` `1: Recorded`
Counter[n].Scale	number	Counter multiplication factor	x -10: 0.0000000001 x -9: 0.000000001 x -8: 0.00000001 x -7: 0.0000001 x -6: 0.000001 x -5: 0.00001 x -4: 0.0001 x -3: 0.001 x -2: 0.01 x -1: 0.1 0: Not multiplied x 1: 10 x 2: 100 x 3: 1000 x 4: 10000 x 5: 100000 x 6: 1000000 x 7: 10000000 x 8: 100000000 x 9: 1000000000
Counter[n].Color	number	Display color	Decimal RGB value
Counter[n].Width	number	Display line width	1: Narrow 2: Medium 3: Wide

Parameters	Type	Description	Valid value
Counter[n].MonitorType	number	Monitoring type	0: Sequential 1: Continuous 2: Average
Counter[n].Count	number	Judgment count	Values within the range of 2 to 16 To be specified if the monitoring type is not set to "Sequential". Displays the continuous count if the monitoring type is set to "Continuous". Displays the average count if the monitoring type is set to "Average".
Counter[n].UpperError	number	Abnormal upper limit monitoring	0: Not monitored 1: Monitored
Counter[n].UpperErrorLimit	number	Threshold of abnormal upper limit	`Upper limit error monitoring: Output if 1 (Monitoring) is set.` Values within the range from -99999999999999 to 999999999999999
Counter[n].UpperWarning	number	Upper limit warning monitoring	0: Not monitored 1: Monitored
Counter[n].UpperWarningLimit	number	Threshold of upper limit warning	`Upper warning monitoring: Output if 1 (Monitoring) is set.` Values within the range from -99999999999999 to 999999999999999
Counter[n].LowerWarning	number	Monitoring lower limit warning	0: Not monitored 1: Monitored
Counter[n].LowerWarningLimit	number	Threshold lower limit warning	`Lower warning monitoring: Output if 1 (Monitoring) is set.` Values within the range from -99999999999999 to 999999999999999
Counter[n].LowerError	number	Abnormal lower limit monitoring	0: Not monitored 1: Monitored
Counter[n].LowerErrorLimit	number	Abnormal threshold lower limit	`Lower limit error monitoring: Output if 1 (Monitoring) is set.` Values within the range from -99999999999999 to 999999999999999
Counter[n].Existence	boolean	Whether the counter exists or not in the object or instance when adding	false: Does not exist. true: Exists.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-

Parameters	Type	Description	Valid value
Manager.StatusCode	number	Internal error code	-

```
* If the same counter name is specified as more than one setting, the
setting registered later is valid.
* If overlapping with the counters that have already been set, the
overlapping counter is skipped and an error does not occur.
* The counters that do not exist are also registered.
```

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

```
Example: Adding the monitoring definition setting of the "% Processor
Time" counter to the instance of the agent "AgentHost"
```

a. Obtain the topology tree configuration, and confirm the Agent name to be added.

   For details, see "Obtaining the topology tree configuration (page 38)".

b. Obtain the performance monitoring tree configuration, and confirm the management ID of the instance to be the destination to which the monitoring definition is added.

   For details, see "Obtaining the performance monitoring tree configuration (page 136)".

c. Obtain the monitoring counter information, and confirm the counter name to be added as the monitoring definition setting.

   For details, see "Obtaining the monitoring counter information (page 155)".

d. Add the monitoring counter definition setting.
   Specify the following parameters, and execute the request.
   - Specify "AgentHost" obtained when obtaining the topology tree configuration as AgentName of the URL of this API.
   - Specify the management ID of the instance obtained when obtaining the performance monitoring tree configuration as NodeID of the URL of this API.
   - Specify "% Processor Time" obtained when obtaining the monitoring counter information in the request Json.

[Request]

```
POST /umf/fw/performance/counter/AgentHost/56e911b4/add HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 08:38:47 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:rpnx/jZ7AcDPeFynSsfL5Uov8SDea7KmV1ioSgGJWeM=
Host: 192.168.21.4:12080
Content-Length: 75

{
    "Counter": [
        {
            "Name": "% Processor Time"
```

```
        }
    ],
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 295
Date: Fri, 18 Mar 2016 08:34:55 GMT

{
    "NodeID": "56e911b4",
    "Counter": [
        {
            "Color": 0,
            "Existence": true,
            "Log": 0,
            "LowerError": 0,
            "LowerWarning": 0,
            "MonitorType": 0,
            "Name": "% Processor Time",
            "NodeID": "06ebbdaf",
            "Scale": 0,
            "UpperError": 0,
            "UpperWarning": 0,
            "Width": 1
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.10 Updating the monitoring counter settings

1. Process overview

   `Update the specified monitoring counter settings.`

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/performance/counter/AgentName/NodeID/update
   ```

Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the ID (object ID or instance ID) of the parent node to be updated in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Counter	object[]	Array of the counter information to be updated	Not possible	-
Counter[n].NodeID	string	Counter ID to be updated	Not possible	`Eight-digit hexadecimal character`
Counter[n].Log	number	Log specification		`0: Not recorded` `1: Recorded`
Counter[n].Scale	number	Counter multiplication factor		x -10: 0.0000000001 x -9: 0.000000001 x -8: 0.00000001 x -7: 0.0000001 x -6: 0.000001 x -5: 0.00001 x -4: 0.0001 x -3: 0.001 x -2: 0.01 x -1: 0.1 0: Not multiplied x 1: 10 x 2: 100 x 3: 1000 x 4: 10000 x 5: 100000 x 6: 1000000 x 7: 10000000 x 8: 100000000 x 9: 1000000000
Counter[n].Color	number	Display color		Decimal RGB value
Counter[n].Width	number	Display line width		1: Narrow 2: Medium

Parameters	Type	Description	Omission	Valid value
				3: Wide
Counter[n].MonitorType	number	Monitoring type		0: Sequential 1: Continuous 2: Average
Counter[n].Count	number	Judgment count		Values within the range of 2 to 16 To be specified if the monitoring type is not set to "Sequential". Displays the continuous count if the monitoring type is set to "Continuous". Displays the average count if the monitoring type is set to "Average".
Counter[n].UpperError	number	Abnormal upper limit monitoring		0: Not monitored 1: Monitored
Counter[n].UpperErrorLimit	number	Threshold of abnormal upper limit		Values within the range from -99999999999999 to 999999999999999
Counter[n].UpperWarning	number	Upper limit warning monitoring		0: Not monitored 1: Monitored
Counter[n].UpperWarningLimit	number	Threshold of upper limit warning		Values within the range from -99999999999999 to 999999999999999
Counter[n].LowerWarning	number	Monitoring lower limit warning		0: Not monitored 1: Monitored
Counter[n].LowerWarningLimit	number	Threshold lower limit warning		Values within the range from -99999999999999 to 999999999999999
Counter[n].LowerError	number	Abnormal lower limit monitoring		0: Not monitored 1: Monitored
Counter[n].LowerErrorLimit	number	Abnormal threshold lower limit		Values within the range from -99999999999999 to 999999999999999
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

```
* Other than the values not to be monitored, each value of the upper
limit error threshold, upper warning threshold, lower warning
threshold, and lower limit error threshold is valid only if the
following relationship is met.
    If an invalid value is set, a request error occurs.
```

Upper limit error threshold > Upper warning threshold > Lower warning threshold > lower limit error threshold

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The monitoring counter settings have been updated successfully.`

HTTP status code	Meaning	Description

400	Bad Request	`The counter information to be updated is not specified.`
		`The counter ID to be updated is not specified.`
		`A management ID other than the parent node ID is specified as the ID (object ID or instance ID) of the parent node to be updated.`

404	Not Found	The specified agent does not exist. The specified agent is being stopped. The parent node (object or instance) ID to be updated is not specified. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	(Object or instance) ID of the parent node to be updated	`Eight-digit hexadecimal character`
Counter	object[]	Array of the counter information to be updated	* Only the updated counters are enumerated.
Counter[n].NodeID	string	Management ID of the counter to be updated	`Eight-digit hexadecimal character`
Counter[n].Name	string	Counter name	Up to 128 characters
Counter[n].Log	number	Log specification	`0: Not recorded` `1: Recorded`
Counter[n].Scale	number	Counter multiplication factor	x -10: 0.0000000001 x -9: 0.000000001 x -8: 0.00000001 x -7: 0.0000001 x -6: 0.000001 x -5: 0.00001 x -4: 0.0001 x -3: 0.001 x -2: 0.01 x -1: 0.1 0: Not multiplied x 1: 10 x 2: 100 x 3: 1000 x 4: 10000 x 5: 100000 x 6: 1000000 x 7: 10000000 x 8: 100000000

Parameters	Type	Description	Valid value
			x 9: 1000000000
Counter[n].Color	number	Display color	Decimal RGB value
Counter[n].Width	number	Display line width	1: Narrow 2: Medium 3: Wide
Counter[n].MonitorType	number	Monitoring type	0: Sequential 1: Continuous 2: Average
Counter[n].Count	number	Judgment count	Values within the range of 2 to 16 To be specified if the monitoring type is not set to "Sequential". Displays the continuous count if the monitoring type is set to "Continuous". Displays the average count if the monitoring type is set to "Average".
Counter[n].UpperError	number	Abnormal upper limit monitoring	0: Not monitored 1: Monitored
Counter[n].UpperErrorLimit	number	Threshold of abnormal upper limit	`Upper limit error monitoring: Output if 1 (Monitoring) is set.` Values within the range from -99999999999999 to 999999999999999
Counter[n].UpperWarning	number	Upper limit warning monitoring	0: Not monitored 1: Monitored
Counter[n].UpperWarningLimit	number	Threshold of upper limit warning	`Upper limit warning monitoring: Output if 1 (Monitoring) is set.` Values within the range from -99999999999999 to 999999999999999
Counter[n].LowerWarning	number	Monitoring lower limit warning	0: Not monitored 1: Monitored
Counter[n].LowerWarningLimit	number	Threshold lower limit warning	`Lower limit warning monitoring: Output if 1 (Monitoring) is set.` Values within the range from -99999999999999 to 999999999999999
Counter[n].LowerError	number	Abnormal lower limit monitoring	0: Not monitored 1: Monitored
Counter[n].LowerErrorLimit	number	Abnormal threshold lower limit	`Lower limit error monitoring: Output if 1 (Monitoring) is set.` Values within the range from -99999999999999 to 999999999999999
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name

Parameters	Type	Description	Valid value
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

```
* If the same NodeID is specified as more than one setting, the
setting registered later is valid, and an error does not occur.
```

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
POST /umf/fw/performance/counter/AgentHost/56e911b4/update HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 09:05:02 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:nxKK+750N8odUmanKveYWiWFd6PY9bn3AgNoUfiwLDk=
Host: 192.168.21.4:12080
Content-Length: 161

{
    "Counter": [
        {
            "Log": 1,
            "NodeID": "06ebbdaf",
            "UpperError": 1,
            "UpperErrorLimit": 100,
            "UpperWarning": 1,
            "UpperWarningLimit": 80
        }
    ],
    "Manager": {
        "Name": "localhost"
    }
}
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 327
Date: Fri, 18 Mar 2016 09:01:08 GMT

{
    "NodeID": "56e911b4",
    "Counter": [
```

```
        {
            "Color": 0,
            "Log": 1,
            "LowerError": 0,
            "LowerWarning": 0,
            "MonitorType": 0,
            "Name": "% Processor Time",
            "NodeID": "06ebbdaf",
            "Scale": 0,
            "UpperError": 1,
            "UpperErrorLimit": 100.0,
            "UpperWarning": 1,
            "UpperWarningLimit": 80.0,
            "Width": 1
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.11 Deleting the monitoring counter settings

1. Process overview

   `Delete the specified monitoring counter settings.`

2. HTTP method

   ```
   POST
   ```

3. URL

   `/umf/fw/performance/counter/`***`AgentName`***`/`***`NodeID`***`/remove`

   Specify the target agent name in ***`AgentName`***. Specify the agent name by using up to 64 characters.

   Specify the ID (object ID or instance ID) of the parent node of the counter to be deleted in ***`NodeID`***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-

Parameters	Type	Description	Omission	Valid value
Counter	object[]	Array of the counter information to be deleted	Not possible	-
Counter[n].NodeID	string	Management ID of the counter to be deleted	Not possible	`Eight-digit hexadecimal character`
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The monitoring counter settings have been deleted successfully.`
400	Bad Request	`A management ID other than the parent node ID is specified as the ID (object ID or instance ID) of the parent node of the counter to be deleted.`
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The parent node ID of the specified counter to be deleted does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	(Object or instance) ID of parent node to be deleted	`Eight-digit hexadecimal character`
Counter	object[]	Array of the counter information to be deleted	* Only the deleted counters are enumerated.

Counter[n].NodeID	string	Management ID of the counter to be deleted	`Eight-digit hexadecimal character`
			
			`* Only the deleted NodeIDs are enumerated.`

Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name

Parameters	Type	Description	Valid value
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

* NodeID of the counter that does not exist is skipped, and an error does not occur.

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

Example: Deleting the monitoring definition setting of the "% User Time" for the instance of the agent "AgentHost"

a. Obtain the topology tree configuration, and confirm the Agent name to be deleted.

   For details, see "Obtaining the topology tree configuration (page 38)".

b. Obtain the performance monitoring tree configuration, and confirm the management ID of the instance that manages the counter to be deleted and the management ID of the counter to be deleted.

   For details, see "Obtaining the performance monitoring tree configuration (page 136)".

c. Delete the monitoring counter definition setting.
   Specify the following parameters, and execute the request.
   - Specify "AgentHost" obtained when obtaining the topology tree configuration as AgentName of the URL of this API.
   - Specify the management ID of the instance obtained when obtaining the performance monitoring tree configuration as NodeID of the URL of this API.
   - Specify "% User Time" obtained when obtaining the performance monitoring tree configuration in the request Json.

[Request]

```
POST /umf/fw/performance/counter/AgentHost/56e911b4/remove HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 04:57:17 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:k7JvP5B+CYnu1ldU9nm1pil5MjAOuD+LwVPJvvUocDQ=
Host: 192.168.21.4:12080
Content-Length: 69

{
    "Counter": [
        {
            "NodeID": "56e911ba"
        }
    ],
    "Manager": {
```

```
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 134
Date: Fri, 18 Mar 2016 04:53:24 GMT

{
    "NodeID": "56e911b4",
    "Counter": [
        {
            "NodeID": "56e911ba"
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.12 Obtaining the monitoring counter settings

1. Process overview

   Obtain the monitoring setting information corresponding to the parent node ID of the specified counter ID and counter ID.

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/performance/monitor/AgentName/NodeID?ManagerName=ManagerName
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the parent node ID of the counter information to be obtained or the node ID of the counter to be obtained in ***NodeID***.

   If the parent node is specified in ***NodeID***, only the counter information right under the specified node is output.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The monitoring counter information has been obtained successfully.`
400	Bad Request	`A management ID other than the parent node ID/counter is specified in the parent node ID of the counter information to be obtained or the node ID of the counter to be obtained.`
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified node does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Counter	object[]	Array of the counter information being monitored	-
Counter[n].NodeID	string	Management ID of the monitoring counter	`Eight-digit hexadecimal character`
Counter[n].Name	string	Counter name	Up to 128 characters
Counter[n].Log	number	Log specification	`0: Not recorded` `1: Recorded`
Counter[n].Scale	number	Counter multiplication factor	x -10: 0.0000000001 x -9: 0.000000001 x -8: 0.00000001 x -7: 0.0000001 x -6: 0.000001 x -5: 0.00001 x -4: 0.0001 x -3: 0.001 x -2: 0.01 x -1: 0.1 0: Not multiplied x 1: 10 x 2: 100 x 3: 1000 x 4: 10000 x 5: 100000 x 6: 1000000 x 7: 10000000 x 8: 100000000

Parameters	Type	Description	Valid value
			x 9: 1000000000
Counter[n].Color	number	Display color	Decimal RGB value
Counter[n].Width	number	Display line width	1: Narrow 2: Medium 3: Wide
Counter[n].MonitorType	number	Monitoring type	0: Sequential 1: Continuous 2: Average
Counter[n].Count	number	Judgment count	Values within the range of 2 to 16 To be specified if the monitoring type is not set to "Sequential". Displays the continuous count if the monitoring type is set to "Continuous". Displays the average count if the monitoring type is set to "Average".
Counter[n].UpperError	number	Abnormal upper limit monitoring	0: Not monitored 1: Monitored
Counter[n].UpperErrorLimit	number	Threshold of abnormal upper limit	`Upper limit error monitoring: Output if 1 (Monitoring) is set.` Values within the range from -99999999999999 to 999999999999999
Counter[n].UpperWarning	number	Upper limit warning monitoring	0: Not monitored 1: Monitored
Counter[n].UpperWarningLimit	number	Threshold of upper limit warning	`Upper warning monitoring: Output if 1 (Monitoring) is set.` Values within the range from -99999999999999 to 999999999999999
Counter[n].LowerWarning	number	Monitoring lower limit warning	0: Not monitored 1: Monitored
Counter[n].LowerWarningLimit	number	Threshold lower limit warning	`Lower warning monitoring: Output if 1 (Monitoring) is set.` Values within the range from -99999999999999 to 999999999999999
Counter[n].LowerError	number	Abnormal lower limit monitoring	0: Not monitored 1: Monitored
Counter[n].LowerErrorLimit	number	Abnormal threshold lower limit	`Lower limit error monitoring: Output if 1 (Monitoring) is set.` Values within the range from -99999999999999 to 999999999999999
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name

Parameters	Type	Description	Valid value
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/performance/monitor/AgentHost/56e911b4 HTTP/1.1
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 08:52:38 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:kNtY9cOdc6AkFIR3mJaIl+h1sDoj21LrHyuRgs+j/KY=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 258
Date: Fri, 18 Mar 2016 08:48:45 GMT

{
    "Counter": [
        {
            "Color": 0,
            "Log": 0,
            "LowerError": 0,
            "LowerWarning": 0,
            "MonitorType": 0,
            "Name": "% Processor Time",
            "NodeID": "06ebbdaf",
            "Scale": 0,
            "UpperError": 0,
            "UpperWarning": 0,
            "Width": 1
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.13 Obtaining the monitoring instance information (Ext)

1. Process overview

```
Obtain the list of the instance that can be monitored of the
specified monitoring object.
Only the "Extend Process” that is a target of the PerformanceExt
function must be obtained; Agent[n].Object[m].ServiceID of Extend
Process (this is the object information obtained when obtaining the
performance monitoring tree configuration) is set to 106.
```

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/performance/instance/AgentName/NodeID?ManagerName=ManagerName
```

Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the management ID of the object to be obtained as ***NodeID***.

If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The instance information has been obtained successfully.
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified object to be monitored does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Instance	object[]	Instance information being monitored	-
Instance[n].Name	string	Instance name	Up to 128 characters
Instance[n].CommandLine	string	Command line	Up to 4096 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name

Parameters	Type	Description	Valid value
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/performance/instance/AgentHost/06e92882 HTTP/1.1
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 05:04:18 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:HQiRW8opOGvqREQ569KGg0B3WMvBnw7wN+oqROc2QHc=
Content-Type: application/json; charset=utf-8
Host: 192.168.21.4:12080
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 7310
Date: Wed, 16 Mar 2016 09:37:18 GMT

{
    "Instance": [
        {
            "CommandLine": "¥"C:¥¥Windows¥¥system32¥¥ServerManager.exe
¥"",
            "Name": "ServerManager.exe"
        },
        {
            "CommandLine": "C:¥¥Windows¥¥System32¥¥svchost.exe -k Loca
lServiceNetworkRestricted",
            "Name": "svchost.exe"
        },
        {
            "CommandLine": "System Idle Process",
            "Name": "System Idle Process"
        },
        {
            "CommandLine": "¥"C:¥¥Program Files (x86)¥¥Internet Explor
er¥¥IEXPLORE.EXE¥" SCODEF:2408 CREDAT:144385 /prefetch:2",
            "Name": "iexplore.exe"
        },
        {
            "CommandLine": "¥"C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Opera
```

```
tions¥¥Svc¥¥bin¥¥SysMonSvc.exe¥"",
            "Name": "SysMonSvc.exe"
        },
        {
            "CommandLine": "¥"C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Opera
tions¥¥Agent¥¥bin¥¥SysMonAgt.exe¥"",
            "Name": "SysMonAgt.exe"
        },
        {
            "CommandLine": "¥"C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Opera
tions¥¥Manager¥¥bin¥¥SysMonMgr.exe¥"",
            "Name": "SysMonMgr.exe"
        },
        {
            "CommandLine": "¥"C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Opera
tions¥¥Tomcat¥¥bin¥¥tomcat8.exe¥" //RS//ServiceGovernor",
            "Name": "tomcat8.exe"
        },
        {
            "CommandLine": "System",
            "Name": "System"
        },
        {
            "CommandLine": "¥"C:/Program Files (x86)/NEC/UMF/Operation
s/Manager/bin/dbms1/bin/postgres.exe¥" ¥"--forkbackend¥" ¥"4444¥"",
            "Name": "postgres.exe"
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.14 Adding the monitoring instance settings (Ext)

1. Process overview

   Add the monitoring instance settings to the specified monitoring object.
   (The higher objects must be monitored here.)
   Only the "Extend Process”that is a target of the PerformanceExt function must be monitored; Agent[n].Object[m].ServiceID of Extend Process (this is the object information obtained when obtaining the performance monitoring tree configuration) is set to 106.

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/performance/instance/AgentName/NodeID/add
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the object ID to be added as ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Instance	object[]	Array of the instances to be added	Not possible	-
Instance[n].Name	string	Name of the instance to be added	Not possible	Up to 128 characters

Instance[n].Command Line	string	Command line name to be added	Not possible	Up to 4096 characters
				`To be described in regular expression format.`
				`Meta characters must start with "\" for escaping when they are used as normal characters.`

Instance[n].ProcessNum	number	Number of searched processes to be added		`More than 1 and 65535 or less` Default value: 64
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The monitoring instance settings have been added successfully.`

400	Bad Request	`The agent name to be added is not specified.`
		`The object ID to be added is not specified.`
		`The instance name to be added is not specified.`
		`The command line name to be added is not specified while the object to be added is "Extend Process".`

404	Not Found	The specified agent does not exist. The specified agent is being stopped. The specified object does not exist. The specified manager does not exist.

HTTP status code	Meaning	Description
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Instance	object[]	Array of the instance information to be added	* Only the added instances are enumerated.
Instance[n].NodeID	string	Management ID of the instance to be added	Eight-digit hexadecimal character
Instance[n].Name	string	Instance name	Up to 128 characters
Instance[n].CommandLine	string	Command line	Up to 4096 characters Same as the contents at the specified requests
Instance[n].ProcessNum	number	Number of searched processes to be added	More than 1 and 65535 or less
Instance[n].Existence	boolean	Whether the instance exists or not in the object when adding	false: Does not exist. true: Exists.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

```
* If the same instance name is specified as more than one setting,
the setting registered later is valid.
* If overlapping with the instances (Name) that have already been
set, the overlapping counter is skipped and an error does not occur.
* The instances that do not exist are also registered.
```

7. Change history

- X-FW-API-Version: 1.0
  - Newly added

8. JSON Example

```
Example: Adding the monitoring definition setting of the
"tomcat8.exe" to the object of the agent "AgentHost".
```

a. Obtain the topology tree configuration, and confirm the Agent name to be added.

   For details, see "Obtaining the topology tree configuration (page 38)".

b. Obtain the performance monitoring tree configuration, and confirm the management ID of "Extend Process" to be the destination to which the monitoring definition is added.

For details, see "Obtaining the performance monitoring tree configuration (page 136)".

c. Obtain the monitoring instance information (Ext), and confirm the instance name and command line name to be added as the monitoring definition setting.

For details, see "Obtaining the monitoring instance information (Ext) (page 178)".

d. Add the monitoring instance definition setting.
Specify the following parameters, and execute the request.

- Specify "AgentHost" obtained when obtaining the topology tree configuration as AgentName of the URL of this API.
- Specify the management ID of "Extend Process" obtained when obtaining the performance monitoring tree configuration as NodeID of the URL of this API.
- Specify "tomcat8.exe" and the command line name obtained when obtaining the monitoring instance information (Ext) in the request Json.

[Request]

```
POST /umf/fw/performance/instance/AgentHost/06e92882/add HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 05:10:50 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:iWN32T3yh6hGk+rdJJxrvvfE5zjyNqBcgU2DvlRJDt8=
Host: 192.168.21.4:12080
Content-Length: 203

{
    "Instance": [
        {
            "CommandLine": "¥"C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Opera
tions¥¥Tomcat¥¥bin¥¥tomcat8.exe¥" //RS//ServiceGovernor",
            "Name": "tomcat8.exe",
            "ProcessNum": 64
        }
    ],
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 284
Date: Fri, 18 Mar 2016 05:06:58 GMT

{
    "Instance": [
        {
```

```
            "CommandLine": "¥"C:¥¥Program Files (x86)¥¥NEC¥¥UMF¥¥Opera
tions¥¥Tomcat¥¥bin¥¥tomcat8.exe¥" //RS//ServiceGovernor",
            "Existence": false,
            "Name": "tomcat8.exe",
            "NodeID": "06eb8cf2",
            "ProcessNum": 64
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.15 Deleting the monitoring instance settings (Ext)

1. Process overview

   Delete the specified monitoring instance settings.
   Only the "Extend Process”that is a target of the PerformanceExt function must be deleted; Agent[n].Object[m].ServiceID of Extend Process (this is the object information obtained when obtaining the performance monitoring tree configuration) is set to 106.

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/performance/instance/AgentName/NodeID/remove
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the parent node ID of the instance to be deleted in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Instance	object[]	Array of the instance information to be deleted	Not possible	-
Instance[n].NodeID	string	Management ID of the instance to be deleted	Not	Eight-digit hexadecimal character

Parameters	Type	Description	Omission	Valid value
			possible	
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The monitoring instance settings have been deleted successfully.`
404	Not Found	The specified agent does not exist. The specified agent is being stopped. The parent node ID of the specified instance to be deleted does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	Parent node ID of the instance to be deleted	`Eight-digit hexadecimal character`
Instance	object[]	Array of the instance information to be deleted	* Only the deleted instances are enumerated.
Instance[n].NodeID	string	Management ID of the instance to be deleted	`Eight-digit hexadecimal character`
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

```
* If the counter being monitored is set under a deleted instance, the
lower counter is deleted (deleted from the tree configuration) while
it is being monitored.
* NodeID that does not exist is skipped and an error does not occur.
```

7. Change history

- X-FW-API-Version: 1.0

- Newly added

8. JSON Example

[Request]

```
POST /umf/fw/performance/instance/AgentHost/06e92882/remove HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 05:20:47 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:l6Ays2go0SwqCNuAJzV8EcfEyjQIzNPL4DE2qMJ8xp4=
Host: 192.168.21.4:12080
Content-Length: 70

{
    "Instance": [
        {
            "NodeID": "56eb8dc9"
        }
    ],
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 135
Date: Fri, 18 Mar 2016 05:16:54 GMT

{
    "NodeID": "06e92882",
    "Instance": [
        {
            "NodeID": "56eb8dc9"
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.6.16 Updating monitoring instance settings (Ext)

1. Process overview

```
Update the specified monitoring instance settings.
Only the "Extend Process”that is a target of the PerformanceExt
function must be monitored; Agent[n].Object[m].ServiceID of Extend
Process (this is the object information obtained when obtaining the
performance monitoring tree configuration) is set to 106.
```

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/performance/instance/AgentName/NodeID/update
```

Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the parent node ID of the instance to be updated in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Instance	object[]	Array of the monitoring instances	Not possible	-
Instance[n].NodeID	string	Management ID of the monitoring instance	Not possible	Eight-digit hexadecimal character
Instance[n].Name	string	Name of the instance to be monitored		Up to 128 characters
Instance[n].Command Line	string	Command line name to be monitored		Up to 4096 characters Describe this key using a regular expression. (When using meta characters such as a period (.) and yen mark (\) (characters with special meanings for regular expression) as normal characters, add “\” immediately before the meta character to escape.)
Instance[n].ProcessNum	number	Number of searched processes to be monitored		1 to 65535

Parameters	Type	Description	Omission	Valid value
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The monitoring instance settings have been updated successfully.`

400	Bad Request	`The agent name to be renewed is not specified.`
		`The management ID of the monitoring instance is not specified.`
		`The same instance (Name) is set in the request JSON.`
		`An instance (Name) is overlapped with an instance (Name) that has already been set.`

404	Not Found	The specified agent does not exist. The specified agent is being stopped. The parent node ID of the specified instance to be updated does not exist. The specified instance does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Instance	object[]	Array of the monitoring instance information	* Only the updated instance information is enumerated.
Instance[n].NodeID	string	Management ID of the renewed instance	`Eight-digit hexadecimal character`
Instance[n].Name	string	Display name (instance name)	Up to 128 characters
Instance[n].CommandLine	string	Command line name to be monitored	Up to 4096 characters
Instance[n].ProcessNum	number	Number of searched processes to be monitored	1 to 65535
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

```
* If the same NodeID is specified as more than one setting, the
setting registered later is valid and an error does not occur.
```

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added

8. JSON Example

[Request]

```
POST /umf/fw/performance/instance/AgentHost/06e92882/update HTTP/1.1
content-type: application/json; charset=utf-8
x-fw-api-version: 1.0
Date: Fri, 18 Mar 2016 05:17:52 GMT
Authorization: SharedKeyLite 16ubpcPbB793uvumPrvSwZIDkuTLRo6w9LuRAwC2G
5o=:Z9w+huFVLilC5G6LN8TpceTy1BLftMRDnT+FcVebCuU=
Host: 192.168.21.4:12080
Content-Length: 88

{
    "Instance": [
        {
            "NodeID": "56eb8dc9",
            "ProcessNum": 100
        }
    ],
    "Manager": {
        "Name": "localhost"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 280
Date: Fri, 18 Mar 2016 05:13:59 GMT

{
    "Instance": [
        {
            "CommandLine": "\"C:/Program Files \\(x86\\)/NEC/UMF/Opera
tions/Manager/bin/dbms1/bin/postgres\\.exe\" \"--forkcol\" \"4460\"",
            "Name": "postgres.exe",
            "NodeID": "56eb8dc9",
            "ProcessNum": 100
        }
    ],
    "Manager": {
        "ErrorMessage": "",
        "Name": "localhost",
        "Status": 200,
```

```
        "StatusCode": 200
    }
}
```

4.7 Application log monitoring

4.7.1 Obtaining the application log group information list

1. Process overview

   Obtain the application log group list of the specified agent.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/aplog/group/AgentName?ManagerName=ManagerName
```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The application log group list has been obtained successfully.
404	Not Found	The specified manager does not exist. The specified agent does not exist. The specified agent is being stopped.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Agent	object[]	Array of the agent information	-
Agent[n].Name	string	Agent name	Up to 64 characters
Agent[n].NodeID	string	Management ID of the agent	Eight-digit hexadecimal character
Agent[n].ApplicationGroup	object[]	Array of the application log group	-

Parameters	Type	Description	Valid value
Agent[n].ApplicationGroup[m].Name	string	Application log group name	Up to 64 characters
Agent[n].ApplicationGroup[m].NodeID	string	Management ID of the application log group	`Eight-digit hexadecimal character`
Agent[n].ApplicationGroup[m].Application	object[]	Array of the application log to be monitored	-
Agent[n].ApplicationGroup[m].Application[l].Name	string	Application log name	Up to 32 characters
Agent[n].ApplicationGroup[m].Application[l].NodeID	string	Monitoring ID of the application log being monitored	`Eight-digit hexadecimal character`
Agent[n].ApplicationGroup[m].Application[l].ApLogName	string	Log file name to be monitored	Character string set as "Log file name" of the application log monitoring setting
Agent[n].ApplicationGroup[m].Application[l].Filter	object[]	Array of the log filter definition	-
Agent[n].ApplicationGroup[m].Application[l].Filter[o].Name	string	Log filter definition name	Up to 256 characters
Agent[n].ApplicationGroup[m].Application[l].Filter[o].NodeID	string	Management ID of the log filter definition	`Eight-digit hexadecimal character`
Agent[n].ApplicationGroup[m].ApplicationGroup	object[]	Array of the application log group	This is a recursive structure with the same structure as the ApplicationGroup object described above.
Agent[n].Application	object[]	Array of the application log to be monitored	-
Agent[n].Application[m].NodeID	string	Management ID of the application log being monitored	`Eight-digit hexadecimal character`
Agent[n].Application[m].ApLogName	string	Log file name to be monitored	Up to 256 characters
Agent[n].Application[m].Filter	object[]	Array of the log filter definition	-
Agent[n].Application[m].Filter[l].Name	string	Log filter definition name	Up to 256 characters
Agent[n].Application[m].Filter[l].NodeID	string	Management ID of the log filter definition	`Eight-digit hexadecimal character`
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history

- X-FW-API-Version: 1.0

- Newly added

8. JSON Example

[Request]

```
GET /umf/fw/aplog/group/AgentHost HTTP/1.1
Accept: application/json, */*
Date: Fri, 13 May 2016 07:00:13 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:BTJlkv2KT2H7viLICEHmMgsLpfOl1of1Hel7NlhlzBA=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 366
Date: Fri, 13 May 2016 07:16:48 GMT

{
  "Agent" : [ {
    "ApplicationGroup" : [ {
      "Application" : [ {
        "ApLogName" : "C:\\Program Files (x86)\\NEC\\application.log",
        "Filter" : [ {
          "Name" : "Filter01",
          "NodeID" : "07357e63"
        } ],
        "Name" : "application.log",
        "NodeID" : "07357972"
      } ],
      "Name" : "APGroupX",
      "NodeID" : "0735772a"
    } ],
    "Name" : "AgentHost",
    "NodeID" : "0735761f"
  } ],
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.7.2 Obtaining the application log setting information

1. Process overview

   `Obtain the application log setting information of the specified agent.`

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/aplog/monitor/AgentName/NodeID?ManagerName=ManagerName
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the application log to be obtained in ***NodeID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The application log setting information has been obtained successfully.
404	Not Found	The specified manager does not exist. The specified agent does not exist. The specified agent is being stopped. The specified application log does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Application	object	Application log to be monitored	-
Application.Name	string	Application log name	Up to 32 characters
Application.NodeID	string	Management ID of the application log being monitored	`Eight-digit hexadecimal character`
Application.ApLogName	string	Log file name to be monitored	Up to 256 characters
Application.BackupLog	number	Backup log monitoring setting	`0: Not monitored` `1: Monitored`
Application.BackupLogName	string[]	Array of the backup log file name to be monitored	To be output in order of priority.

Parameters	Type	Description	Valid value
Application.Encode	number	Character code for encoding	<table><tr><th>Setting value</th><th>Description</th></tr><tr><td>54936</td><td>GB18030</td></tr><tr><td>936</td><td>gb2312</td></tr><tr><td>950</td><td>big5</td></tr><tr><td>20932</td><td>EUC-JP</td></tr><tr><td>50220</td><td>iso-2022-jp</td></tr><tr><td>932</td><td>shift_jis</td></tr><tr><td>1200</td><td>utf-16</td></tr><tr><td>1201</td><td>unicodeFFFE</td></tr><tr><td>65001</td><td>utf-8</td></tr><tr><td>20127</td><td>us-ascii</td></tr></table>
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
GET /umf/fw/aplog/monitor/AgentHost/07357972 HTTP/1.1
Accept: application/json, */*
Date: Fri, 13 May 2016 07:04:36 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:iHxGrKHdbg1RmHqVCu/gP0XVPqtLMxMFfpkuWxIJxAU=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
```

```
Content-Length: 247
Date: Fri, 13 May 2016 07:21:11 GMT

{
  "Application" : {
    "ApLogName" : "C:\\Program Files (x86)\\NEC\\application.log",
    "Encode" : 932,
    "BackupLogName" : [ ],
    "BackupLog" : 0,
    "Name" : "application.log",
    "NodeID" : "07357972"
  },
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.7.3 Adding the application log monitoring settings

1. Process overview

   Add the application log monitoring settings to the location under the specified application log group.

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/aplog/monitor/AgentName/NodeID
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the parent node (agent/group) to be added in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Application	object	Application log information to be added	Not possible	-

<table>
<tr><th>Parameters</th><th>Type</th><th>Description</th><th>Omission</th><th>Valid value</th></tr>
<tr><td>Application.Name</td><td>string</td><td>Application log name to be added</td><td>Not possible</td><td>Up to 32 characters</td></tr>
<tr><td>Application.ApLogName</td><td>string</td><td>Log file name to be added</td><td>Not possible</td><td>Up to 256 characters</td></tr>
<tr><td>Application.BackupLog</td><td>number</td><td>Backup log monitoring setting</td><td></td><td>0: Not monitored
1: Monitored
Default value:
0: Not monitored</td></tr>
<tr><td>Application.BackupLogName</td><td>string[]</td><td>Array of the backup log file name to be monitored</td><td></td><td>Specify the files in the order of priority.
Up to 8 files can be specified.
One log file name can be specified by using up to 256 characters. Blank character is prohibited.

* If "1: Monitored" is set to the backup log monitoring setting (BackupLog), at least one log file must be specified as the backup log file (BackupLogName).</td></tr>
<tr><td>Application.Encode</td><td>number</td><td>Character code for encoding</td><td></td><td><table><tr><th>Setting value</th><th>Description</th></tr><tr><td>54936</td><td>GB18030</td></tr><tr><td>936</td><td>gb2312</td></tr><tr><td>950</td><td>big5</td></tr><tr><td>20932</td><td>EUC-JP</td></tr><tr><td>50220</td><td>iso-2022-jp</td></tr><tr><td>932</td><td>shift_jis</td></tr><tr><td>1200</td><td>utf-16</td></tr><tr><td>1201</td><td>unicodeFFFE</td></tr><tr><td>65001</td><td>utf-8</td></tr><tr><td>20127</td><td>us-ascii</td></tr></table>Default value:<table><tr><th>Setting value</th><th>Description</th></tr><tr><td>20127</td><td>us-ascii</td></tr></table></td></tr>
<tr><td>Manager</td><td>object</td><td>Manager object</td><td></td><td>-</td></tr>
</table>

Parameters	Type	Description	Omission	Valid value
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The application log has been added successfully.`
404	Not Found	The management ID of the specified parent node (agent/group) does not exist. The specified manager does not exist. The specified agent does not exist. The specified agent is being stopped.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	Management ID of the parent node (agent/group)	`Eight-digit hexadecimal character`
Application	object	Added application log information	-
Application.Name	string	Application log name	Up to 32 characters
Application.NodeID	string	Management ID of application log	`Eight-digit hexadecimal character`
Application.ApLogName	string	Log file name to be monitored	Up to 256 characters
Application.BackupLog	number	Backup log monitoring setting	`0: Not monitored` `1: Monitored`
Application.BackupLogName	string[]	Array of the backup log file name to be monitored	To be output in order of priority.
Application.Encode	number	Character code of the monitoring log	Setting value / Description 54936 / GB18030 936 / gb2312 950 / big5 20932 / EUC-JP 50220 / iso-2022-jp 932 / shift_jis 1200 / utf-16 1201 / unicodeFFFE

Parameters	Type	Description	Valid value	
			Setting value	**Description**
			65001	utf-8
			20127	us-ascii
Application.EncodeString	string	Character code character string of the monitoring log	-	
Manager	object	Manager object	-	
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name	
Manager.ErrorMessage	string	Error message	-	
Manager.Status	number	Communication error code	-	
Manager.StatusCode	number	Internal error code	-	

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
POST /umf/fw/aplog/monitor/AgentHost/0735772a HTTP/1.1
Content-Type:  application/json; charset=utf-8
Accept: application/json, */*
Date: Fri, 13 May 2016 06:34:55 GMT
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:5VjY17GFcl3ENRbWq48/79m3IoEAeOmifIIkh+vCwz0=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
Content-Length: 148

{
  "Application" : {
    "ApLogName" : "C:\\Program Files (x86)\\NEC\\application.log",
    "BackupLog" : 0,
    "BackupLogName" : [ ],
    "Encode" : 932,
    "Name" : "application.log"
  }
}
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
```

```
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 267
Date: Fri, 13 May 2016 06:51:30 GMT

{
  "Application" : {
    "ApLogName" : "C:\\Program Files (x86)\\NEC\\application.log",
    "Encode" : 932,
    "BackupLogName" : [ ],
    "BackupLog" : 0,
    "Name" : "application.log",
    "NodeID" : "07357972"
  },
  "NodeID" : "0735772a",
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.7.4 Deleting the application log monitoring settings

1. Process overview

   `Delete the monitoring settings for the specified application log.`

2. HTTP method

   ```
   DELETE
   ```

3. URL

   `/umf/fw/aplog/monitor/`***`AgentName`***`/`***`NodeID`***`?ManagerName=`***`ManagerName`***

   Specify the target agent name in ***`AgentName`***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the target application log in ***`NodeID`***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The application log has been deleted successfully.`
404	Not Found	The management ID of the specified application log does not exist. The specified manager does not exist. The specified agent does not exist.

HTTP status code	Meaning	Description
		The specified agent is being stopped.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	Management ID of the deleted application log	Eight-digit hexadecimal character
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added

8. JSON Example

[Request]

```
DELETE /umf/fw/aplog/monitor/AgentHost/07357972 HTTP/1.1
Accept: application/json, */*
Date: Fri, 13 May 2016 07:27:46 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:SxFtoljtJKQfY/xaDQMP9q7UuqaPk9C/f/bYqZo6rPc=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 100
Date: Fri, 13 May 2016 07:44:21 GMT

{
```

```
  "NodeID" : "07357972",
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.7.5 Updating the application log monitoring settings

1. Process overview

   `Update the monitoring settings for the specified application log.`

2. HTTP method

   ```
   PUT
   ```

3. URL

   ```
   /umf/fw/aplog/monitor/AgentName/NodeID
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the application log to be updated in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Application	object	Application log information		-
Application.Name	string	Application log name		Up to 32 characters
Application.ApLogName	string	Log file name to be monitored		Up to 256 characters
Application.BackupLog	number	Backup log monitoring setting		0: Not monitored 1: Monitored
Application.BackupLogName	string[]	Array of the backup log file name to be monitored		Specify the files in order of priority. Up to 8 files can be specified. One log file name can be specified by using up to 256 characters. Use of a blank character is prohibited. * If "1: Monitored" is set to the backup log monitoring setting (BackupLog) and the

Parameters	Type	Description	Omission	Valid value
				backup log file is not set to the existing node, at least one log file must be specified as the backup log file (BackupLogName). * By specifying the corresponding key, all the existing backup log file settings are deleted, and the specified values are set. * If an empty array is specified, all the backup log file settings are deleted.
Application.Encode	number	Character code for encoding		<table><tr><th>Setting value</th><th>Description</th></tr><tr><td>54936</td><td>GB18030</td></tr><tr><td>936</td><td>gb2312</td></tr><tr><td>950</td><td>big5</td></tr><tr><td>20932</td><td>EUC-JP</td></tr><tr><td>50220</td><td>iso-2022-jp</td></tr><tr><td>932</td><td>shift_jis</td></tr><tr><td>1200</td><td>utf-16</td></tr><tr><td>1201</td><td>unicodeFFFE</td></tr><tr><td>65001</td><td>utf-8</td></tr><tr><td>20127</td><td>us-ascii</td></tr></table>
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The application log has been updated successfully.
400	Bad Request	Nine or more log file names are specified in the array of BackupLogName.
404	Not Found	The management ID of the specified application log group does not exist. The specified manager does not exist. The specified agent does not exist. The specified agent is being stopped.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Application	object	Application log information	* Displayed only if the application log information is updated.
Application.Name	string	Application log name	Up to 32 characters
Application.NodeID	string	Management ID of application log	`Eight-digit hexadecimal character`
Application.ApLogName	string	Log file name	Up to 256 characters
Application.BackupLog	number	Backup log monitoring setting	`0: Not monitored` `1: Monitored`
Application.BackupLogName	string[]	Array of the backup log file name to be monitored	To be output in the order of priority.
Application.Encode	number	Character code of the monitoring log	<table><tr><th>Setting value</th><th>Description</th></tr><tr><td>54936</td><td>GB18030</td></tr><tr><td>936</td><td>gb2312</td></tr><tr><td>950</td><td>big5</td></tr><tr><td>20932</td><td>EUC-JP</td></tr><tr><td>50220</td><td>iso-2022-jp</td></tr><tr><td>932</td><td>shift_jis</td></tr><tr><td>1200</td><td>utf-16</td></tr><tr><td>1201</td><td>unicodeFFFE</td></tr><tr><td>65001</td><td>utf-8</td></tr><tr><td>20127</td><td>us-ascii</td></tr></table>
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
{
    "Application": {
        "ApLogName": "C:\Program Files (x86)\NEC\UMF\Operations\Tomcat
\logs\vdca.log",
        "BackupLog": 1,
        "BackupLogName": "C:\Program Files (x86)\NEC\UMF\Operations\To
mcat\logs\vdca.log1",
        "Encode": 932,
```

```
        "Name": "APLog1"
    },
    "Manager": {
        "Name": "MoM1"
    }
}
```

[Response]

```
{
    "Application": {
        "ApLogName": "C:\Program Files (x86)\NEC\UMF\Operations\Tomcat
\logs\vdca.log",
        "BackupLog": 1,
        "BackupLogName": "C:\Program Files (x86)\NEC\UMF\Operations\To
mcat\logs\vdca.log1",
        "Encode": 932,
        "Name": "APLog1",
        "NodeID": "54d2c0cb"
    },
    "Manager": {
        "ErrorMessage": null,
        "Name": "MoM1",
        "Status": 200,
        "StatusCode": 200
    }
}
```

4.7.6 Obtaining the application log filter definition list

1. Process overview

   Obtain the filter definition list of the specified application log.
   The obtained filter definition lists are output in order of priority.

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/aplog/filter/AgentName/list/NodeID?ManagerName=ManagerName
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the target application log in ***NodeID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The log filter definition list has been obtained successfully.
404	Not Found	The management ID of the specified log does not exist. The specified manager does not exist. The specified agent does not exist. The specified agent is being stopped.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Filter	object[]	Array of the log filter definition	-
Filter[n].NodeID	string	Management ID of the log filter definition	Eight-digit hexadecimal character
Filter[n].Name	string	Log filter name	Up to 256 characters
Filter[n].FilterType	number	Filter type	0: Storage filter 1: Deletion filter
Filter[n].MessageTextNot	number	Negative specification of message text condition	0: Positive 1: Negative
Filter[n].MessageText	string	Message text condition	Up to 1024 characters
Filter[n].SelPos	object[]	Array of the SelPos conditions	-
Filter[n].SelPos[m].Type	number	Negative specification	0: Positive 1: Negative
Filter[n].SelPos[m].Position	number	Comparison position	1 origin
Filter[n].SelPos[m].CompareType	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter[n].SelPos[m].Value	string	Character string to be compared	Up to 64 characters
Filter[n].SelKey	object[]	Array of the Selkey conditions	-
Filter[n].SelKey[m].Type	number	Negative specification	0: Positive 1: Negative
Filter[n].SelKey[m].Key	string	Key character string	Up to 64 characters
Filter[n].SelKey[m].CompareType	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <

Parameters	Type	Description	Valid value
Filter[n].SelKey[m].Value	string	Character string to be compared	Up to 64 characters
Filter[n].Severity	number	Display definition: Severity	* To be output only if the filter type is set to the storage filters.
Filter[n].Category	string	Display definition: Category name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].Node	string	Display definition: Node name	Up to 256 characters * To be output only if the filter type is set to the storage filters.
Filter[n].Application	string	Display definition: Application name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].Object	string	Display definition: Object name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].MessageID	string	Display definition: Message ID	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnore	number	Message suppression function	0: Function is not used 1: Function is used * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnoreInterval	number	Message suppression interval	Unit: Second Integer within the range of 1 to 3600 * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnorePassDelete	number	Suppression operation	0: Deleting the message sent within the monitoring intervals 1: Applying the message sent within the monitoring intervals to the subsequent filters * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnoreReset	number	Reset of monitoring interval	0: Not reset 1: Reset

Parameters	Type	Description	Valid value
			* To be output only if the filter type is set to the storage filters.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/aplog/filter/AgentHost/list/07357972 HTTP/1.1
Accept: application/json, */*
Date: Fri, 13 May 2016 07:09:18 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:obP6CIaM98obcAwLgQyePKApe6N69iJnnMHsxPUH7co=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 1220
Date: Fri, 13 May 2016 07:25:54 GMT

{
  "Filter" : [ {
    "MessageIgnore" : 0,
    "Node" : "AgentHost",
    "Application" : "application.log",
    "MessageIgnoreInterval" : 10,
    "SelKey" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
```

```
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    } ],
    "MessageIgnorePassDelete" : 0,
    "Severity" : 264,
    "MessageIgnoreReset" : 0,
    "SelPos" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
```

```
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    } ],
    "Name" : "Filter01",
    "MessageID" : "0000",
    "MessageTextNot" : 0,
    "NodeID" : "07357e63",
    "Object" : "ApLogMonitor",
    "FilterType" : 0,
    "Category" : "Application",
    "MessageText" : ".*"
  } ],
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```


4.7.7 Obtaining the application log filter definition

1. Process overview

   `Obtain the specified application log filter definition.`

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/aplog/filter/AgentName/NodeID?ManagerName=ManagerName
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the filter ID to be obtained in ***NodeID***.

If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The log filter definition has been obtained successfully.`
404	Not Found	The specified filter ID does not exist. The specified manager does not exist. The specified agent does not exist. The specified agent is being stopped.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Filter	object	Log filter definition	-
Filter.NodeID	string	Management ID of the log filter definition	`Eight-digit hexadecimal character`
Filter.Name	string	Log filter name	Up to 256 characters
Filter.FilterType	number	Filter type	`0: Storage filter` `1: Deletion filter`
Filter.MessageTextNot	number	Negative specification of message text condition	`0: Positive` `1: Negative`
Filter.MessageText	string	Message text condition	Up to 1024 characters
Filter.SelPos	object[]	Array of the SelPos conditions	-
Filter.SelPos[m].Type	number	Negative specification	`0: Positive` `1: Negative`
Filter.SelPos[m].Position	number	Comparison position	1 origin

Filter.SelPos[m].Compare Type	number	Comparison type	`0: =`
			`1: <>`
			`2: >=`
			`3: >`
			`4: <=`
			`5: <`

Filter.SelPos[m].Value	string	Character string to be compared	Up to 64 characters
Filter.SelKey	object[]	Array of the Selkey conditions	-
Filter.SelKey[m].Type	number	Negative specification	`0: Positive` `1: Negative`
Filter.SelKey[m].Key	string	Key character string	Up to 64 characters

Parameters	Type	Description	Valid value
Filter.SelKey[m].Compare Type	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter.SelKey[m].Value	string	Character string to be compared	Up to 64 characters
Filter.Severity	number	Display definition: Severity	* To be output only if the filter type is set to the storage filters.
Filter.Category	string	Display definition: Category name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter.Node	string	Display definition: Node name	Up to 256 characters * To be output only if the filter type is set to the storage filters.
Filter.Application	string	Display definition: Application name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter.Object	string	Display definition: Object name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter.MessageID	string	Display definition: Message ID	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter.MessageIgnore	number	Message suppression function	0: Function is not used 1: Function is used * To be output only if the filter type is set to the storage filters.
Filter.MessageIgnoreInterval	number	Message suppression interval	Unit: Second Integer within the range of 1 to 3600 * To be output only if the filter type is set to the storage filters.
Filter.MessageIgnorePass Delete	number	Suppression operation	0: Deleting the message sent within the monitoring intervals 1: Applying the message sent within the monitoring intervals to the subsequent filters

Parameters	Type	Description	Valid value
			* To be output only if the filter type is set to the storage filters.
Filter.MessageIgnoreReset	number	Reset of monitoring interval	0: Not reset 1: Reset * To be output only if the filter type is set to the storage filters.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history

- X-FW-API-Version: 1.0
  - Newly added

8. JSON Example

[Request]

```
GET /umf/fw/aplog/filter/AgentHost/07357e63 HTTP/1.1
Accept: application/json, */*
Date: Fri, 13 May 2016 07:12:03 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:pZHVUmRKsYA2mr62cDwx2jQVqAAg2MLEpuyMe0MZSSY=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 1218
Date: Fri, 13 May 2016 07:28:38 GMT

{
  "Filter" : {
    "MessageIgnore" : 0,
    "Node" : "AgentHost",
    "Application" : "application.log",
    "MessageIgnoreInterval" : 10,
```

```
    "SelKey" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    } ],
    "MessageIgnorePassDelete" : 0,
    "Severity" : 264,
    "MessageIgnoreReset" : 0,
    "SelPos" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
```

```
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    } ],
    "Name" : "Filter01",
    "MessageID" : "0000",
    "MessageTextNot" : 0,
    "NodeID" : "07357e63",
    "Object" : "ApLogMonitor",
    "FilterType" : 0,
    "Category" : "Application",
    "MessageText" : ".*"
  },
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```


4.7.8 Editing the application log filter definition

1. Process overview

Edit (Add, Delete, Renew, Renew the priority order) the application log filter definition in the specified application log.

Operation	Description
Addition	If Filter[n].NodeID (management ID of the log filter) is not specified, the filter information is newly added.
Update	If Filter[n].NodeID (management ID of the log filter) is specified, the corresponding filter information is

Operation	Description
	updated. For the parameters that can be omitted, specify only the settings you want to change so that the remaining settings are kept in the defined status. If Filter[n].NotModify (flag without any change) is set to "1: No change", intentional update of the definition can be avoided.
Deletion	If the defined filter information is not specified, the already-defined filter information is deleted.
Priority	Priorities are assigned in the order of the defined filters.

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/aplog/filter/AgentName/NodeID
```

Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the management ID of the target application log in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Filter	object[]	Information on the log filter definition to be edited	Not possible	-
Filter[n].NodeID	string	Management ID of the log filter definition		Eight-digit hexadecimal character This is processed as the addition in the event of omitting. This is processed as the update in the event of specifying.
Filter[n].NotModify	number	No-change flag		0: Changed 1: Not changed To be used only if the filter is updated. If 0 is set, all the following keys are checked since there is

Parameters	Type	Description	Omission	Valid value
				a change in the filter information. If 1 is set, all the following keys are not checked since there is no change in the filter information. * When changing the specific filters or the priority, set this key to 1 to improve the processing performance. Default value: 0: Changed
Filter[n].Name	string	Log filter name		Up to 256 characters The requirements of the keys are described below. If NodeID is omitted (added): Required If NodeID is specified (renewed): Optional
Filter[n].FilterType	number	Filter type		0: Storage filter 1: Deletion filter Default value: 0: Storage filter
Filter[n].MessageTextNot	number	Negative specification of message text condition		0: Positive 1: Negative Default value: 0: Positive
Filter[n].MessageText	string	Message text condition		Up to 1024 characters Default value: null: No comparison character string If 1 is specified in Filter[n].MessageTextNot, the key must be specified.
Filter[n].SelPos	object[]	Array of the SelPos conditions		-
Filter[n].SelPos[m].Type	number	Negative specification		0: Positive 1: Negative Default value: 0: Positive
Filter[n].SelPos[m].Position	number	Comparison position		1 origin (within the range of 1 to 1024) Default value: 1: 1st character If 1 is specified in Filter[n].SelPos[m].Type, the key must be specified.
Filter[n].SelPos[m].CompareType	number	Comparison type		0: = 1: <> 2: >= 3: >

Parameters	Type	Description	Omission	Valid value
				4: <= 5: < Default value: 0: = If 1 is specified in Filter[n].SelPos[m].Type, the key must be specified.
Filter[n].SelPos[m].Value	string	Character string to be compared		Up to 64 characters Default value: -: No character string to compare If 1 is specified in Filter[n].SelPos[m].Type, the key must be specified.
Filter[n].SelKey	object[]	Array of the Selkey conditions		-
Filter[n].SelKey[m].Type	number	Negative specification		0: Positive 1: Negative Default value: 0: Positive
Filter[n].SelKey[m].Key	string	Key character string		Up to 64 characters Default value: null: No key character string If any value is specified in Filter[n].SelKey[m].Value, the key must be specified.
Filter[n].SelKey[m].CompareType	number	Comparison type		0: = 1: <> 2: >= 3: > 4: <= 5: < Default value: 0: = If 1 is specified in Filter[n].SelKey[m].Type, the key must be specified.
Filter[n].SelKey[m].Value	string	Character string to be compared		Up to 64 characters Default value: -: No character string to compare If any value is specified in Filter[n].SelKey[m].Key, the key must be specified.
Filter[n].Severity	number	Display definition: Severity		* To be output only if the filter type is set to the storage filters. Default value: 264: Normal

Parameters	Type	Description	Omission	Valid value
Filter[n].Category	string	Display definition: Category name		Up to 32 characters Default value: Application
Filter[n].Node	string	Display definition: Node name		Up to 256 characters Default value: Name of the agent to which the relevant filter was added
Filter[n].Application	string	Display definition: Application name		Up to 32 characters Default value: Name of the application log to which the relevant filter was added
Filter[n].Object	string	Display definition: Object name		Up to 32 characters Default value: ApLogMonitor
Filter[n].MessageID	string	Display definition: Message ID		Up to 32 characters Default value: 0000

Filter[n].MessageIgnore	number	Message suppression function		`0: Function is not used`
				`1: Function is used`
				Default value:
				0: Function is not used

Filter[n].MessageIgnoreInterval	number	Message suppression interval		`Unit: Second`
				`Integer within the range of 1 to 3600`
				Default value:
				10: 10 seconds of suppression intervals

Filter[n].MessageIgnorePassDelete	number	Suppression operation		`0: Deleting the message sent within the monitoring intervals`
				`1: Applying the message sent within the monitoring intervals to the subsequent filters`
				Default value:
				0: The message within the monitoring intervals is deleted

Filter[n].MessageIgnoreReset	number	Reset of monitoring interval		`0: Not reset`
				`1: Reset`
				Default value:
				0: Not reset

Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

* If "1: Negation" was set to each negative condition and if some values such as a corresponding character string to compare are omitted, an error occurs.

* If the SelKey key character string and comparison character are input only to one side, an error occurs.

* Also if "1: Deletion filter" was set to the filter type, the display definition and option definition (message suppression function) can be set. However, the message is handled as the deletion message and the function is not valid.

If the same NodeID is specified for more than one setting, the setting registered later is valid and an error does not occur.

If the Management ID of the filter that does not exist or the Management ID of the filter that is not located under the corresponding application log is specified, the definition is not edited and an error does not occur.

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The application log filter definition had been edited successfully.`
404	Not Found	The management ID of the specified application log does not exist. The specified manager does not exist. The specified agent does not exist. The specified agent is being stopped.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Filter	object[]	Array of the log filter definition	-
Filter[n].NodeID	string	Management ID of the log filter definition	`Eight-digit hexadecimal character`
Filter.Name	string	Log filter name	Up to 256 characters
Filter[n].FilterType	number	Filter type	`0: Storage filter` `1: Deletion filter`
Filter[n].MessageTextNot	number	Negative specification of message text condition	`0: Positive` `1: Negative`
Filter[n].MessageText	string	Message text condition	Up to 1024 characters
Filter[n].SelPos	object[]	Array of the SelPos conditions	-
Filter[n].SelPos[m].Type	number	Negative specification	`0: Positive` `1: Negative`
Filter[n].SelPos[m].Position	number	Comparison position	1 origin

Filter[n].SelPos[m].CompareType	number	Comparison type	`0: =`
			`1: <>`
			`2: >=`
			`3: >`
			`4: <=`
			`5: <`

Filter[n].SelPos[m].Value	string	Character string to be compared	Up to 64 characters

Parameters	Type	Description	Valid value
Filter[n].SelKey	object[]	Array of the Selkey conditions	-
Filter[n].SelKey[m].Type	number	Negative specification	0: Positive 1: Negative
Filter[n].SelKey[m].Key	string	Key character string	Up to 64 characters
Filter[n].SelKey[m].CompareType	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter[n].SelKey[m].Value	string	Character string to be compared	Up to 64 characters
Filter[n].Severity	number	Display definition: Severity	* To be output only if the filter type is set to the storage filters.
Filter[n].Category	string	Display definition: Category name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].Node	string	Display definition: Node name	Up to 256 characters * To be output only if the filter type is set to the storage filters.
Filter[n].Application	string	Display definition: Application name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].Object	string	Display definition: Object name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].MessageID	string	Display definition: Message ID	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnore	number	Message suppression function	0: Function is not used 1: Function is used * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnoreInterval	number	Message suppression interval	Unit: Second Integer within the range of 1 to 3600 * To be output only if the filter type is set to the storage filters.

Parameters	Type	Description	Valid value
Filter[n].MessageIgnorePassDelete	number	Suppression operation	0: Deleting the message sent within the monitoring intervals 1: Applying the message sent within the monitoring intervals to the subsequent filters * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnoreReset	number	Reset of monitoring interval	0: Not reset 1: Reset * To be output only if the filter type is set to the storage filters.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

* If the NodeID of the filter that does not exist or the NodeID of the filter that is not located under the corresponding application log is specified, it is skipped.

7. Change history

- X-FW-API-Version: 1.0
  - Newly added

8. JSON Example

[Request]

```
POST /umf/fw/aplog/filter/AgentHost/07357972 HTTP/1.1
Content-Type:  application/json; charset=utf-8
Accept: application/json, */*
Date: Fri, 13 May 2016 06:55:59 GMT
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:+3kUWxFc2Y5ZWdHHXv/MIB7DAN8lQjj7H+wV/RGCmwE=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
Content-Length: 85

{
  "Filter" : [ {
    "Name" : "Filter01",
    "FilterType" : 0,
    "MessageTextNot" : 0,
```

```
    "MessageText" : ".*"
  } ]
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 1220
Date: Fri, 13 May 2016 07:12:35 GMT

{
  "Filter" : [ {
    "MessageIgnore" : 0,
    "Node" : "AgentHost",
    "Application" : "application.log",
    "MessageIgnoreInterval" : 10,
    "SelKey" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
```

```
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    } ],
    "MessageIgnorePassDelete" : 0,
    "Severity" : 264,
    "MessageIgnoreReset" : 0,
    "SelPos" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    } ],
    "Name" : "Filter01",
    "MessageID" : "0000",
    "MessageTextNot" : 0,
    "NodeID" : "07357e63",
    "Object" : "ApLogMonitor",
    "FilterType" : 0,
    "Category" : "Application",
    "MessageText" : ".*"
  } ],
```

```
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.7.9 Adding the application log monitoring group

1. Process overview

   Add the application log monitoring group.

2. HTTP method

   ```
   POST
   ```

3. URL

   ```
   /umf/fw/aplog/group/AgentName/NodeID
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the node ID (agent/group) to be added in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Name	string	Monitoring group name to be added	Not possible	Up to 64 characters
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring group has been added successfully.
404	Not Found	The specified node does not exist. The specified manager does not exist. The specified agent does not exist.

HTTP status code	Meaning	Description
		The specified agent is being stopped.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	Management ID of the added monitoring group	Eight-digit hexadecimal character
Name	string	Added monitoring group name	Up to 64 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

* The group with the same name as the existing monitoring group can be registered.

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added

8. JSON Example

[Request]

```
POST /umf/fw/aplog/group/AgentHost/0735761f HTTP/1.1
Content-Type:  application/json; charset=utf-8
Accept: application/json, */*
Date: Fri, 13 May 2016 06:25:11 GMT
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:roo5QGoBqS+RcANbUVRQOfXMZGYtggRRJ9FW1giEOH8=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
Content-Length: 19

{
  "Name" : "APGroupX"
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 118
Date: Fri, 13 May 2016 06:41:47 GMT

{
  "Name" : "APGroupX",
  "NodeID" : "0735772a",
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.7.10 Deleting the application log monitoring group

1. Process overview

   Delete the specified application log monitoring group.
   The application log monitoring settings located under the monitoring group are also deleted.

2. HTTP method

   ```
   DELETE
   ```

3. URL

   /umf/fw/aplog/group/***AgentName***/***NodeID***?ManagerName=***ManagerName***

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the monitoring group to be deleted in ***NodeID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring group has been deleted successfully.
404	Not Found	The specified monitoring group does not exist. The specified manager does not exist. The specified agent does not exist.

HTTP status code	Meaning	Description
		The specified agent is being stopped.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	Management ID of the deleted monitoring group	Eight-digit hexadecimal character
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added

8. JSON Example

[Request]

```
DELETE /umf/fw/aplog/group/AgentHost/0735772a HTTP/1.1
Accept: application/json, */*
Date: Fri, 13 May 2016 07:32:48 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:4vGcB486CppYp/7vqJGX3MkeFNqCRKLKNfSL2aie7AY=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 100
Date: Fri, 13 May 2016 07:49:23 GMT

{
```

```
  "NodeID" : "0735772a",
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.7.11 Updating the application log monitoring group

1. Process overview

   `Update the specified application log monitoring group.`

2. HTTP method

   ```
   PUT
   ```

3. URL

   ```
   /umf/fw/aplog/group/AgentName/NodeID
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the node ID (monitoring group node) to be updated in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Name	string	Monitoring group name to be updated	Not possible	Up to 64 characters
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The monitoring group has been updated successfully.`
400	Bad Request	`The monitoring group name is not specified.`
404	Not Found	The specified node does not exist.

HTTP status code	Meaning	Description
		The specified manager does not exist. The specified agent does not exist. The specified agent is being stopped.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	Management ID of the updated monitoring group	Eight-digit hexadecimal character Nothing appears if the monitoring contents are not updated.
Name	string	Updated monitoring group name	Up to 64 characters Nothing appears if the monitoring contents are not updated.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

* The group with the same name as the existing monitoring group can be registered.

7. Change history

- X-FW-API-Version: 1.0
  - Newly added

8. JSON Example

[Request]

```
PUT /umf/fw/aplog/monitor/AgentHost/07357972 HTTP/1.1
Content-Type:  application/json; charset=utf-8
Accept: application/json, */*
Date: Fri, 13 May 2016 07:18:41 GMT
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:/t2MK9KIwiUznm+PhTHVfaOGIVetRQbSR6fC9Mmwzk4=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
Content-Length: 195

{
```

```
  "Application" : {
    "ApLogName" : "C:\\Program Files (x86)\\NEC\\application.log",
    "BackupLog" : 1,
    "BackupLogName" : ["C:\\Program Files (x86)\\NEC\\application.log.
1"]
  }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 296
Date: Fri, 13 May 2016 07:35:16 GMT

{
  "Application" : {
    "ApLogName" : "C:\\Program Files (x86)\\NEC\\application.log",
    "Encode" : 932,
    "BackupLogName" : [ "C:\\Program Files (x86)\\NEC\\application.log
.1" ],
    "BackupLog" : 1,
    "Name" : "application.log",
    "NodeID" : "07357972"
  },
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.8 Event log monitoring

4.8.1 Obtaining the event log list

1. Process overview

   Obtain the event log list information of the specified agent.

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/eventlog/monitor/AgentName?ManagerName=ManagerName
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The event log list information has been obtained successfully.`
404	Not Found	The specified manager does not exist. The specified agent does not exist. The specified agent is being stopped.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Agent	object[]	Array of agent information	-
Agent[n].Name	string	Agent name	Up to 64 characters
Agent[n].NodeID	string	Management ID of the agent	`Eight-digit hexadecimal character`
Agent[n].EventLog	object[]	Array of event logs	-
Agent[n].EventLog[m].Name	string	Event log name	Up to 32 characters
Agent[n].EventLog[m].NodeID	string	Management ID of the event log	`Eight-digit hexadecimal character`
Agent[n].EventLog[m].Filter	object[]	Array of the log filter to be monitored	-
Agent[n].EventLog[m].Filter[l].Name	string	Log filter name	Up to 256 characters
Agent[n].EventLog[m].Filter[l].NodeID	string	Management ID of the log filter	`Eight-digit hexadecimal character`
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history

   - X-FW-API-Version: 1.0
     - `Newly added`

8. JSON Example

[Request]

```
GET /umf/fw/eventlog/monitor/AgentHost HTTP/1.1
Accept: application/json, */*
Date: Fri, 13 May 2016 07:53:45 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:8dRu1keW5CMXDRwrnzD2mwD9jN5tx/6mstiwbWBuYko=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 863
Date: Fri, 13 May 2016 08:10:21 GMT

{
  "Agent" : [ {
    "EventLog" : [ {
      "Filter" : [ {
        "Name" : "Default Filter",
        "NodeID" : "073536e2"
      } ],
      "Name" : "Application",
      "NodeID" : "07357620"
    }, {
      "Filter" : [ {
        "Name" : "Default Filter",
        "NodeID" : "073536e0"
      } ],
      "Name" : "HardwareEvents",
      "NodeID" : "073536e1"
    }, {
      "Filter" : [ {
        "Name" : "Default Filter",
        "NodeID" : "073536de"
      } ],
      "Name" : "Internet Explorer",
      "NodeID" : "073536df"
    }, {
      "Filter" : [ {
        "Name" : "Default Filter",
        "NodeID" : "073536dc"
      } ],
      "Name" : "Key Management Service",
      "NodeID" : "073536dd"
    }, {
```

```
      "Filter" : [ {
        "Name" : "Default Filter",
        "NodeID" : "073536da"
      } ],
      "Name" : "Security",
      "NodeID" : "073536db"
    }, {
      "Filter" : [ {
        "Name" : "Default Filter",
        "NodeID" : "073536d8"
      } ],
      "Name" : "System",
      "NodeID" : "073536d9"
    }, {
      "Filter" : [ {
        "Name" : "Default Filter",
        "NodeID" : "073536d6"
      } ],
      "Name" : "Windows PowerShell",
      "NodeID" : "073536d7"
    } ],
    "Name" : "AgentHost",
    "NodeID" : "0735761f"
  } ],
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.8.2 Obtaining the event log filter definition list

1. Process overview

   Obtain the event log filter definition list of the specified event log.
   The objects are output in order of priority.

2. HTTP method

   ```
   GET
   ```

3. URL

   /umf/fw/eventlog/monitor/filter/***AgentName***/***NodeID***?ManagerName=***ManagerName***

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the target event log in ***NodeID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The log filter definition list has been obtained successfully.`
404	Not Found	The specified node ID does not exist. The specified manager does not exist. The specified agent does not exist. The specified agent is being stopped.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Filter	object[]	Array of the log filter definition	-
Filter[n].NodeID	string	Management ID of the log filter definition	`Eight-digit hexadecimal character`
Filter[n].Name	string	Log filter name	Up to 256 characters
Filter[n].FilterType	number	Filter type	`0: Storage filter` `1: Deletion filter`
Filter[n].NodeNot	number	Negative specification of node name condition	`0: Positive` `1: Negative`
Filter[n].Node	string	Node name condition	Up to 256 characters
Filter[n].ApplicationNot	number	Negative specification of the application name condition	`0: Positive` `1: Negative`
Filter[n].Application	string	Application name condition	Up to 128 characters
Filter[n].ObjectNot	number	Negative specification of object name condition	`0: Positive` `1: Negative`
Filter[n].Object	string	Object name condition	Up to 128 characters
Filter[n].MessageIDNot	number	Negative specification of message ID condition	`0: Positive` `1: Negative`
Filter[n].MessageID	string	Message ID condition	Up to 128 characters
Filter[n].MessageTextNot	number	Negative specification of message text condition	`0: Positive` `1: Negative`
Filter[n].MessageText	string	Message text condition	Up to 1024 characters
Filter[n].SelPos	object[]	Array of the SelPos conditions	-
Filter[n].SelPos[m].Type	number	Negative specification	`0: Positive` `1: Negative`
Filter[n].SelPos[m].Position	number	Comparison position	1 origin

Parameters	Type	Description	Valid value
Filter[n].SelPos[m].CompareType	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter[n].SelPos[m].Value	string	Character string to be compared	Up to 64 characters
Filter[n].SelKey	object[]	Array of the Selkey conditions	-
Filter[n].SelKey[m].Type	number	Negative specification	0: Positive 1: Negative
Filter[n].SelKey[m].Key	string	Key character string	Up to 64 characters
Filter[n].SelKey[m].CompareType	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter[n].SelKey[m].Value	string	Character string to be compared	Up to 64 characters
Filter[n].SeverityNot	number	Negative specification of severity	0: Positive 1: Negative
Filter[n].Severity	number	Severity condition	0: Severity not specified 1: Success 2: Error 3: Warning 5: Information 9: Audit Success 17: Audit Failure
Filter[n].OverWriteSeverity	number	Display definition: Specifying severity change	Set to 0 if nothing is specified. * To be output only if the filter type is set to the storage filters.
Filter[n].OverWriteNode	string	Display definition: Specifying node name change	Leave blank characters if nothing is specified. * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnore	number	Message suppression function	0: Function is not used 1: Function is used * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnoreInterval	number	Message suppression interval	Unit: Second Integer within the range of 1 to 3600 * To be output only if the filter type is set to the storage filters.

Parameters	Type	Description	Valid value
Filter[n].MessageIgnorePassDelete	number	Suppression operation	0: Deleting the message sent within the monitoring intervals 1: Applying the message sent within the monitoring intervals to the subsequent filters * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnoreReset	number	Reset of monitoring interval	0: Not reset 1: Reset * To be output only if the filter type is set to the storage filters.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/eventlog/monitor/filter/AgentHost/073536db HTTP/1.1
Accept: application/json, */*
Date: Fri, 13 May 2016 08:21:31 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:DxogublQMaeqAb5H88cWmBYSRyeqYWrE47VcBW+z4Xs=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 2330
```

```
Date: Fri, 13 May 2016 08:38:06 GMT

{
  "Filter" : [ {
    "Node" : "",
    "Application" : "",
    "ObjectNot" : 0,
    "SelKey" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    } ],
    "MessageIDNot" : 0,
    "NodeNot" : 0,
    "Severity" : 0,
    "SelPos" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
```

```
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    } ],
    "Name" : "LogOnSuccess",
    "MessageTextNot" : 0,
    "MessageID" : "00004624",
    "NodeID" : "0735910b",
    "SeverityNot" : 0,
    "Object" : "",
    "FilterType" : 1,
    "ApplicationNot" : 0,
    "MessageText" : ""
  }, {
    "MessageIgnore" : 0,
    "Node" : "",
    "Application" : "",
    "MessageIgnoreInterval" : 10,
    "ObjectNot" : 0,
    "SelKey" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
```

```
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    } ],
    "MessageIgnorePassDelete" : 0,
    "MessageIDNot" : 0,
    "NodeNot" : 0,
    "Severity" : 0,
    "MessageIgnoreReset" : 0,
    "OverWriteSeverity" : 0,
    "SelPos" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
```

```
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    } ],
    "Name" : "Default Filter",
    "MessageTextNot" : 0,
    "MessageID" : "",
    "NodeID" : "073536d2",
    "SeverityNot" : 0,
    "Object" : "",
    "FilterType" : 0,
    "ApplicationNot" : 0,
    "OverWriteNode" : "",
    "MessageText" : ""
  } ],
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.8.3 Obtaining the event log filter definition

1. Process overview

   `Obtain the event log filter definition of the specified event log.`

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/eventlog/filter/AgentName/NodeID?ManagerName=ManagerName
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the target event log filter in ***NodeID***.

If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The log filter definition has been obtained successfully.`
404	Not Found	The specified node ID does not exist. The specified manager does not exist. The specified agent does not exist. The specified agent is being stopped.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Filter	object	Log filter definition	-
Filter.NodeID	string	Management ID of the log filter definition	`Eight-digit hexadecimal character`
Filter.Name	string	Log filter name	Up to 256 characters
Filter.FilterType	number	Filter type	`0: Storage filter` `1: Deletion filter`
Filter.NodeNot	number	Negative specification of node name condition	`0: Positive` `1: Negative`
Filter.Node	string	Node name condition	Up to 256 characters
Filter.ApplicationNot	number	Negative specification of the application name condition	`0: Positive` `1: Negative`
Filter.Application	string	Application name condition	Up to 128 characters
Filter.ObjectNot	number	Negative specification of object name condition	`0: Positive` `1: Negative`
Filter.Object	string	Object name condition	Up to 128 characters
Filter.MessageIDNot	number	Negative specification of message ID condition	`0: Positive` `1: Negative`
Filter.MessageID	string	Message ID condition	Up to 128 characters
Filter.MessageTextNot	number	Negative specification of message text condition	`0: Positive` `1: Negative`
Filter.MessageText	string	Message text condition	Up to 1024 characters
Filter.SelPos	object[]	Array of the SelPos conditions	-

Parameters	Type	Description	Valid value
Filter.SelPos[m].Type	number	Negative specification	0: Positive 1: Negative
Filter.SelPos[m].Position	number	Comparison position	1 origin
Filter.SelPos[m].Compare Type	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter.SelPos[m].Value	string	Character string to be compared	Up to 64 characters
Filter.SelKey	object[]	Array of the Selkey conditions	-
Filter.SelKey[m].Type	number	Negative specification	0: Positive 1: Negative
Filter.SelKey[m].Key	string	Key character string	Up to 64 characters
Filter.SelKey[m].Compare Type	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter.SelKey[m].Value	string	Character string to be compared	Up to 64 characters
Filter.SeverityNot	number	Negative specification of severity	0: Positive 1: Negative
Filter.Severity	number	Severity condition	0: Severity not specified 1: Success 2: Error 3: Warning 5: Information 9: Audit Success 17: Audit Failure
Filter.OverWriteSeverity	number	Display definition: Specifying severity change	Set to 0 if nothing is specified. * To be output only if the filter type is set to the storage filters.
Filter.OverWriteNode	string	Display definition: Specifying node name change	Leave blank characters if nothing is specified. * To be output only if the filter type is set to the storage filters.
Filter.MessageIgnore	number	Message suppression function	0: Function is not used 1: Function is used * To be output only if the filter type is set to the storage filters.
Filter.MessageIgnoreInterval	number	Message suppression interval	Unit: Second Integer within the range of 1 to 3600

Parameters	Type	Description	Valid value
			* To be output only if the filter type is set to the storage filters.
Filter.MessageIgnorePass Delete	number	Suppression operation	0: Deleting the message sent within the monitoring intervals 1: Applying the message sent within the monitoring intervals to the subsequent filters * To be output only if the filter type is set to the storage filters.
Filter.MessageIgnoreReset	number	Reset of monitoring interval	0: Not reset 1: Reset * To be output only if the filter type is set to the storage filters.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/eventlog/filter/AgentHost/0735910b HTTP/1.1
Accept: application/json, */*
Date: Fri, 13 May 2016 08:26:16 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:iyte3sGxRUOpcNqHmjj2mPJqcDMAQhux4y7Nl5v3BxE=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
```

```
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 1143
Date: Fri, 13 May 2016 08:42:51 GMT

{
  "Filter" : {
    "Node" : "",
    "Application" : "",
    "ObjectNot" : 0,
    "SelKey" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    } ],
    "MessageIDNot" : 0,
    "NodeNot" : 0,
    "Severity" : 0,
    "SelPos" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
```

```
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    } ],
    "Name" : "LogOnSuccess",
    "MessageTextNot" : 0,
    "MessageID" : "00004624",
    "NodeID" : "0735910b",
    "SeverityNot" : 0,
    "Object" : "",
    "FilterType" : 1,
    "ApplicationNot" : 0,
    "MessageText" : ""
  },
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```


4.8.4 Editing the event log filter definition

1. Process overview

Edit (add, delete, update and update the priority of) the event log filter definition in the specified event log.

Operation	Description
Addition	If Filter[n].NodeID (management ID of the log filter) is not specified, the filter information is newly added.
Update	If Filter[n].NodeID (management ID of the log filter) is specified, the corresponding filter information is updated. For the parameters that can be omitted, specify only the settings you want to change so that the remaining settings are kept in the defined status. If Filter[n].NotModify (flag without any change) is set to "1: No change", intentional update of the definition can be avoided.
Deletion	If the defined filter information is not specified, the already-defined filter information is deleted.
Priority	Priorities are assigned in the order of the defined filters.

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/eventlog/filter/AgentName/NodeID
```

Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the management ID of the target event log in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Filter	object[]	Information on the log filter definition to be edited	Not possible	-
Filter[n].NodeID	string	Management ID of the log filter definition		Eight-digit hexadecimal character

Parameters	Type	Description	Omission	Valid value
				This is processed as the addition in the event of omitting. This is processed as the update in the event of specifying.
Filter[n].NotModify	number	No-change flag		0: Changed 1: Not changed To be used only if the filter is updated. If 0 is set, all the following keys are checked since there is a change in the filter information. If 1 is set, all the following keys are not checked since there is no change in the filter information. * When changing the specific filters or the priority, set this key to 1 to improve the processing performance. Default value: 0: Changed
Filter[n].Name	string	Log filter name		Up to 256 characters The requirements of the keys are described below. If NodeID is omitted (added): Required If NodeID is specified (renewed): Optional
Filter[n].FilterType	number	Filter type		0: Storage filter 1: Deletion filter Default value: 0: Storage filter
Filter[n].NodeNot	number	Negative specification of node name condition		0: Positive 1: Negative Default value: 0: Positive
Filter[n].Node	string	Node name condition		Up to 256 characters Default value: null: No character string to compare If 1 is specified in Filter[n].NodeNot, the key must be specified.
Filter[n].ApplicationNot	number	Negative specification of the application name condition		0: Positive 1: Negative Default value: 0: Positive
Filter[n].Application	string	Application name condition		Up to 128 characters Default value: null: No character string to compare

Parameters	Type	Description	Omission	Valid value
				If 1 is specified in Filter[n].ApplicationNot, the key must be specified.

Filter[n].ObjectNot	number	Negative specification of object name condition		`0: Positive`
				`1: Negative`
				Default value:
				0: Positive

Filter[n].Object	string	Object name condition		Up to 128 characters Default value: null: No character string to compare If 1 is specified in Filter[n].ObjectNot, the key must be specified.

Filter[n].MessageIDNot	number	Negative specification of message ID condition		`0: Positive`
				`1: Negative`
				Default value:
				0: Positive

Filter[n].MessageID	string	Message ID condition		Up to 128 characters Default value: null: No character string to compare If 1 is specified in Filter[n].MessageIDNot, the key must be specified.

Filter[n].MessageTextNot	number	Negative specification of message text condition		`0: Positive`
				`1: Negative`
				Default value:
				0: Positive

Filter[n].MessageText	string	Message text condition		Up to 1024 characters Default value: null: No character string to compare If 1 is specified in Filter[n].MessageTextNot, the key must be specified.
Filter[n].SelPos	object[]	Array of the SelPos conditions		-

Filter[n].SelPos[m].Type	number	Negative specification		`0: Positive`
				`1: Negative`
				Default value:
				0: Positive

Filter[n].SelPos[m].Position	number	Comparison position		1 origin (within the range of 1 to 1024) Default value: 1: 1st character If 1 is specified in Filter[n].SelPos[m].Type, the key must be specified.

Filter[n].SelPos[m].CompareType	number	Comparison type		`0: =`
				`1: <>`
				`2: >=`
				`3: >`

Parameters	Type	Description	Omission	Valid value
				4: <= 5: < Default value: 0: = If 1 is specified in Filter[n].SelPos[m].Type, the key must be specified.
Filter[n].SelPos[m].Value	string	Character string to be compared		Up to 64 characters Default value: -: No character string to compare If 1 is specified in Filter[n].SelPos[m].Type, the key must be specified.
Filter[n].SelKey	object[]	Array of the Selkey conditions		-
Filter[n].SelKey[m].Type	number	Negative specification		0: Positive 1: Negative Default value: 0: Positive
Filter[n].SelKey[m].Key	string	Key character string		Up to 64 characters Default value: null: No key character string If any value is specified in Filter[n].SelKey[m].Value, the key must be specified.
Filter[n].SelKey[m].CompareType	number	Comparison type		0: = 1: <> 2: >= 3: > 4: <= 5: < Default value: 0: = If 1 is specified in Filter[n].SelKey[m].Type, the key must be specified.
Filter[n].SelKey[m].Value	string	Character string to be compared		Up to 64 characters Default value: -: No character string to compare If any value is specified in Filter[n].SelKey[m].Key, the key must be specified. If 1 is specified in Filter[n].SelKey[m].Type, the key must be specified.
Filter[n].SeverityNot	number	Negative specification of severity		0: Positive 1: Negative Default value:

Parameters	Type	Description	Omission	Valid value
				0: Positive
Filter[n].Severity	number	Severity condition		0: Severity not specified 1: Success 2: Error 3: Warning 5: Information 9: Audit Success 17: Audit Failure Default value: 0: Severity is not specified If 1 is specified in Filter[n].SeverityNot, the key must be specified.
Filter[n].OverWriteSeverity	number	Display definition: Specifying severity change		Default value: 0: Not changed * To be output only if the filter type is set to the storage filters.
Filter[n].OverWriteNode	string	Display definition: Specifying node name change		Up to 256 characters Default value: null: Not changed
Filter[n].MessageIgnore	number	Message suppression function		0: Function is not used 1: Function is used Default value: 0: Function unused
Filter[n].MessageIgnoreInterval	number	Message suppression interval		Unit: Second Integer within the range of 1 to 3600 Default value: 10: 10 seconds of suppression intervals
Filter[n].MessageIgnorePassDelete	number	Suppression operation		0: Deleting the message sent within the monitoring intervals 1: Applying the message sent within the monitoring intervals to the subsequent filters Default value: 0: The message within the monitoring intervals is deleted
Filter[n].MessageIgnoreReset	number	Reset of monitoring interval		0: Not reset 1: Reset Default value: 0: Not reset
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

* If "1: Negation" was set to each negative condition and if the values such as the corresponding character string to be compared are omitted, an error occurs.

* If the SelKey key character string and character to compare are input only to one side, an error occurs.

* In addition, if "1: Deletion filter" was set to the filter type, the display definition and option definition (message suppression function) can be set. However, the message is handled as a deletion message and the function is not valid.

* If the same NodeID is specified for more than one setting, the setting registered later is valid and an error does not occur.

* If the management ID of the filter that does not exist or the management ID of the filter that is not located under the corresponding application log is specified, it is skipped and an error does not occur.

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The event log filter definition has been edited successfully.`
404	Not Found	The management ID of the specified event log does not exist. The specified manager does not exist. The specified agent does not exist. The specified agent is being stopped.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Filter	object[]	Array of the log filter definition	-
Filter[n].NodeID	string	Management ID of the log filter definition	`Eight-digit hexadecimal character`
Filter[n].Name	string	Log filter name	Up to 256 characters
Filter[n].FilterType	number	Filter type	`0: Storage filter` `1: Deletion filter`
Filter[n].NodeNot	number	Negative specification of node name condition	`0: Positive` `1: Negative`
Filter[n].Node	string	Node name condition	Up to 256 characters
Filter[n].ApplicationNot	number	Negative specification of the application name condition	`0: Positive` `1: Negative`
Filter[n].Application	string	Application name condition	Up to 128 characters
Filter[n].ObjectNot	number	Negative specification of object name condition	`0: Positive` `1: Negative`
Filter[n].Object	string	Object name condition	Up to 128 characters
Filter[n].MessageIDNot	number	Negative specification of message ID condition	`0: Positive` `1: Negative`

Parameters	Type	Description	Valid value
Filter[n].MessageID	string	Message ID condition	Up to 128 characters
Filter[n].MessageTextNot	number	Negative specification of message text condition	0: Positive 1: Negative
Filter[n].MessageText	string	Message text condition	Up to 1024 characters
Filter[n].SelPos	object[]	Array of the SelPos conditions	-
Filter[n].SelPos[m].Type	number	Negative specification	0: Positive 1: Negative
Filter[n].SelPos[m].Position	number	Comparison position	1 origin
Filter[n].SelPos[m].CompareType	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter[n].SelPos[m].Value	string	Character string to be compared	Up to 64 characters
Filter[n].SelKey	object[]	Array of the Selkey conditions	-
Filter[n].SelKey[m].Type	number	Negative specification	0: Positive 1: Negative
Filter[n].SelKey[m].Key	string	Key character string	Up to 64 characters
Filter[n].SelKey[m].CompareType	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter[n].SelKey[m].Value	string	Character string to be compared	Up to 64 characters
Filter[n].SeverityNot	number	Negative specification of severity	0: Positive 1: Negative
Filter[n].Severity	number	Severity condition	0: Severity not specified 1: Success 2: Error 3: Warning 5: Information 9: Audit Success 17: Audit Failure
Filter[n].OverWriteSeverity	number	Display definition: Specifying severity change	Set to 0 if nothing is specified. * To be output only if the filter type is set to the storage filters.
Filter[n].OverWriteNode	string	Display definition: Specifying node name change	Leave blank characters if nothing is specified. * To be output only if the filter type is set to the storage filters.

Parameters	Type	Description	Valid value
Filter[n].MessageIgnore	number	Message suppression function	0: Function is not used 1: Function is used * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnoreInterval	number	Message suppression interval	Unit: Second Integer within the range of 1 to 3600 * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnorePassDelete	number	Suppression operation	0: Deleting the message sent within the monitoring intervals 1: Applying the message sent within the monitoring intervals to the subsequent filters * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnoreReset	number	Reset of monitoring interval	0: Not reset 1: Reset * To be output only if the filter type is set to the storage filters.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
POST /umf/fw/eventlog/filter/AgentHost/073536db HTTP/1.1
Content-Type:  application/json; charset=utf-8
Accept: application/json, */*
Date: Fri, 13 May 2016 08:15:36 GMT
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:Youjzs8YyE4V65V9k10jPL8yTQ1uC5fupzur9hxvCsE=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
```

```
Connection: keep-alive
Content-Length: 186

{
  "Filter" : [ {
    "FilterType" : 1,
    "MessageID" : "00004624",
    "Name" : "LogOnSuccess",
    "OverWriteNode" : "AgentHost"
  }, {
    "Name" : "Default Filter"
  } ]
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 2330
Date: Fri, 13 May 2016 08:32:11 GMT

{
  "Filter" : [ {
    "Node" : "",
    "Application" : "",
    "ObjectNot" : 0,
    "SelKey" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
```

```
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    } ],
    "MessageIDNot" : 0,
    "NodeNot" : 0,
    "Severity" : 0,
    "SelPos" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    } ],
```

```
    "Name" : "LogOnSuccess",
    "MessageTextNot" : 0,
    "MessageID" : "00004624",
    "NodeID" : "0735910b",
    "SeverityNot" : 0,
    "Object" : "",
    "FilterType" : 1,
    "ApplicationNot" : 0,
    "MessageText" : ""
  }, {
    "MessageIgnore" : 0,
    "Node" : "",
    "Application" : "",
    "MessageIgnoreInterval" : 10,
    "ObjectNot" : 0,
    "SelKey" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    } ],
    "MessageIgnorePassDelete" : 0,
    "MessageIDNot" : 0,
```

```
    "NodeNot" : 0,
    "Severity" : 0,
    "MessageIgnoreReset" : 0,
    "OverWriteSeverity" : 0,
    "SelPos" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    } ],
    "Name" : "Default Filter",
    "MessageTextNot" : 0,
    "MessageID" : "",
    "NodeID" : "073536d2",
    "SeverityNot" : 0,
    "Object" : "",
    "FilterType" : 0,
    "ApplicationNot" : 0,
    "OverWriteNode" : "",
    "MessageText" : ""
  } ],
  "Manager" : {
    "Name" : "localhost",
```

```
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.9 syslog monitoring

4.9.1 Obtaining the system log list

1. Process overview

   Obtain the system log list information of the specified agent.

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/syslog/monitor/AgentName?ManagerName=ManagerName
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The system log list information has been obtained successfully.
404	Not Found	The specified agent name does not exist. The specified manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if the manager name is omitted.

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Agent	object[]	Array of agent information	-
Agent[n].Name	string	Agent name	Up to 64 characters
Agent[n].NodeID	string	Management ID of the agent	Eight-digit hexadecimal character
Agent[n].SysLog	object[]	Array of the system log	-
Agent[n].SysLog[m].Name	string	System log group name	Up to 256 characters

Parameters	Type	Description	Valid value
Agent[n].SysLog[m].SysLogName	string	Log file name to be monitored	Up to 256 characters
Agent[n].SysLog[m].NodeID	string	Management ID of the system log group	`Eight-digit hexadecimal character`
Agent[n].SysLog[m].Filter	object[]	Array of the log filter definition	-
Agent[n].SysLog[m].Filter[l].Name	string	Log filter name	Up to 256 characters
Agent[n].SysLog[m].Filter[l].NodeID	string	Management ID of the log filter definition	`Eight-digit hexadecimal character`
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
GET /umf/fw/syslog/monitor/AgentHost HTTP/1.1
Accept: application/json, */*
Date: Mon, 16 May 2016 01:34:27 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:/oZ9z8opnP4QwA984YsIVHp7sh6sIhnixtpKRMRa47k=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 906
Date: Mon, 16 May 2016 01:51:05 GMT

{
  "Agent" : [ {
```

```
    "SysLog" : [ {
      "SysLogName" : "/var/log/messages",
      "Filter" : [ {
        "Name" : "Default Filter",
        "NodeID" : "073536ee"
      } ],
      "Name" : "messages",
      "NodeID" : "07353998"
    }, {
      "SysLogName" : "/var/log/secure",
      "Filter" : [ {
        "Name" : "Default Filter",
        "NodeID" : "073536ec"
      } ],
      "Name" : "secure",
      "NodeID" : "073536ed"
    }, {
      "SysLogName" : "/var/log/cron",
      "Filter" : [ {
        "Name" : "Default Filter",
        "NodeID" : "073536e8"
      } ],
      "Name" : "cron",
      "NodeID" : "073536e9"
    } ],
    "Name" : "AgentHost",
    "NodeID" : "07353996"
  } ],
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.9.2 Obtaining the system log filter definition list

1. Process overview

   Obtain the system log filter definition list of the specified system log.
   The obtained filter definition lists are output in order of priority.

2. HTTP method

   ```
   GET
   ```

3. URL

   /umf/fw/syslog/monitor/filter/***AgentName***/***NodeID***?ManagerName=***ManagerName***

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the target system log in ***NodeID***.

   If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The log filter definition list has been obtained successfully.`
404	Not Found	The specified node ID does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Filter	object[]	Array of the log filter definition	-
Filter[n].NodeID	string	Management ID of the log filter definition	`Eight-digit hexadecimal character`
Filter[n].Name	string	Log filter name	Up to 256 characters
Filter[n].FilterType	number	Filter type	`0: Storage filter` `1: Deletion filter`
Filter[n].MessageTextNot	number	Negative specification of message text condition	`0: Positive` `1: Negative`
Filter[n].MessageText	string	Message text condition	Up to 1024 characters
Filter[n].SelPos	object[]	Array of the SelPos conditions	-
Filter[n].SelPos[m].Type	number	Negative specification	`0: Positive` `1: Negative`
Filter[n].SelPos[m].Position	number	Comparison position	1 origin

Filter[n].SelPos[m].CompareType	number	Comparison type	`0: =`
			`1: <>`
			`2: >=`
			`3: >`
			`4: <=`
			`5: <`

Filter[n].SelPos[m].Value	string	Character string to be compared	Up to 64 characters
Filter[n].SelKey	object[]	Array of the Selkey conditions	-
Filter[n].SelKey[m].Type	number	Negative specification	`0: Positive` `1: Negative`
Filter[n].SelKey[m].Key	string	Key character string	Up to 64 characters

Filter[n].SelKey[m].CompareType	number	Comparison type	`0: =`
			`1: <>`
			`2: >=`
			`3: >`

Parameters	Type	Description	Valid value
			4: <= 5: <
Filter[n].SelKey[m].Value	string	Character string to be compared	Up to 64 characters
Filter[n].Severity	number	Display definition: Severity	* To be output only if the filter type is set to the storage filters.
Filter[n].Category	string	Display definition: Category name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].Node	string	Display definition: Node name	Up to 256 characters * To be output only if the filter type is set to the storage filters.
Filter[n].Application	string	Display definition: Application name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].Object	string	Display definition: Object name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].MessageID	string	Display definition: Message ID	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnore	number	Message suppression function	0: Function is not used 1: Function is used * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnoreInterval	number	Message suppression interval	Unit: Second Integer within the range of 1 to 3600 * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnorePassDelete	number	Suppression operation	0: Deleting the message sent within the monitoring intervals 1: Applying the message sent within the monitoring intervals to the subsequent filters * To be output only if the filter type is set to the storage filters.

Parameters	Type	Description	Valid value
Filter[n].MessageIgnoreReset	number	Reset of monitoring interval	0: Not reset 1: Reset * To be output only if the filter type is set to the storage filters.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/syslog/monitor/filter/AgentHost/07353998 HTTP/1.1
Accept: application/json, */*
Date: Mon, 16 May 2016 01:43:33 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:LL3Tq68n/uK9bmhzQfThpHQrRh9QnJ6CdHFe4Sc/75Q=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 1202
Date: Mon, 16 May 2016 02:00:11 GMT

{
  "Filter" : [ {
    "MessageIgnore" : 0,
    "Node" : "AgentHost",
    "Application" : "0000",
    "MessageIgnoreInterval" : 10,
    "SelKey" : [ {
      "CompareType" : 0,
```

```
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    } ],
    "MessageIgnorePassDelete" : 0,
    "Severity" : 264,
    "MessageIgnoreReset" : 0,
    "SelPos" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
```

```
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    } ],
    "Name" : "Default Filter",
    "MessageID" : "0000",
    "MessageTextNot" : 0,
    "NodeID" : "073536ee",
    "Object" : "0000",
    "FilterType" : 0,
    "Category" : "messages",
    "MessageText" : ""
  } ],
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.9.3 Obtaining the system log filter definition

1. Process overview

   Obtain the specified system log filter definition.

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/syslog/filter/AgentName/NodeID?ManagerName=ManagerName
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the filter ID to be obtained in ***NodeID***.

If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The log filter definition has been obtained successfully.`
404	Not Found	The specified filter ID does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Filter	object	Log filter definition	-
Filter.NodeID	string	Management ID of the log filter definition	`Eight-digit hexadecimal character`
Filter.Name	string	Log filter name	Up to 256 characters
Filter.FilterType	number	Filter type	`0: Storage filter` `1: Deletion filter`
Filter.MessageTextNot	number	Negative specification of message text condition	`0: Positive` `1: Negative`
Filter.MessageText	string	Message text condition	Up to 1024 characters
Filter.SelPos	object[]	Array of the SelPos conditions	-
Filter.SelPos[m].Type	number	Negative specification	`0: Positive` `1: Negative`
Filter.SelPos[m].Position	number	Comparison position	1 origin

Filter.SelPos[m].Compare Type	number	Comparison type	`0: =`
			`1: <>`
			`2: >=`
			`3: >`
			`4: <=`
			`5: <`

Filter.SelPos[m].Value	string	Character string to be compared	Up to 64 characters
Filter.SelKey	object[]	Array of the Selkey conditions	-
Filter.SelKey[m].Type	number	Negative specification	`0: Positive` `1: Negative`
Filter.SelKey[m].Key	string	Key character string	Up to 64 characters

Parameters	Type	Description	Valid value
Filter.SelKey[m].Compare Type	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter.SelKey[m].Value	string	Character string to be compared	Up to 64 characters
Filter.Severity	number	Display definition: Severity	* To be output only if the filter type is set to the storage filters.
Filter.Category	string	Display definition: Category name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter.Node	string	Display definition: Node name	Up to 256 characters * To be output only if the filter type is set to the storage filters.
Filter.Application	string	Display definition: Application name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter.Object	string	Display definition: Object name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter.MessageID	string	Display definition: Message ID	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter.MessageIgnore	number	Message suppression function	0: Function is not used 1: Function is used * To be output only if the filter type is set to the storage filters.
Filter.MessageIgnoreInterval	number	Message suppression interval	Unit: Second Integer within the range of 1 to 3600 * To be output only if the filter type is set to the storage filters.
Filter.MessageIgnorePass Delete	number	Suppression operation	0: Deleting the message sent within the monitoring intervals 1: Applying the message sent within the monitoring intervals to the subsequent filters

Parameters	Type	Description	Valid value
			* To be output only if the filter type is set to the storage filters.
Filter.MessageIgnoreReset	number	Reset of monitoring interval	0: Not reset 1: Reset * To be output only if the filter type is set to the storage filters.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/syslog/filter/AgentHost/073536ee HTTP/1.1
Accept: application/json, */*
Date: Mon, 16 May 2016 01:49:39 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:7p2F8fV1O3w3sKbSrGhQjDBQEFLnEbv2v3rkqMBqqNs=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 1200
Date: Mon, 16 May 2016 02:06:18 GMT

{
  "Filter" : {
    "MessageIgnore" : 0,
    "Node" : "AgentHost",
    "Application" : "0000",
    "MessageIgnoreInterval" : 10,
```

```
    "SelKey" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    } ],
    "MessageIgnorePassDelete" : 0,
    "Severity" : 264,
    "MessageIgnoreReset" : 0,
    "SelPos" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
```

```
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    } ],
    "Name" : "Default Filter",
    "MessageID" : "0000",
    "MessageTextNot" : 0,
    "NodeID" : "073536ee",
    "Object" : "0000",
    "FilterType" : 0,
    "Category" : "messages",
    "MessageText" : ""
  },
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```


4.9.4 Editing the system log filter definition

1. Process overview

Edit (add, delete, update, update the priority order) the log filter definition in the specified system log.

Operation	Description
Addition	If Filter[n].NodeID (management ID of the log filter) is not specified, the filter information is newly added.
Update	If Filter[n].NodeID (management ID of the log filter) is specified, the corresponding filter information is

Operation	Description
	updated. For the parameters that can be omitted, specify only the settings you want to change so that the remaining settings are kept in the defined status. If Filter[n].NotModify (flag without any change) is set to "1: No change", intentional update of the definition can be avoided.
Deletion	If the defined filter information is not specified, the already-defined filter information is deleted.
Priority	Priorities are assigned in the order of the defined filters.

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/syslog/filter/AgentName/NodeID
```

Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the management ID of the target system log in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
Filter	object[]	Information on the log filter definition to be edited	Not possible	-
Filter[n].NodeID	string	Management ID of the log filter definition		Eight-digit hexadecimal character This is processed as the addition in the event of omitting. This is processed as the update in the event of specifying.
Filter[n].NotModify	number	No-change flag		0: Changed 1: Not changed To be used only if the filter is updated. If 0 is set, all the following keys are checked since there is

Parameters	Type	Description	Omission	Valid value
				a change in the filter information. If 1 is set, all the following keys are not checked since there is no change in the filter information. * When changing the specific filters or the priority, set this key to 1 to improve the processing performance. Default value: 0: Changed
Filter[n].Name	string	Log filter name		Up to 256 characters The requirements of the keys are described below. If NodeID is omitted (added): Required If NodeID is specified (renewed): Optional
Filter[n].FilterType	number	Filter type		0: Storage filter 1: Deletion filter Default value: 0: Storage filter
Filter[n].MessageTextNot	number	Negative specification of message text condition		0: Positive 1: Negative Default value: 0: Positive
Filter[n].MessageText	string	Message text condition		Up to 1024 characters Default value: null: No character string to compare If 1 is specified in Filter[n].MessageTextNot, the key must be specified.
Filter[n].SelPos	object[]	Array of the SelPos conditions		-
Filter[n].SelPos[m].Type	number	Negative specification		0: Positive 1: Negative Default value: 0: Positive
Filter[n].SelPos[m].Position	number	Comparison position		1 origin (within the range of 1 to 1024) Default value: 1: 1st character If 1 is specified in Filter[n].SelPos[m].Type, the key must be specified.
Filter[n].SelPos[m].CompareType	number	Comparison type		0: = 1: <> 2: >= 3: >

Parameters	Type	Description	Omission	Valid value
				4: <= 5: < Default value: 0: = If 1 is specified in Filter[n].SelPos[m].Type, the key must be specified.
Filter[n].SelPos[m].Value	string	Character string to be compared		Up to 64 characters Default value: -: No character string to compare If 1 is specified in Filter[n].SelPos[m].Type, the key must be specified.
Filter[n].SelKey	object[]	Array of the Selkey conditions		-
Filter[n].SelKey[m].Type	number	Negative specification		0: Positive 1: Negative Default value: 0: Positive
Filter[n].SelKey[m].Key	string	Key character string		Up to 64 characters Default value: null: No key character string If any value is specified in Filter[n].SelKey[m].Value, the key must be specified.
Filter[n].SelKey[m].CompareType	number	Comparison type		0: = 1: <> 2: >= 3: > 4: <= 5: < Default value: 0: = If 1 is specified in Filter[n].SelKey[m].Type, the key must be specified.
Filter[n].SelKey[m].Value	string	Character string to be compared		Up to 64 characters Default value: -: No character string to compare If any value is specified in Filter[n].SelKey[m].Key, the key must be specified. If 1 is specified in Filter[n].SelKey[m].Type, the key must be specified.
Filter[n].Severity	number	Display definition: Severity		* To be output only if the filter type is set to the storage filters.

Parameters	Type	Description	Omission	Valid value
				Default value: 264: Normal
Filter[n].Category	string	Display definition: Category name		Up to 32 characters Default value: Higher system log group name of the relevant filter
Filter[n].Node	string	Display definition: Node name		Up to 256 characters Default value: Name of the agent to which the relevant filter was added
Filter[n].Application	string	Display definition: Application name		Up to 32 characters * If 1 (Deletion filter) is specified in FilterType, specifying the key is not required.
Filter[n].Object	string	Display definition: Object name		Up to 32 characters Default value: SysLogMonitor
Filter[n].MessageID	string	Display definition: Message ID		Up to 32 characters Default value: 0000

Filter[n].MessageIgnore	number	Message suppression function		`0: Function is not used`
				`1: Function is used`
				Default value:
				0: Function is not used

Filter[n].MessageIgnoreInterval	number	Message suppression interval		`Unit: Second`
				`Integer within the range of 1 to 3600`
				Default value:
				10: 10 seconds of suppression intervals

Filter[n].MessageIgnorePassDelete	number	Suppression operation		`0: Deleting the message sent within the monitoring intervals`
				`1: Applying the message sent within the monitoring intervals to the subsequent filters`
				Default value:
				0: Deleting the message within the monitoring intervals

Filter[n].MessageIgnoreReset	number	Reset of monitoring interval		`0: Not reset`
				`1: Reset`
				Default value:
				0: Not reset

Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

* If "1: Negation" was set to each negative condition and if the corresponding values such as character string to compare are omitted, an error occurs.

* If the SelKey key character string and character string to compare are input only to one side, an error occurs.

* In addition, if "1: Deletion filter" is set to the filter type, the display definition and option definition (message suppression function) can be set. However, the message is handled as a deletion message and the function is not valid.

* If the same NodeID is specified for more than one setting, the setting registered later is valid and an error does not occur.

If a management ID of the log filter that does not exist or a management ID of the log filter that does not belong to the relevant event log is specified, it is skipped and an error does not occur.

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The system log filter definition has been edited successfully.`
404	Not Found	The management ID of the specified system log does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
Filter	object[]	Array of the log filter definition	-
Filter[n].NodeID	string	Management ID of the log filter definition	`Eight-digit hexadecimal character`
Filter.Name	string	Log filter name	Up to 256 characters
Filter[n].FilterType	number	Filter type	`0: Storage filter` `1: Deletion filter`
Filter[n].MessageTextNot	number	Negative specification of message text condition	`0: Positive` `1: Negative`
Filter[n].MessageText	string	Message text condition	Up to 1024 characters
Filter[n].SelPos	object[]	Array of the SelPos conditions	-
Filter[n].SelPos[m].Type	number	Negative specification	`0: Positive` `1: Negative`
Filter[n].SelPos[m].Position	number	Comparison position	1 origin

Filter[n].SelPos[m].CompareType	number	Comparison type	`0: =`
			`1: <>`
			`2: >=`
			`3: >`
			`4: <=`
			`5: <`

Filter[n].SelPos[m].Value	string	Character string to be compared	Up to 64 characters

Parameters	Type	Description	Valid value
Filter[n].SelKey	object[]	Array of the Selkey conditions	-
Filter[n].SelKey[m].Type	number	Negative specification	0: Positive 1: Negative
Filter[n].SelKey[m].Key	string	Key character string	Up to 64 characters
Filter[n].SelKey[m].CompareType	number	Comparison type	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter[n].SelKey[m].Value	string	Character string to be compared	Up to 64 characters
Filter[n].Severity	number	Display definition: Severity	* To be output only if the filter type is set to the storage filters.
Filter[n].Category	string	Display definition: Category name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].Node	string	Display definition: Node name	Up to 256 characters * To be output only if the filter type is set to the storage filters.
Filter[n].Application	string	Display definition: Application name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].Object	string	Display definition: Object name	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].MessageID	string	Display definition: Message ID	Up to 32 characters * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnore	number	Message suppression function	0: Function is not used 1: Function is used * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnoreInterval	number	Message suppression interval	Unit: Second Integer within the range of 1 to 3600 * To be output only if the filter type is set to the storage filters.

Parameters	Type	Description	Valid value
Filter[n].MessageIgnorePassDelete	number	Suppression operation	0: Deleting the message sent within the monitoring intervals 1: Applying the message sent within the monitoring intervals to the subsequent filters * To be output only if the filter type is set to the storage filters.
Filter[n].MessageIgnoreReset	number	Reset of monitoring interval	0: Not reset 1: Reset * To be output only if the filter type is set to the storage filters.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

* If NodeID of a filter that does not exist or NodeID of a filter that is not located under the corresponding system log is specified, it is skipped.

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
POST /umf/fw/syslog/filter/AgentHost/07353998 HTTP/1.1
Content-Type:  application/json; charset=utf-8
Accept: application/json, */*
Date: Mon, 16 May 2016 02:01:59 GMT
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:dJZ49+O2eCHbYLPq8bvnWo9hSd0TZjowCbQCNq2jXFI=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
Content-Length: 107

{
  "Filter" : [ {
    "Name" : "Filter01",
    "FilterType" : 1,
    "MessageText" : "Normal"
```

```
  }, {
    "NodeID" : "073536ee",
    "NotModify" : 0
  } ]
}
```


[Response]


```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 2105
Date: Mon, 16 May 2016 02:29:50 GMT

{
  "Filter" : [ {
    "SelKey" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
```

```
      "Key" : "",
      "Value" : ""
    } ],
    "SelPos" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    } ],
    "Name" : "Filter01",
    "MessageTextNot" : 0,
    "NodeID" : "0739309e",
    "FilterType" : 1,
    "MessageText" : "Normal"
  }, {
    "MessageIgnore" : 0,
    "Node" : "AgentHost",
    "Application" : "0000",
    "MessageIgnoreInterval" : 10,
    "SelKey" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
```

```
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Key" : "",
      "Value" : ""
    } ],
    "MessageIgnorePassDelete" : 0,
    "Severity" : 264,
    "MessageIgnoreReset" : 0,
    "SelPos" : [ {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
```

```
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    }, {
      "CompareType" : 0,
      "Type" : 0,
      "Value" : "",
      "Position" : 1
    } ],
    "Name" : "Default Filter",
    "MessageID" : "0000",
    "MessageTextNot" : 0,
    "NodeID" : "073536ee",
    "Object" : "0000",
    "FilterType" : 0,
    "Category" : "messages",
    "MessageText" : ""
  } ],
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.9.5 Obtaining the common option of the system log filter definition

1. Process overview

   Obtain the information on the common option of the log filter definition corresponding to the specified system log management ID.

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/syslog/filter/option/AgentName/NodeID?ManagerName=ManagerName
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

Specify the management ID of the target system log in ***NodeID***.

If more than one manager exists, specify the manager name obtained from the topology tree configuration as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The log filter definition option information has been obtained successfully.`
404	Not Found	The specified node ID does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	System log management ID to be obtained	-
SameMessage	number	Identical message suppression function	`0: Function is not used` `1: Function is used`
SameMessageCount	number	Message count	Integer within the range of 256 to 4096
SameMessageInterval	number	Message suppression monitoring interval	`Unit: Second` `Integer within the range of 1 to 3600`
SameMessageReset	number	Reset of monitoring interval	`0: Not reset` `1: Reset`
SameMessageNumeric	number	Exclusion of the numerical value	`0: Not excluded` `1: Excluded`
LostPos	number	Function to send all log messages if the monitoring cannot be continued	`0: Function is not used` `1: Function is used`
Encode	number	Character code for encoding	Setting value / Description 54936 / GB18030 936 / gb2312 950 / big5 20932 / EUC-JP 50220 / iso-2022-jp 932 / shift_jis 1200 / utf-16 1201 / unicodeFFFE 65001 / utf-8

Parameters	Type	Description	Valid value
			Setting value: 20127 — Description: us-ascii Setting value: 0 — Description: Default value
BackupLog	number	Specifying the backup log	`0: Not specified` `1: Specified`
BackupLogName	string	Backup log name	Up to 256 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
GET /umf/fw/syslog/filter/option/AgentHost/07353998 HTTP/1.1
Accept: application/json, */*
Date: Mon, 16 May 2016 02:21:17 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:lcyZ+tqxfjAlft6EYZ0w5JTpGO7dVrfcGs5dXj0TZaw=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 265
Date: Mon, 16 May 2016 02:37:55 GMT

{
  "SameMessageInterval" : 10,
  "Encode" : 0,
  "SameMessage" : 0,
  "BackupLogName" : "",
  "BackupLog" : 0,
```

```
  "SameMessageNumeric" : 0,
  "LostPos" : 1,
  "SameMessageReset" : 0,
  "SameMessageCount" : 1024,
  "NodeID" : "07353998",
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.9.6 Updating the common option of the system log filter definition

1. Process overview

   Update the common option of the information on the log filter definition corresponding to the specified system log management ID. If the requirement condition is set to "Optional", specify only the settings to be changed so that the remaining settings maintain the status before update.

2. HTTP method

   ```
   PUT
   ```

3. URL

   ```
   /umf/fw/syslog/filter/option/AgentName/NodeID
   ```

   Specify the target agent name in ***AgentName***. Specify the agent name by using up to 64 characters.

   Specify the management ID of the target system log in ***NodeID***.

4. Parameters

Parameters	Type	Description	Omission	Valid value
(Root)	object	Root object	Not possible	-
SameMessage	number	Identical message suppression function		0: Function is not used 1: Function is used
SameMessageCount	number	Message count		Integer within the range of 256 to 4096
SameMessageInterval	number	Message suppression monitoring interval		Unit: Second Integer within the range of 1 to 3600
SameMessageReset	number	Reset of monitoring interval		0: Not reset 1: Reset

Parameters	Type	Description	Omission	Valid value
SameMessageNumeric	number	Exclusion of the numerical value		`0: Not excluded` `1: Excluded`
LostPos	number	Function to send all log messages if the monitoring cannot be continued		`0: Function is not used` `1: Function is used`
Encode	number	Character code for encoding		<table><tr><th>Setting value</th><th>Description</th></tr><tr><td>54936</td><td>GB18030</td></tr><tr><td>936</td><td>gb2312</td></tr><tr><td>950</td><td>big5</td></tr><tr><td>20932</td><td>EUC-JP</td></tr><tr><td>50220</td><td>iso-2022-jp</td></tr><tr><td>932</td><td>shift_jis</td></tr><tr><td>1200</td><td>utf-16</td></tr><tr><td>1201</td><td>unicodeFFFE</td></tr><tr><td>65001</td><td>utf-8</td></tr><tr><td>20127</td><td>us-ascii</td></tr><tr><td>0</td><td>Default value</td></tr></table>
BackupLog	number	Specifying the backup log		`0: Not specified` `1: Specified`
BackupLogName	string	Backup log name		Up to 256 characters `* The backup log name is required if 1 is specified for the backup log.`
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager that manages the target resource MoM name or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The log filter definition option information has been update successfully.`
404	Not Found	The specified node ID does not exist. The specified manager does not exist.
409	Conflict	`More than one specified resource exists, and it cannot be identified uniquely.` `* Occurs if the manager name is omitted.`

6. Response

Parameters	Type	Description	Valid value
(Root)	object	Root object	-
NodeID	string	System log management ID to be obtained	-
SameMessage	number	Identical message suppression function	`0: Function is not used` `1: Function is used`
SameMessageCount	number	Message count	Integer within the range of 256 to 4096
SameMessageInterval	number	Message suppression monitoring interval	`Unit: Second` `Integer within the range of 1 to 3600`
SameMessageReset	number	Reset of monitoring interval	`0: Not reset` `1: Reset`
SameMessageNumeric	number	Exclusion of the numerical value	`0: Not excluded` `1: Excluded`
LostPos	number	Function to send all log messages if the monitoring cannot be continued	`0: Function is not used` `1: Function is used`
Encode	number	Character code for encoding	**Setting value** / **Description** 54936 / GB18030 936 / gb2312 950 / big5 20932 / EUC-JP 50220 / iso-2022-jp 932 / shift_jis 1200 / utf-16 1201 / unicodeFFFE 65001 / utf-8 20127 / us-ascii 0 / Default value
BackupLog	number	Specifying the backup log	`0: Not specified` `1: Specified`
BackupLogName	string	Backup log name	Up to 256 characters
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager that manages the target resource MoM name or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

* The information on the common option of the log filter definition is not output if the contents of the information were not updated,

7. Change history

- X-FW-API-Version: 1.0

- Newly added

8. JSON Example

[Request]

```
PUT /umf/fw/syslog/filter/option/AgentHost/07353998 HTTP/1.1
Content-Type:  application/json; charset=utf-8
Accept: application/json, */*
Date: Mon, 16 May 2016 02:28:46 GMT
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:okaFixLh3SuVPI6IzoV2upxT3/YauV9OAnOpek5LzOA=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
Content-Length: 82

{
  "SameMessage" : 1,
  "SameMessageReset" : 1,
  "SameMessageCount" : 1024
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 265
Date: Mon, 16 May 2016 02:45:24 GMT

{
  "SameMessageInterval" : 10,
  "Encode" : 0,
  "SameMessage" : 1,
  "BackupLogName" : "",
  "BackupLog" : 0,
  "SameMessageNumeric" : 0,
  "LostPos" : 1,
  "SameMessageReset" : 1,
  "SameMessageCount" : 1024,
  "NodeID" : "07353998",
  "Manager" : {
    "Name" : "localhost",
    "Status" : 200,
    "StatusCode" : 200,
    "ErrorMessage" : ""
  }
}
```

4.10 Scheduler

4.10.1 Obtaining a schedule list

1. Process overview

   Obtain the schedule list.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/schedule/schedules/FuctionID/Mode?ManagerName=ManagerName
```

   Specify the schedule definition ID in ***FunctionID***.

   FunctionID cannot be omitted.

   For the function name corresponding to the schedule function ID, see "List of function ID and function name (page 311)".

   Specify the operation mode of the schedule in ***Mode***.

   0: Time-point schedule mode (Failover can be specified.)

   1: Time-range schedule mode

   2: Time-point schedule mode (Failover cannot be specified.)

   Mode cannot be omitted.

   For an environment where more than one manager exists, specify the target manager name as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The schedule list has been obtained successfully.
400	Bad Request	Parameter error
404	Not Found	The manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if ManagerName is omitted.
500	Internal Server Error	Internal server error

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object type	-

Parameter	Data type	Description	Valid value
Schedule	object[]	Array of the schedule settings	-
Schedule[n].ID	string	Schedule definition ID	Eight-digit hexadecimal character string that uniquely identifies the schedule in the manager
Schedule[n].Name	string	Schedule name	1 to 64 characters
Schedule[n].FunctionID	string	Schedule function ID	Eight-digit hexadecimal number For the function names corresponding to the schedule function ID, see "List of function ID and function name (page 311)" .
Schedule[n].CalendarID	string	Calendar ID to which the schedule belongs	Eight-digit hexadecimal number
Schedule[n].Mode	number	Operation mode of schedule	0: Time schedule (Failover can be specified.) 1: Period schedule 2: Time schedule (Failover cannot be specified.)
Schedule[n].Manager	object	Manager object	-
Schedule[n].Manager.Name	string	Manager name	Name of the manager in which the schedule exists, MoM name, or RM name
Schedule[n].Manager.ErrorMessage	string	Error message	-
Schedule[n].Manager.Status	number	Communication error code	-
Schedule[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/schedule/schedules/FFFFFFFF/1?ManagerName=mco-RM HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-FW-API-Version: 1.0
Content-Type: application/json; charset=utf-8
```

```
Content-Length: 0
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 376
Date: Thu, 17 Mar 2016 07:40:45 GMT

{
    "Schedule" : [
        {
            "Mode" : 1,
            "FunctionID" : "ffffffff",
            "Name" : "Schedule01",
            "ID" : "56e90e4a",
            "CalendarID" : "56e7ba3e",
            "Manager" : {
                "Name" : "mco-RM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }, {
            "Mode" : 1,
            "FunctionID" : "ffffffff",
            "Name" : "Schedule02",
            "ID" : "56ea647f",
            "CalendarID" : "56e7ba3e",
            "Manager" : {
                "Name" : "mco-RM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.10.2 Obtaining schedule details

1. Process overview

   Obtain the detailed information on the specified schedule.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/schedule/schedules/ID?ManagerName=ManagerName
```

Specify the schedule definition ID in ***ID***.

Specify using the eight-digit hexadecimal character string in ***ID***.

ID cannot be omitted.

Specify the name of the manager for which the definition is obtained in ***ManagerName***.

ManagerName cannot be omitted.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The detailed information has been obtained successfully.
400	Bad Request	Parameter error
404	Not Found	The schedule does not exist.
500	Internal Server Error	Internal server error

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Schedule	object	Schedule object	-
Schedule.Name	string	Schedule name	1 to 64 characters
Schedule.FunctionID	string	Schedule function ID	Eight-digit hexadecimal number For the function names corresponding to the schedule function ID, see "List of function ID and function name (page 311)" .
Schedule.CalendarID	string	Calendar ID to which the schedule belongs	Eight-digit hexadecimal number
Schedule.Mode	string	Operation mode of schedule	0: Time schedule (Failover can be specified.) 1: Period schedule 2: Time schedule (Failover cannot be specified.)
Schedule.NotifyFailOver	boolean	Schedule report setting in the case of a failover	true: Reported false: Not reported This is valid if Mode is set to 0 (time schedule).

Parameter	Data type	Description	Valid value
Schedule.PastTime	string	Time to track back to the previous schedule that was not reported	A value can be specified within the range from 1 minute to 6 days and 23 hours and 59 minutes Report the schedule in the dhhmm format. Valid if NotifyFailOver is set to true (Reported).
Schedule.PastTimeCount	number	Specify whether to report all the previous schedules in the cycle that were not reported or report the most recent schedule once.	0: All schedules are reported 1: The most recent schedule is reported once Valid if NotifyFailOver is set to true (Reported).
Schedule.Rule	object[]	Rule array	-
Schedule.Rule[n].Type	number	Schedule rule type	0: Operating day/Every day 1: Repetition of operating day/Intervals of XX days 2: Every week 3: Every month (date) 4: Every month (day of week) 5: Every year (date) 6: Every year (day of week) 7: Specific day 8: Consecutive days
Schedule.Rule[n].Year	number	Year	1971-2036 Valid if the rule type is set to 7 (Specific day).
Schedule.Rule[n].Month	number	Month	1-12 Valid if the rule type is set to 5 (Every year (date)), 6 (Every year (day of week)), or 7 (Specific day).
Schedule.Rule[n].Day	number	Day	1 to 31: Specified day 99: End of month Valid if the rule type is set to 5 (Every year (date)), 6 (Every year (day of week)), or 7 (Specific day).
Schedule.Rule[n].Week	number	Indicates the times of week of the day in combination with Schedule.Rule[n].DayOfWeek.	0: First 1: Second 2: Third 3: Fourth 4: Last Valid if the rule type is set to 4 (Every month (day of week)) or 6 (Every year (day of week)).

Parameter	Data type	Description	Valid value
		The values from 0 to 4 are used.	
Schedule.Rule[n].DayOfWeek	number	Day of week	0: Sunday 1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5; Friday 6: Saturday Valid if the rule type is set to 4 (Every month (day of week)) or 6 (Every year (day of week)).
Schedule.Rule[n].DayOfWeekStr	string	Indicates the confirmation status in days of week from Sunday to Saturday.	0: Invalid 1: Valid Valid if the rule type is set to 2 (Every week).
Schedule.Rule[n].Hour	number	Time (Start)	0 to 23 Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week)) 7 (Specific day)
Schedule.Rule[n].Minute	number	Minute (Start)	0 to 59 Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week)) 7 (Specific day)
Schedule.Rule[n].EndHour	number	Time (End)	0 to 23 Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date))

Parameter	Data type	Description	Valid value
			6 (Every year (day of week)) 7 (Specific day)
Schedule.Rule[n].EndMinute	number	Minute (End)	0 to 59 Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week)) 7 (Specific day)
Schedule.Rule[n].IntervalTime	number	Intervals for repeating (minutes)	1 to 720 Valid if the rule type is set to 1 (Repetition of operating day).
Schedule.Rule[n].StartDate	string	Application start day	yyyymmdd Valid if the rule type is set as shown below. 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week))
Schedule.Rule[n].EndDate	string	Application end day	yyyymmdd Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week)) * If Schedule.Rule[n].Endless is set to true (end day is undecided), an empty string ("") is set.
Schedule.Rule[n].Endless	boolean	Indicates whether the end day is specified or not.	true: End day is undecided false: End day is decided Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week))

Parameter	Data type	Description	Valid value
Schedule.Rule[n].StartDateTime	string	Start day of the application period	yyyymmddhhmm Valid if the rule type is set to 8 (Consecutive days). 197101010000-203612312359
Schedule.Rule[n].EndDateTime	string	End day of the application period	yyyymmddhhmm Valid if the rule type is set to 8 (Consecutive days). 197101010000-203612312359
Schedule[n].Manager	object	Manager object	-
Schedule[n].Manager.Name	string	Manager name	Name of the manager in which the schedule exists, MoM name, or RM name
Schedule[n].Manager.ErrorMessage	string	Error message	-
Schedule[n].Manager.Status	number	Communication error code	-
Schedule[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/schedule/schedules/56e90e4a?ManagerName=mco-RM HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-FW-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 0
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 319
Date: Thu, 17 Mar 2016 07:41:40 GMT

{
```

```
    "Schedule" : [
        {
            "Mode" : "1",
            "FunctionID" : "ffffffff",
            "Rule" : [
                {
                    "EndDate" : "20171231",
                    "Hour" : 0,
                    "Minute" : 0,
                    "EndHour" : 23,
                    "StartDate" : "20160101",
                    "Type" : 0,
                    "EndMinute" : 59,
                    "Endless" : false
                }
            ],
            "Name" : "Schedule01",
            "CalendarID" : "56e7ba3e",
            "Manager" : {
                "Name" : "mco-RM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.10.3 Adding a schedule

1. Process overview

   Add the schedule settings.

   More than one schedule rule must be defined when adding the schedule.

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/schedule/schedules
```

4. Parameters

Parameter	Data type	Description	Omission	Valid value
(Root)	object	Root object type	Not possible	-
Schedule	object	Schedule object	Not possible	-
Schedule.Name	string	Schedule name	Not possible	1 to 64 characters
Schedule.FunctionID	string	Schedule function ID	Not possible	Eight-digit hexadecimal number For the function names corresponding to the schedule function ID, see

Parameter	Data type	Description	Omission	Valid value
				"List of function ID and function name (page 311)" .
Schedule.CalendarID	string	Calendar ID	Not possible	Eight-digit hexadecimal number
Schedule.Mode	string	Operation mode of schedule	Not possible	0: Time schedule (Failover can be specified) 1: Period schedule 2: Time schedule (Failover cannot be specified)
Schedule.NotifyFailOver	boolean	Schedule report setting in the case of a failover	Cannot be used if Mode is set to 0.	true: Reported false: Not reported This is valid if Mode is set to 0 (time schedule).
Schedule.PastTime	string	Time to track back to the previous schedule that was not reported	Yes	A value can be specified within the range of 1 minute to 6 days and 23 hours and 59 minutes Report the schedule in dhhmm format. 10 minutes is set in the event of omitting. Valid if NotifyFailOver is set to true (Reported). Not referenced if NotifyFailOver is set to false (Not reported).
Schedule.PastTimeCount	number	Specify whether to report all the previous schedules in the cycle that were not reported or to report the most recent schedule once.	Yes	0: All schedules are reported. 1: The most recent schedule is reported once. 1 is set in the event of omitting. Valid if NotifyFailOver is set to true (Reported). No reference if NotifyFailOver is set to false (Not reported).
Schedule.Rule	object[]	Schedule rule array	No	
Schedule.Rule[n].Type	number	Schedule rule type	No	0: Operating day/Every day 1: Repetition of operating day/ Intervals of XX days 2: Every week 3: Every month (date) 4: Every month (day of week) 5: Every year (date) 6: Every year (day of week) 7: Specific day 8: Consecutive days
Schedule.Rule[n].Year	number	Year	Can be specified only if the conditions	1971-2036

Parameter	Data type	Description	Omission	Valid value
			described as valid values are met.	Valid if the rule type is set to 7 (Specific day).
Schedule.Rule[n].Month	number	Month	Can be specified only if the conditions described as valid values are met.	1-12 Valid if the rule type is set to 5 (Every year (date)), 6 (Every year (day of week)), or 7 (Specific day).
Schedule.Rule[n].Day	number	Day	Can be specified only if the conditions described as valid values are met.	1 to 31: Specified day 99: End of month Valid if the rule type is set to 3 (Every month (date)), 5 (Every year (date)), or 7 (Specific day).
Schedule.Rule[n].Week	number	Indicates the number of the specific day of the week in the month in combination with Schedule.Rule[n].DayOfWeek.	Can be specified only if the conditions described as valid values are met.	0: First 1: Second 2: Third 3: Fourth 4: Last Valid if the rule type is set to 4 (Every month (day of week)) or 6 (Every year (day of week)).
Schedule.Rule[n].DayOfWeek	number	Specify the day of the week.	Can be specified only if the conditions described as valid values are met.	0: Sunday 1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday Valid if the rule type is set to 4 (Every month (day of week)) or 6 (Every year (day of week)).
Schedule.Rule[n].DayOfWeekStr	string	Indicates the validity for each day of week by using 0 or 1 (from Sunday to Saturday).	Can be specified only if the conditions described as valid values are met.	0: Invalid 1: Valid Valid if the rule type is set to 2 (Every week). Example: 0111110
Schedule.Rule[n].Hour	number	Time (Start)	Can be specified only if the conditions described as valid values are met.	0-23 Valid if the rule type is set as shown below. 0 (Operating day) 1 (Operating day repetition) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week))

Parameter	Data type	Description	Omission	Valid value
				7 (Specific day)
Schedule.Rule[n].Minute	number	Minute (Start)	Can be specified only if the conditions described as valid values are met.	0-59 [The operation mode is set to 0 or 2.] Valid if the rule type is set to 1 (Repetition of operating day). [The operation mode is set to 1.] Valid if the rule type is set as shown below. 0 (Operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week)) 7 (Specific day)
Schedule.Rule[n].EndHour	number	Time (End)	Can be specified only if the conditions described as valid values are met.	0-23 [The operation mode is set to 0 or 2.] Valid if the rule type is set to 1 (Repetition of operating day). [The operation mode is set to 1.] Valid if the rule type is set as shown below. 0 (Operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week)) 7 (Specific day)
Schedule.Rule[n].EndMinute	number	Minute (End)	Can be specified only if the conditions described as valid values are met.	0-59 Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week)) 7 (Specific day)
Schedule.Rule[n].IntervalTime	number	Intervals for repeating (minutes)	Can be specified only if the conditions described as	Valid if the rule type is set to 1 (Operating day repetition). 1-720

Parameter	Data type	Description	Omission	Valid value
			valid values are met.	
Schedule.Rule[n].StartDate	string	Start day of the application period	Can be specified only if the conditions described as valid values are met.	yyyymmdd Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week))
Schedule.Rule[n].EndDate	string	Last day of the application period	Can be specified only if the conditions described as valid values are met.	yyyymmdd Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week)) * Not referenced if Schedule.Rule[n].Endless is set to true (the last day is undecided).
Schedule.Rule[n].Endless	boolean	Indicates whether the last day is specified or not.	Can be specified only if the conditions described as valid values are met.	true: The last day is undecided. false: The last day is decided. Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week))
Schedule.Rule[n].StartDateTime	string	Start day of the application period	Can be specified only if the conditions described as valid values are met.	yyyymmddhhmm 197101010000-203612312359 Valid if the rule type is set to 8 (Consecutive days).
Schedule.Rule[n].EndDateTime	string	Last day of the application period	Can be specified only if the conditions described as	yyyymmddhhmm 197101010000-203612312359 Valid if the rule type is set to 8 (Consecutive days).

Parameter	Data type	Description	Omission	Valid value
			valid values are met.	
Manager	object	Manager object	Not possible	-
Manager.Name	string	Manager name	Not possible	Manager name, MoM name, or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The schedule has been added successfully.
400	Bad Request	Parameter error A schedule with the same name already exists. * The schedule must be named uniquely for each operation mode in the schedule function ID.
404	Not Found	The manager does not exist. The calendar ID does not exist.
500	Internal Server Error	Internal server error

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Schedule	object	Schedule object	-
Schedule.ID	string	Schedule definition ID	Eight-digit hexadecimal character string that uniquely identifies the schedule in the manager
Schedule[n].Manager	object	Manager object	-
Schedule[n].Manager.Name	string	Manager name	Name of the manager to which the schedule is added, MoM name, or RM name
Schedule[n].Manager.ErrorMessage	string	Error message	-
Schedule[n].Manager.Status	number	Communication error code	-
Schedule[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`

8. JSON Example

   [Request]

```
POST /umf/fw/schedule/schedules HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-FW-API-VERSION: 1.0
Content-Type: application/json; charset=UTF-8
Content-Length: 425

{
    "Schedule":{
        "Name":"Schedule01_MoM",
        "FunctionID":"ffffffff",
        "CalendarID":"56e91000",
        "Mode":"1",
        "NotifyFailOver":true,
        "PastTime":"62359",
        "PastTimeCount":0,
        "Rule":[
            {
                "Type":0,
                "StartDate":"20160601",
                "Hour":0,
                "Minute":0,
                "EndDate":"20161231",
                "EndHour":23,
                "EndMinute":59,
                "Endless":false
            }
        ]
    },
    "Manager":{
        "Name":"mco-MoM"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 115
Date: Wed, 16 Mar 2016 07:55:07 GMT

{
    "Schedule" : [
        {
            "ID" : "56e9115b",
            "Manager" : {
                "Name" : "mco-MoM",
                "Status" : 200,
```

```
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.10.4 Updating a schedule

1. Process overview

   Update the specified schedule definition ID settings.

   All definitions including the existing definitions to be unchanged must be specified.

   If a calendar ID that does not exist in the schedule setting items is set, an error occurs.

2. HTTP method

```
PUT
```

3. URL

```
/umf/fw/schedule/schedules/ID
```

   Specify the schedule definition ID in ***ID***.

   Specify the definition by using the eight-digit hexadecimal character string in ***ID***.

   ID cannot be omitted.

4. Parameters

Parameter	Data type	Description	Omission	Valid value
(Root)	object	Root object type	Not possible	-
Schedule	object	Schedule object	Not possible	-
Schedule.Name	string	Schedule name	Not possible	1 to 64 characters
Schedule.CalendarID	string	Calendar ID	No	Eight-digit hexadecimal number
Schedule.NotifyFailOver	boolean	Schedule report setting in the case of a failover	This is invalid if the operation mode is set to 0 (Time schedule).	true: Reported false: Not reported
Schedule.PastTime	string	Time to track back to the previous schedule that was not reported	Yes	A value can be specified within the range of 1 minute to 6 days and 23 hours and 59 minutes Report the schedule in dhhmm format. 10 minutes is set in the event of omitting. Valid if NotifyFailOver is set to true (Reported). No reference if NotifyFailOver is set to false (Not reported).

Parameter	Data type	Description	Omission	Valid value
Schedule.PastTimeCount	number	Specify whether to report all the previous schedules in the cycle that were not reported or to report the most recent schedule once.	Yes	0: All schedules are reported 1: The most recent schedule is reported once 1 is set in the event of omitting. Valid if NotifyFailOver is set to true (Reported). No reference if NotifyFailOver is set to false (Not reported).
Schedule.Rule	object[]	Schedule rule array	No	-
Schedule.Rule[n].Type	number	Schedule rule type	No	0: Operating day/Every day 1: Repetition of operating day/ Intervals of XX days 2: Every week 3: Every month (date) 4: Every month (day of week) 5: Every year (date) 6: Every year (day of week) 7: Specific day 8: Consecutive days
Schedule.Rule[n].Year	number	Year	Can be specified only if the conditions described as valid values are met.	1971 to 2036 Valid if the rule type is set to 7 (Specific day).
Schedule.Rule[n].Month	number	Month	Can be specified only if the conditions described as valid values are met.	1 to 12 Valid if the rule type is set to 5 (Every year (date)), 6 (Every year (day of week)), or 7 (Specific day).
Schedule.Rule[n].Day	number	Day	Can be specified only if the conditions described as valid values are met.	1 to 31: Specified day 99: End of month Valid if the rule type is set to 3 (Every month (date)), 5 (Every year (date)), or 7 (Specific day).
Schedule.Rule[n].Week	number	Indicates the number of the specific day of the week in the month in combination with Schedule.Rule[n].DayOf Week.	Can be specified only if the conditions described as valid values are met.	0: First 1: Second 2: Third 3: Fourth 4: Last Valid if the rule type is set to 4 (Every month (day of week)) or 6 (Every year (day of week)).
Schedule.Rule[n].DayOfWeek	number	Specify the day of the week.	Can be specified only if the conditions	0: Sunday 1: Monday

Parameter	Data type	Description	Omission	Valid value
			described as valid values are met.	2: Tuesday 3: Wednesday 4: Thursday 5; Friday 6: Saturday Valid if the rule type is set to 4 (Every month (day of week)) or 6 (Every year (day of week)).
Schedule.Rule[n].DayOfWeekStr	string	Indicates the validity for each day of the week by using 0 or 1 (from Sunday to Saturday).	Can be specified only if the conditions described as valid values are met.	0: Invalid 1: Valid Valid if the rule type is set to 2 (Every week). Example: 0111110
Schedule.Rule[n].Hour	number	Time (Start)	Can be specified only if the conditions described as valid values are met.	0 to 23 Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week)) 7 (Specific day)
Schedule.Rule[n].Minute	number	Minute (Start)	Can be specified only if the conditions described as valid values are met.	0 to 59 [The operation mode is set to 0 or 2.] Valid if the rule type is set to 1 (Repetition of operating day). [The operation mode is set to 1.] Valid if the rule type is set as shown below. 0 (Operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week)) 7 (Specific day)
Schedule.Rule[n].EndHour	number	Time (End)	Can be specified only if the conditions described as valid values are met.	0 to 23 [The operation mode is set to 0 or 2.] Valid if the rule type is set to 1 (Operating day repetition). [The operation mode is set to 1.]

Parameter	Data type	Description	Omission	Valid value
				Valid if the rule type is set as shown below. 0 (Operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week)) 7 (Specific day)
Schedule.Rule[n].EndMinute	number	Minute (End)	Can be specified only if the conditions described as valid values are met.	0 to 59 Valid if the rule type is set as shown below. 0 (Operating day) 1 (Operating day repetition) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week)) 7 (Specific day)
Schedule.Rule[n].IntervalTime	number	Intervals for repeating (minutes)	Can be specified only if the conditions described as valid values are met.	Valid if the rule type is set to 1 (Repetition of operating day). 1 to 720
Schedule.Rule[n].StartDate	string	Start day of the application period	Can be specified only if the conditions described as valid values are met.	yyyymmdd Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week))
Schedule.Rule[n].EndDate	string	End day of the application period	Can be specified only if the conditions described as valid values are met.	yyyymmdd Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week))

Parameter	Data type	Description	Omission	Valid value
				* Not referenced if Schedule.Rule[n].Endless is set to true (end day is undecided).
Schedule.Rule[n].Endless	boolean	Indicates whether the end day is specified or not.	Can be specified only if the conditions described as valid values are met.	true: End day is undecided. false: End day is decided. Valid if the rule type is set as shown below. 0 (Operating day) 1 (Repetition of operating day) 2 (Every week) 3 (Every month (date)) 4 (Every month (day of week)) 5 (Every year (date)) 6 (Every year (day of week))
Schedule.Rule[n].StartDateTime	string	Start day of the application period	Can be specified only if the conditions described as valid values are met.	yyyymmddhhmm 197101010000 to 203612312359 Valid if the rule type is set to 8 (Consecutive days).
Schedule.Rule[n].EndDateTime	string	End day of the application period	Can be specified only if the conditions described as valid values are met.	yyyymmddhhmm 197101010000 to 203612312359 Valid if the rule type is set to 8 (Consecutive days).
Manager	object	Manager object	No	-
Manager.Name	string	Manager name	No	Manager name, MoM name, or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The schedule has been updated successfully.
400	Bad Request	Parameter error A schedule with the same name exists.
404	Not Found	The manager does not exist. The schedule definition ID does not exist. The calendar ID does not exist.
500	Internal Server Error	Internal server error

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object type	-

Parameter	Data type	Description	Valid value
Schedule	object	Schedule object	-
Schedule.ID	string	Schedule definition ID	Eight-digit hexadecimal character string that uniquely identifies the schedule in the manager
Schedule[n].Manager	object	Manager object	-
Schedule[n].Manager.Name	string	Manager name	Name of the manager for which the schedule is renewed, MoM name, or RM name
Schedule[n].Manager.ErrorMessage	string	Error message	-
Schedule[n].Manager.Status	number	Communication error code	-
Schedule[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
PUT /umf/fw/schedule/schedules/56e9115b HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-FW-API-VERSION: 1.0
Content-Type: application/json; charset=UTF-8
Content-Length: 317

{
    "Schedule":{
        "Name":"Schedule01",
        "CalendarID":"56e91000",
        "Rule":[
            {
                "Type":0,
                "StartDate":"20160101",
                "Hour":0,
                "Minute":0,
                "EndDate":"20171231",
                "EndHour":23,
                "EndMinute":59,
                "Endless":false
            }
        ]
    },
    "Manager":{
        "Name":"mco-MoM"
```

```
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 115
Date: Thu, 17 Mar 2016 06:26:53 GMT

{
    "Schedule" : [
        {
            "ID" : "56e9115b",
            "Manager" : {
                "Name" : "mco-MoM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.10.5 Deleting a schedule

1. Process overview

   Delete the specified schedule definition ID settings.

2. HTTP method

```
DELETE
```

3. URL

```
/umf/fw/schedule/schedules/ID?ManagerName=ManagerName
```

   Specify the schedule definition ID in ***ID***.

   Specify the definition by using the eight-digit hexadecimal character string in ***ID***.

   ID cannot be omitted.

   Specify the name of the manager for which the definition is deleted in ***ManagerName***.

   ManagerName cannot be omitted.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The schedule has been deleted successfully.
400	Bad Request	Parameter error A schedule being used
404	Not Found	The schedule definition ID does not exist.
500	Internal Server Error	Internal server error

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Schedule	object	Schedule object	-
Schedule.ID	string	Schedule definition ID	Eight-digit hexadecimal character string that uniquely identifies the schedule in the manager
Schedule[n].Manager	object	Manager object	-
Schedule[n].Manager.Name	string	Manager name	Name of the manager for which the schedule is deleted, MoM name, or RM name
Schedule[n].Manager.ErrorMessage	string	Error message	-
Schedule[n].Manager.Status	number	Communication error code	-
Schedule[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`

8. JSON Example

[Request]

```
DELETE /umf/fw/schedule/schedules/56e90e4a?ManagerName=mco-RM HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-FW-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 0
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 114
Date: Thu, 17 Mar 2016 08:00:55 GMT

{
    "Schedule" : [
        {
            "ID" : "56e90e4a",
            "Manager" : {
                "Name" : "mco-RM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.10.6 List of function ID and function name

- List of function ID and function name

  The function name corresponding to the schedule function ID and the operation mode (Mode) specified when adding a schedule are listed below.

Function ID	Function name	Operation mode of schedule
FFFFFFFF	Topology view	1
FFFFFFFF	Business view	1
0000004F	Network view	1

4.10.7 Setting item list for each schedule rule type

- The setting items for each schedule rule type are listed below.

  For "Obtaining schedule details", items marked with x are not returned.

  For "Adding/Renewing a schedule", if items marked with x are set, they are ignored.

1. The operation mode of the schedule is set to the time schedule (0 or 2).

Item Type	Year	Month	Day	Week	DayOf Week	DayOf WeekStr	Hour Minute	EndHour EndMinute	IntervalTime	StartDate EndDate Endless
Operating day	×	×	×	×	×	×	○	×	×	○

Item Type	Year	Month	Day	Week	DayOf Week	DayOf WeekStr	Hour Minute	EndHour EndMinute	IntervalTime	StartDate EndDate Endless
Repetition of operating day	×	×	×	×	×	×	○	○	○	○
Every week	×	×	×	×	×	○	○	×	×	○
Every day (date)	×	×	○	×	×	×	○	×	×	○
Every month (day of week)	×	×	×	○	○	×	○	×	×	○
Every year (date)	×	○	○	×	×	×	○	×	×	○
Every year (day of week)	×	○	×	○	○	×	○	×	×	○
Specific day	○	○	○	×	×	×	○	×	×	×

2. The operation mode of the schedule is set to the period schedule (1).

Item Type	Year	Month	Day	Week	DayOf Week	DayOf WeekStr	Hour Minute	EndHour EndMinute	IntervalTime	StartDate EndDate Endless
Operating day	×	×	×	×	×	×	○	○	×	○
Every week	×	×	×	×	×	○	○	○	×	○
Every day (date)	×	×	○	×	×	×	○	○	×	○
Every month (day of week)	×	×	×	○	○	×	○	○	×	○
Every year (date)	×	○	○	×	×	×	○	○	×	○
Every year	×	○	×	○	○	×	○	○	×	○

Item Type	Year	Month	Day	Week	DayOf Week	DayOf WeekStr	Hour Minute	EndHour EndMinute	IntervalTime	StartDate EndDate Endless
(day of week)										
Specific day	○	○	○	×	×	×	○	○	×	×
Consecutive days	All the above parameters must be marked with x. Set StartDateTime and EndDateTime.									

4.11 Calendar

4.11.1 Obtaining the calendar list

1. Process overview

   Obtain the calendar list.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/calendar/calendars?ManagerName=ManagerName
```

   For an environment where more than one manager exists, specify the target manager name as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The calendar list has been obtained successfully.
404	Not Found	The manager does not exist.
500	Internal Server Error	Internal server error

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Calendar	object[]	Calendar object	-

Parameter	Data type	Description	Valid value
Calendar[n].ID	string	Calendar ID	Eight-digit hexadecimal character string that uniquely identifies the calendar in the manager
Calendar[n].Name	string	Calendar name	1 to 64 characters
Calendar[n].Calendar	object[]	Calendar object of subtree	This is output if there are calendars of subtree. The contents of the object are the same as the Calendar object as described above.
Calendar[n].Manager	object	Manager object	-
Calendar[n].Manager.Name	string	Manager name	Name of the manager in which the calendar exists, MoM name, or RM name
Calendar[n].Manager.ErrorMessage	string	Error message	-
Calendar[n].Manager.Status	number	Communication error code	-
Calendar[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/calendar/calendars HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-FW-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 0
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 803
Date: Wed, 16 Mar 2016 07:45:56 GMT
```

```
{
    "Calendar" : [
        {
            "Name" : "All operation dates",
            "ID" : "56e79c2a",
            "Manager" : {
                "Name" : "mco-MoM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }, {
            "Name" : "Weekday operation dates",
            "ID" : "56e79c29",
            "Manager" : {
                "Name" : "mco-MoM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }, {
            "Name" : "Calendar103",
            "ID" : "56e8a661",
            "Manager" : {
                "Name" : "mco-MoM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }, {
            "Name" : "All operation dates",
            "ID" : "56e7ba3e",
            "Manager" : {
                "Name" : "mco-RM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }, {
            "Name" : "Weekday operation dates",
            "ID" : "56e7ba3d",
            "Calendar" : [
                {
                    "Name" : "Calendar02",
                    "ID" : "56e90bb1"
                }
            ],
            "Manager" : {
                "Name" : "mco-RM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }, {
            "Name" : "Calendar01",
            "ID" : "56e902f6",
            "Manager" : {
                "Name" : "mco-RM",
```

```
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.11.2 Obtaining the calendar details

1. Process overview

   Obtain detailed information on the specified calendar.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/calendar/calendars/ID?StartDate=StartDate&EndDate=EndDate&ManagerName=
ManagerName
```

   Specify the ID obtained from the calendar list in ***ID***.

   ID cannot be omitted.

   Specify the application start month and end month to be obtained in yyyymm format in ***StartDate*** and ***EndDate***. (Example: 201601)

   Specify a value within the range of 197101 to 203612 in ***StartDate*** and ***EndDate***.

   Note that the application data for up to 10 years from the application start month can be returned as the response.

   StartDate and ***EndDate*** cannot be omitted.

   Specify the name of the manager for which the detailed calendar is obtained in ***ManagerName***.

   ManagerName cannot be omitted.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The calendar details have been obtained successfully.
400	Bad Request	The calendar ID is not specified. The parameter is specified incorrectly.
404	Not Found	The specified calendar ID does not exist. The manager does not exist.
500	Internal Server Error	Internal server error

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Calendar	object	Calendar object	-
Calendar.Name	string	Calendar name	1 to 64 characters
Calendar.ParentID	string	Parent calendar ID	Eight-digit hexadecimal character string that uniquely identifies the calendar in the manager
Calendar.Apply	object[]	Object within the application range	For details, see "Application range of calendar (page 335)" .
Calendar.Apply[n].YearMonth	string	Year/month within the application range	Specify this in yyyymm format. Example: 201501
Calendar.Apply[n].Data	string	Application data for each month Output the contents of the rule application for each month.	The character string length corresponds to the number of days in the month indicated in Calendar.Apply[n].YearMonth. (Up to 31 characters) The meaning of each character is shown below. 0: Not applied 1: Operating day 2: Non-operating day 3: Unspecified day
Calendar.Description	string	Calendar description	This is the description set when creating the calendar. If this was not set, a space is left.
Calendar.Rule	object[]	Rule object	-
Calendar.Rule[n].Kind	number	Type of rule application day	1: Operating day 2: Non-operating day 3: Unspecified day
Calendar.Rule[n].Type	number	Rule type	0: Every day 1: Every week 2: Every month (date) 3: Every month (day of week) 4: Every year (date) 5: Every year (day of week) 6: Specific day The subsequent parameters are returned according to the type.
Calendar.Rule[n].Year	number	Year	1971 to 2036 This is returned if Calendar.Rule[n].Type is set to 6 (Specific day).
Calendar.Rule[n].Month	number	Month	1 to 12

Parameter	Data type	Description	Valid value
			This is returned if Calendar.Rule[n].Type is set to 4 (Every year (date)), 5 (Every year (day of week)), or 6 (Specific day).
Calendar.Rule[n].Day	number	Day	1 to 31 or 99 1 to 31: Specified day 99: End of month This is returned if Calendar.Rule[n].Type is set to 2 (Every month (date)), 5 (Every year (day of week)), or 6 (Specific day).
Calendar.Rule[n].Week	number	Indicates the number of the specific day of the week in the month in combination with Calendar.Rule[n].DayOfWeek.	0: First 1: Second 2: Third 3: Fourth 4: Last This is returned if Calendar.Rule[n].Type is set to 3 (Every month (day of week)) or 5 (Every year (day of week)).
Calendar.Rule[n].DayOfWeek	number	Day of week	0: Sunday 1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5; Friday 6: Saturday This is returned if Calendar.Rule[n].Type is set to 3 (Every month (day of week)) or 5 (Every year (day of week)).
Calendar.Rule[n].DayOfWeekStr	string	Indicates the validity for each day of week.	Indicates by using 7 characters for days from Sunday to Saturday. 0: Invalid 1: Valid For example, if days from Monday to Friday are selected, this is indicated as 0111110. This is returned if Calendar.Rule[n].Type is set to 1 (Every week).
Calendar.Rule[n].StartDate	string	Application start day	yyyymmdd Specify a value within the range of 19710101 to 20361231. This is returned if Calendar.Rule[n].Type is set as shown below. 0 (Every day) 1 (Every week) 2 (Every month (date)) 3 (Every month (day of week)) 4 (Every year (date)) 5 (Every year (day of week))

Parameter	Data type	Description	Valid value
Calendar.Rule[n].EndDate	string	Application end day	yyyymmdd Specify a value within the range of 19710101 to 20361231. * If Calendar.Rule[n].Endless is set to true (End day is undecided), an empty string ("") is set. This is returned if Calendar.Rule[n].Type is set as shown below. 0 (Every day) 1 (Every week) 2 (Every month (date)) 3 (Every month (day of week)) 4 (Every year (date)) 5 (Every year (day of week))
Calendar.Rule[n].Endless	boolean	Indicates whether the application end date is decided or not.	true: End day is undecided false: End day is decided This is returned if Calendar.Rule[n].Type is set as shown below. 0 (Every day) 1 (Every week) 2 (Every month (date)) 3 (Every month (day of week)) 4 (Every year (date)) 5 (Every year (day of week))
Calendar[n].Manager	object	Manager object	-
Calendar[n].Manager.Name	string	Manager name	Name of the manager in which the calendar exists, MoM name, or RM name
Calendar[n].Manager.ErrorMessage	string	Error message	-
Calendar[n].Manager.Status	number	Communication error code	-
Calendar[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/calendar/calendars/56e90bb1?StartDate=201601&EndDate=20161
2&ManagerName=mco-RM HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
```

```
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-FW-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 0
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 1322
Date: Thu, 17 Mar 2016 04:43:52 GMT

{
    "Calendar" : [
        {
            "Apply" : [
                {
                    "YearMonth" : "201601",
                    "Data" : "122111112211111221111221111122"
                }, {
                    "YearMonth" : "201602",
                    "Data" : "111112211111221111122111111221"
                }, {
                    "YearMonth" : "201603",
                    "Data" : "111122111112211111221111221111"
                }, {
                    "YearMonth" : "201604",
                    "Data" : "122111112211111221111122111112"
                }, {
                    "YearMonth" : "201605",
                    "Data" : "211111221111122111122111112211"
                }, {
                    "YearMonth" : "201606",
                    "Data" : "111221111122111112211111221111"
                }, {
                    "YearMonth" : "201607",
                    "Data" : "122111112211111221111221111122"
                }, {
                    "YearMonth" : "201608",
                    "Data" : "111112211111221111221111122111"
                }, {
                    "YearMonth" : "201609",
                    "Data" : "112211111221111122111112211111"
                }, {
                    "YearMonth" : "201610",
                    "Data" : "221111122111112211111221111221"
                }, {
                    "YearMonth" : "201611",
                    "Data" : "111122111112211111221111122111"
                }, {
                    "YearMonth" : "201612",
```

```
                    "Data" : "112211111221111221111122111112"
                }
            ],
            "Rule" : [
                {
                    "EndDate" : "20151231",
                    "Kind" : 1,
                    "StartDate" : "20150101",
                    "Type" : 1,
                    "DayOfWeekStr" : "0000001",
                    "Endless" : false
                }, {
                    "EndDate" : "20151231",
                    "Kind" : 2,
                    "StartDate" : "20150101",
                    "Type" : 1,
                    "DayOfWeekStr" : "0001000",
                    "Endless" : false
                }, {
                    "Kind" : 2,
                    "Day" : 1,
                    "Type" : 6,
                    "Year" : 2015,
                    "Month" : 1
                }, {
                    "EndDate" : "20151231",
                    "Week" : 2,
                    "Kind" : 2,
                    "DayOfWeek" : 0,
                    "StartDate" : "20150101",
                    "Type" : 3,
                    "Endless" : false
                }
            ],
            "Name" : "Calendar02",
            "ParentID" : "56e7ba3d",
            "Description" : "Attendance calendar",
            "Manager" : {
                "Name" : "mco-RM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```


4.11.3 Adding the calendar

1. Process overview

   Add a new calendar setting.

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/calendar/calendars
```

4. Parameters

Parameter	Data type	Description	Omission	Valid value
(Root)	object	Root object type	Not possible	-
Calendar	object	Calendar object	Not possible	-
Calendar.Name	string	Calendar name	Not possible	1 to 64 characters Delete spaces before and after the characters. The calendar must be named uniquely. If the same calendar name already exists, an error occurs.
Calendar.ParentID	string	Parent calendar ID	Not possible	Eight-digit hexadecimal character string that uniquely identifies the calendar in the manager Specify "00000000” to add an ID to the route.
Calendar.Description	string	Calendar description	Not possible	Specify this item by using up to 128 characters. Delete spaces before and after the characters. If this is not specified, leave an empty string ("").
Calendar.Rule	object[]	Rule object	Yes	Note: Priorities are set for the rules. Specify the elements of the array in descending order of priority.
Calendar.Rule[n].Kind	number	Rule class	Not possible	1: Operating day 2: Non-operating day 3: Unspecified day
Calendar.Rule[n].Type	number	Rule type	No	0: Every day 1: Every week 2: Every month (date) 3: Every month (day of week) 4: Every year (date) 5: Every year (day of week) 6: Specific day The subsequent parameters cannot be omitted depending on the type.
Calendar.Rule[n].Year	number	Year	Cannot be omitted if Calendar.Rule[n].Type is set to 6 (Specific day).	1971 to 2036
Calendar.Rule[n].Month	number	Month	Cannot be omitted if Calendar.Rule[n].Type is set to 4	1 to 12

Parameter	Data type	Description	Omission	Valid value
			(Every year (date)), 5 (Every year (day of week)), or 6 (Specific day).	
Calendar.Rule[n].Day	number	Day	Cannot be omitted if Calendar.Rule[n].Type is set to 2 (Every month (date)), 5 (Every year (day of week)), or 6 (Specific day).	Specify 1 to 31 or 99. 1 to 31: Specified day 99: End of month
Calendar.Rule[n].Week	number	Indicates the number of the specific day of the week in the month in combination with Calendar.Rule[n].DayOf Week.	Cannot be omitted if Calendar.Rule[n].Type is set to 3 (Every month (day of week)) or 5 (Every year (day of week)).	0: First 1: Second 2: Third 3: Fourth 4: Last
Calendar.Rule[n].DayOfWeek	number	Day of week	Cannot be omitted if Calendar.Rule[n].Type is set to 3 (Every month (day of week)) or 5 (Every year (day of week)).	0: Sunday 1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5; Friday 6: Saturday
Calendar.Rule[n].DayOfWeekStr	string	Indicates the validity for each day of week.	Cannot be omitted if Calendar.Rule[n].Type is set to 1 (Every week).	Indicated by seven characters for days from Sunday to Saturday. 0: Invalid 1: Valid For example, if days from Monday to Friday are selected, this is indicated as 0111110.
Calendar.Rule[n].StartDate	string	Application start month	Cannot be omitted if Calendar.Rule[n].Type is set as shown below. 0 (Every day) 1 (Every week) 2 (Every month (date)) 3 (Every month (day of week)) 4 (Every year (date)) 5 (Every year (day of week))	Specify a value within the range of 19710101 to 20361231 in yyyymmdd format. Example: 20150101

Parameter	Data type	Description	Omission	Valid value
Calendar.Rule[n].EndDate	string	Application end month	Cannot be omitted if Calendar.Rule[n].Type is set as shown below. 0 (Every day) 1 (Every week) 2 (Every month (date)) 3 (Every month (day of week)) 4 (Every year (date)) 5 (Every year (day of week))	Specify a value within the range of 19710101 to 20361231 in yyyymmdd format. Example: 20150101 * If Calendar.Rule[n].Endless is set to true (End day is undecided), ignore this.
Calendar.Rule[n].Endless	boolean	Indicates whether the application end date is undecided or not.	Cannot be omitted if Calendar.Rule[n].Type is set as shown below. 0 (Every day) 1 (Every week) 2 (Every month (date)) 3 (Every month (day of week)) 4 (Every year (date)) 5 (Every year (day of week))	true: End day is undecided false: End day is decided
Manager	object	Manager object	Not possible	-
Manager.Name	string	Manager name	No	Manager name, MoM name, or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The calendar has been added successfully.
400	Bad Request	The parameter is specified incorrectly.
404	Not Found	The specified calendar ID does not exist. The manager does not exist.
500	Internal Server Error	Internal server error

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Calendar	object	Calendar object	-
Calendar.ID	string	Calendar ID	Eight-digit hexadecimal character string that uniquely identifies the calendar in the manager
Calendar[n].Manager	object	Manager object	-
Calendar[n].Manager.Name	string	Manager name	Name of the manager for which the calendar is added, MoM name, or RM name
Calendar[n].Manager.ErrorMessage	string	Error message	-
Calendar[n].Manager.Status	number	Communication error code	-
Calendar[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
POST /umf/fw/calendar/calendars HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-FW-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 771

{
    "Calendar" : {
        "Name" : "Calendar01_MoM",
        "ParentID" : "56e79c2a",
        "Description" : "Business calendar",
        "Rule" : [
            {
                "Kind" : 1,
                "Type" : 1,
                "DayOfWeekStr" : "0000001",
                "StartDate" : "20150101",
                "EndDate" : "20151231",
                "Endless" : false
            }, {
                "Kind" : 2,
                "Type" : 1,
```

```
                "DayOfWeekStr" : "0001000",
                "StartDate" : "20150101",
                "EndDate" : "20151231",
                "Endless" : false
            }, {
                "Kind" : 2,
                "Type" : 6,
                "Year" : 2015,
                "Month" : 1,
                "Day" : 1
            }, {
                "Kind" : 2,
                "Type" : 3,
                "Week" : 2,
                "DayOfWeek" : 0,
                "StartDate" : "20150101",
                "EndDate" : "20151231",
                "Endless" : false
            }
        ]
    },
    "Manager" : {
        "Name" : "mco-MoM"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 115
Date: Wed, 16 Mar 2016 07:49:33 GMT

{
    "Calendar" : [
        {
            "ID" : "56e91000",
            "Manager" : {
                "Name" : "mco-MoM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.11.4 Updating the calendar

1. Process overview

Update the specified calendar settings.

2. HTTP method

```
PUT
```

3. URL

```
/umf/fw/calendar/calendars/ID
```

Specify the ID obtained from the calendar list in ***ID***.

ID cannot be omitted.

The "All operating days" and "Operating weekdays" calendars set by default cannot be updated.

If these calendar IDs are specified, an error (400 Bad Request) occurs.

4. Parameters

Parameter	Data type	Description	Omission	Valid value
(Root)	object	Root object type	No	-
Calendar	object	Calendar object	Not possible	-
Calendar.Name	string	Calendar name	No	1 to 64 characters Delete spaces before and after the characters. The calendar must be named uniquely. If the same calendar name already exists, an error occurs.
Calendar.Description	string	Calendar description	No	Specify this item by using up to 128 characters. Delete spaces before and after the characters. If this is not specified, leave an empty string (""").
Calendar.Rule	object[]	Rule object	Yes	Discard all existing rules, and replace them with new rules. All the existing rules are deleted when omitted. Note: Priorities are set for the rules. Specify the elements of the array in descending order of priority.
Calendar.Rule[n].Kind	number	Rule class	No	1: Operating day 2: Non-operating day 3: Unspecified day
Calendar.Rule[n].Type	number	Rule type	No	0: Every day 1: Every week 2: Every month (date) 3: Every month (day of week) 4: Every year (date)

Parameter	Data type	Description	Omission	Valid value
				5: Every year (day of week) 6: Specific day The subsequent parameters cannot be omitted depending on the type.
Calendar.Rule[n].Year	number	Year	Cannot be omitted if Calendar.Rule[n].Type is set to 6 (Specific day).	1971 to 2036
Calendar.Rule[n].Month	number	Month	Cannot be omitted if Calendar.Rule[n].Type is set to 4 (Every year (date)), 5 (Every year (day of week)), or 6 (Specific day).	1 to 12
Calendar.Rule[n].Day	number	Day	Cannot be omitted if Calendar.Rule[n].Type is set to 2 (Every month (date)), 5 (Every year (day of week)), or 6 (Specific day).	Specify 1 to 31 or 99. 1 to 31: Specified day 99: End of month
Calendar.Rule[n].Week	number	Indicates the number of the specific day of the week in the month in combination with Calendar.Rule[n].DayOf Week.	Cannot be omitted if Calendar.Rule[n].Type is set to 3 (Every month (day of week)) or 5 (Every year (day of week)).	0: First 1: Second 2: Third 3: Fourth 4: Last
Calendar.Rule[n].DayOfWeek	number	Day of week	Cannot be omitted if Calendar.Rule[n].Type is set to 3 (Every month (day of week)) or 5 (Every year (day of week)).	0: Sunday 1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5; Friday 6: Saturday
Calendar.Rule[n].DayOfWeekStr	string	Indicates the validity for each day of week.	Cannot be omitted if Calendar.Rule[n].Type is set to 1 (Every week).	Indicated by using seven characters for days from Sunday to Saturday. 0: Invalid 1: Valid For example, if days from Monday to Friday are selected, this is indicated as 0111110.

Parameter	Data type	Description	Omission	Valid value
Calendar.Rule[n].StartDate	string	Application start month	Cannot be omitted if Calendar.Rule[n].Type is set as shown below. 0 (Every day) 1 (Every week) 2 (Every month (date)) 3 (Every month (day of week)) 4 (Every year (date)) 5 (Every year (day of week))	Specify a value within the range from 19710101 to 20361231 in yyyymmdd format. Example: 20150101
Calendar.Rule[n].EndDate	string	Application end month	Cannot be omitted if Calendar.Rule[n].Type is set as shown below. 0 (Every day) 1 (Every week) 2 (Every month (date)) 3 (Every month (day of week)) 4 (Every year (date)) 5 (Every year (day of week))	Specify a value within the range of 19710101 to 20361231 in yyyymmdd format. Example: 20150101 * If Calendar.Rule[n].Endless is set to true (End day is undecided), this is ignored.
Calendar.Rule[n].Endless	boolean	Indicates whether the application end date is undecided or not.	Cannot be omitted if Calendar.Rule[n].Type is set as shown below. 0 (Every day) 1 (Every week) 2 (Every month (date)) 3 (Every month (day of week)) 4 (Every year (date)) 5 (Every year (day of week))	true: End day is undecided. false: End day is decided.
Manager	object	Manager object	No	-
Manager.Name	string	Manager name	No	Manager name, MoM name, or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The calendar has been updated successfully.
400	Bad Request	The parameter is specified incorrectly.
404	Not Found	The specified calendar ID does not exist. The manager does not exist.
500	Internal Server Error	Internal server error

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Calendar	object	Calendar object	-
Calendar.ID	string	Calendar ID	Eight-digit hexadecimal character string that uniquely identifies the calendar in the manager
Calendar[n].Manager	object	Manager object	-
Calendar[n].Manager.Name	string	Manager name	Name of the manager for which the calendar is updated, MoM name, or RM name
Calendar[n].Manager.ErrorMessage	string	Error message	-
Calendar[n].Manager.Status	number	Communication error code	-
Calendar[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
PUT /umf/fw/calendar/calendars/56e91000 HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-FW-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 1789

{
    "Calendar":{
        "Name":"Calendar001",
```

```
        "Description":"Attendance calendar",
        "Rule":[
            {
                "Week":1,
                "DayOfWeek":2,
                "DayOfWeekStr":"1100011",
                "StartDate":"20151221",
                "EndDate":"20151231",
                "Endless":false,
                "Kind":1,
                "Type":6,
                "Year":2015,
                "Month":12,
                "Day":23
            },
            {
                "Year":2016,
                "Day":30,
                "DayOfWeekStr":"1100011",
                "Kind":1,
                "Type":5,
                "Month":12,
                "Week":0,
                "DayOfWeek":3,
                "StartDate":"20151223",
                "EndDate":"20151231",
                "Endless":false
            },
            {
                "Year":2016,
                "Week":1,
                "DayOfWeek":2,
                "DayOfWeekStr":"1100011",
                "Kind":1,
                "Type":4,
                "Month":12,
                "Day":24,
                "StartDate":"20151223",
                "EndDate":"20151231",
                "Endless":false
            },
            {
                "Year":2016,
                "Month":11,
                "Day":30,
                "DayOfWeekStr":"1100011",
                "Kind":2,
                "Type":3,
                "Week":1,
                "DayOfWeek":3,
                "StartDate":"20151223",
                "EndDate":"20151231",
                "Endless":false
            },
            {
                "Year":2016,
                "Month":11,
                "Week":1,
```

```
                "DayOfWeek":2,
                "DayOfWeekStr":"1100011",
                "Kind":3,
                "Type":2,
                "Day":24,
                "StartDate":"20151223",
                "EndDate":"20151231",
                "Endless":false
            },
            {
                "Year":2016,
                "Month":11,
                "Day":30,
                "Week":1,
                "DayOfWeek":2,
                "Kind":2,
                "Type":1,
                "DayOfWeekStr":"0111110",
                "StartDate":"20150610",
                "EndDate":"",
                "Endless":true
            },
            {
                "Year":2016,
                "Month":11,
                "Day":30,
                "Week":1,
                "DayOfWeek":2,
                "DayOfWeekStr":"1100011",
                "Kind":1,
                "Type":0,
                "StartDate":"20150928",
                "EndDate":"20151231",
                "Endless":false
            }
        ]
    },
    "Manager":{
        "Name":"mco-MoM"
    }
}
```


[Response]


```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 115
Date: Thu, 17 Mar 2016 06:25:44 GMT

{
    "Calendar" : [
```

```
        {
            "ID" : "56e91000",
            "Manager" : {
                "Name" : "mco-MoM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.11.5 Deleting the calendar

1. Process overview

   Delete the specified calendar settings.

2. HTTP method

```
DELETE
```

3. URL

```
/umf/fw/calendar/calendars/ID?ManagerName=ManagerName
```

   Specify the ID obtained from the calendar list in ***ID***.

   ID cannot be omitted.

   If a calendar with a subtree is specified, the calendar of the specified ID and all calendars under a subtree are deleted.

   The "All operating days" and "Operating weekdays" calendars set by default cannot be deleted.

   If their calendar IDs are specified, an error (400 Bad Request) occurs.

   Although the calendar used for the schedule can be deleted, the schedule does not work if the calendar being used for the schedule is deleted.

   Obtain the schedule list in advance to check that calendars to be deleted and calendars in the subtree are not used, and then delete the calendars.

   Specify the name of the manager for which the definition is deleted in ***ManagerName***.

   ManagerName cannot be omitted.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The calendar list has been obtained successfully.
400	Bad Request	The calendar ID is not specified. The calendar IDs of "All operating days" and "Operating weekdays" are specified.
404	Not Found	The specified calendar ID does not exist.

HTTP status code	Meaning	Description
		The manager does not exist.
500	Internal Server Error	Internal server error

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Calendar	object	Calendar object	-
Calendar.ID	string[]	Deleted calendar ID	Eight-digit hexadecimal character string that uniquely identifies the calendar in the manager If there are calendars of the subtree under the calendar to be deleted, return the calendar ID to be deleted and all calendar IDs under it.
Calendar[n].Manager	object	Manager object	-
Calendar[n].Manager.Name	string	Manager name	Name of the manager for which the calendar is deleted, MoM name, or RM name
Calendar[n].Manager.ErrorMessage	string	Error message	-
Calendar[n].Manager.Status	number	Communication error code	-
Calendar[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added

8. JSON Example

[Request]

```
DELETE /umf/fw/calendar/calendars/56e90bb1?ManagerName=mco-RM HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-FW-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 0
```

[Response]

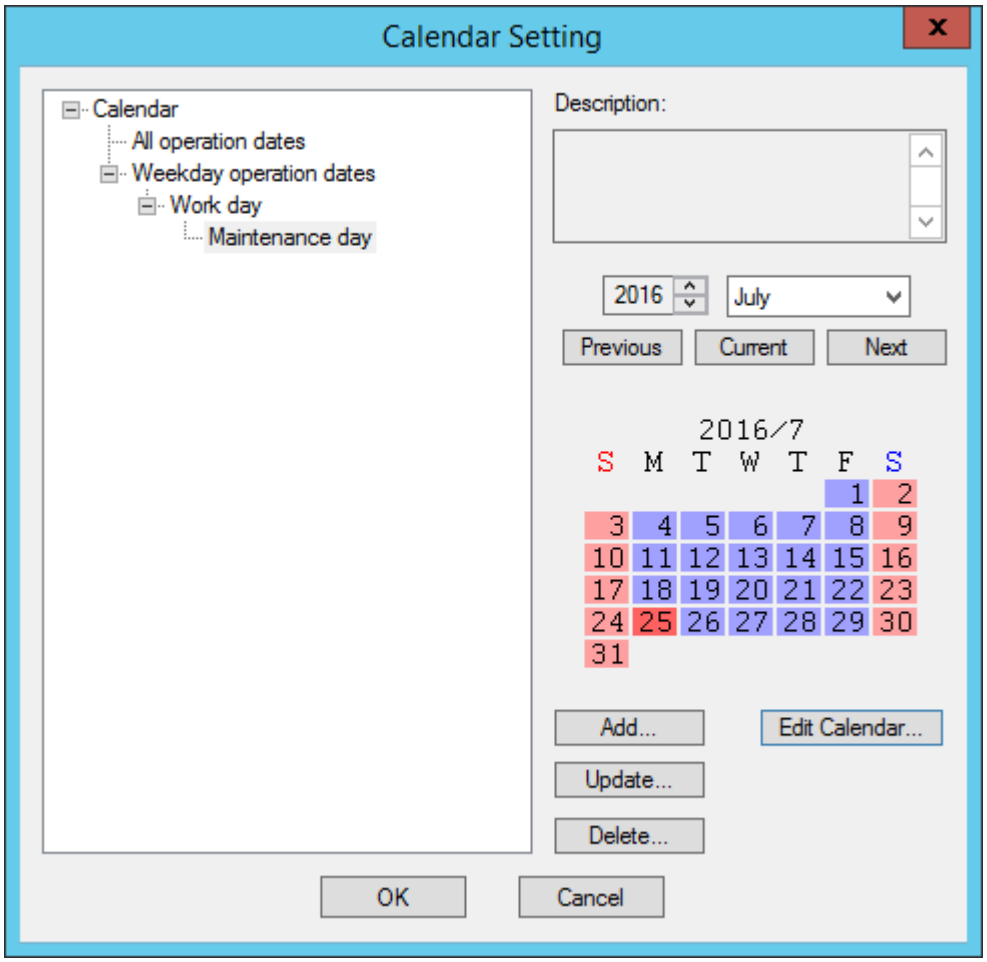
```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 116
Date: Thu, 17 Mar 2016 08:03:13 GMT

{
    "Calendar" : [
        {
            "ID" : [
                "56e90bb1"
            ],
            "Manager" : {
                "Name" : "mco-RM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.11.6 Application range of calendar

- The calendar has a hierarchical tree structure as shown in the figure below, and the application range of calendar includes upper calendars.

  In case of the figure below, the application range of "Maintenance day" includes the merged application range of the upper calendar "Work day" and "Operating weekdays".



When the application range is merged, the application range of the lower calendar is prioritized.

For example, if the operating day is set in the specific day in the upper calendar and the non-operating day is set in the base calendar, the non-operating day in the base calendar is applied.

4.11.7 Setting item list for each calendar rule type

- Setting items for each calendar rule type are listed below.

  For "Obtaining the detailed calendar", items marked with x are not returned.

  For "Adding/Renewing the calendar", if items marked with x are set, they are ignored.

Item Type	Year	Month	Day	Week	DayOfWeek	DayOfWeekStr	StartDate EndDate Endless
Every day	×	×	×	×	×	×	○
Every week	×	×	×	×	×	○	○
Every month (date)	×	×	○	×	×	×	○
Every month (day of week)	×	×	×	○	○	×	○
Every year (date)	×	○	○	×	×	×	○

Item Type	Year	Month	Day	Week	DayOfWeek	DayOfWeekStr	StartDate EndDate Endless
Every year (day of week)	×	○	×	○	○	×	○
Specific day	○	○	○	×	×	×	×

4.12 Service port monitoring

4.12.1 Obtaining the monitoring setting list

1. Process overview

   Obtain the port monitoring setting list for the specified agent.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/sysmgr/portmonitor/monitor/HostName?ManagerName=ManagerName
```

   Specify the agent name to be obtained in `HostName` within the range of 1 to 64 characters.

   The agent name to be specified in ***HostName*** can be checked in the agent list.

   `HostName` cannot be omitted.

   For an environment where more than one manager exists, specify the target manager name as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring setting list has been obtained successfully.
400	Bad Request	Parameter error The agent name is not specified.
404	Not Found	The agent does not exist. The manager does not exist.
409	Conflict	More than one specified resource exists, and it cannot be identified uniquely. * Occurs if ManagerName is omitted.
500	Internal Server Error	Internal server error

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object type	-
HostName	string	Agent name	Character string that identifies the agent uniquely
Port	object[]	Array of the monitoring settings	If the monitoring setting count is 0, the number of elements of the array is set to 0.
Port[n].ID	string	Monitoring setting ID	Eight-digit hexadecimal character string that uniquely identifies the port monitoring settings in the agent
Port[n].DisplayName	string	Display name	1 to 64 characters
Port[n].PortNo	number	Port number	1 to 65535
Port[n].Protocol	string	Protocol	"TCP" "UDP"
Port[n].NormalStatus	string	Normal port status	"CLOSE" "OPEN"
HostType	number	Host type	0: Agent 1: Remote host
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager in which the agent exists, MoM name, or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-SYSMGR-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/sysmgr/portmonitor/monitor/Windows HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 0
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 231
Date: Thu, 17 Mar 2016 07:56:36 GMT

{
    "HostName" : "Windows",
    "HostType" : 0,
    "Port" : [
        {
            "NormalStatus" : "OPEN",
            "Protocol" : "TCP",
            "ID" : "56e8f66d",
            "DisplayName" : "SysMonAgt_Update",
            "PortNo" : 12570
        }
    ],
    "Manager" : {
        "Name" : "mco-RM",
        "Status" : 200,
        "StatusCode" : 200,
        "ErrorMessage" : "200 OK"
    }
}
```

4.12.2 Adding the monitoring settings

1. Process overview

   Add the port monitoring settings for the specified agent.

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/sysmgr/portmonitor/port/HostName
```

   Specify the agent name to be obtained in `HostName` within the range from 1 to 64 characters.

   The agent name to be specified in ***HostName*** can be checked in the agent list.

   `HostName` cannot be omitted.

4. Parameters

Parameter	Data type	Description	Omission	Valid value
(Root)	object	Root object type	No	-
DisplayName	string	Display name	Not possible	1 to 64 characters

Parameter	Data type	Description	Omission	Valid value
				Delete spaces in front of and next to the characters.
PortNo	number	Port number	Not possible	1 to 65535
Protocol	string	Protocol	Not possible	"TCP" "UDP"
NormalStatus	string	Normal port status	Not possible	"CLOSE" "OPEN"
UseInterval	Boolean	Specifying the monitoring interval false is set in the event of omitting.		false: Not specified true: Specified
Interval	number	Monitoring interval This cannot be specified if "Specifying the monitoring interval" is set to false. The monitoring interval is set according to the option setting value.	This cannot be specified if "Specifying the monitoring interval" is set to true.	Agent: 10 to 86400 seconds Remote host: 60 to 86400 seconds
UseConnectTimeout	Boolean	Specifying the connection timeout false is set in the event of omitting.		false: Not specified. true: Specified.
ConnectTimeout	number	Connection timeout This cannot be specified if "Specifying the connection timeout" is set to false. The connection timeout is set according to the option setting value.	This cannot be specified if "Specifying the connection timeout" is set to true.	1 to 60 seconds
UseRetryCount	Boolean	Specifying the retry count false is set in the event of omitting. If "Protocol" is set to TCP, this cannot be specified. Only if "Protocol" is set to UDP can this be specified.		false: Not specified true: Specified
RetryCount	number	Retry count This cannot be specified if "Specifying the retry count" is set to false. The retry count is set according to the option setting value.	This cannot be specified if "Specifying the retry count" is set to true.	0 to 10 times

Parameter	Data type	Description	Omission	Valid value
UseAddress	Boolean	Specifying the address false is set in the event of omitting.		false: Not specified true: Specified
Address	string	Address This cannot be specified if "Specifying the address" is set to false. The address is set as "localhost" for the agent. For the remote host, the address is the IP address of the remote host.	This cannot be specified if "Specifying the address" is set to true.	Specify the IP address (IPv4/IPv6) consisting of up to 39 characters or "localhost". Delete spaces before and after the characters. Check the validity of the format only. If IPv6 is specified for an agent not compliant with IPv6, this check is not performed. For the agent, specifying addresses other than the agent address is prohibited. For the remote host, specifying addresses other than the remote host address is prohibited.
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager in which the agent exists, MoM name, or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring setting has been added successfully.
400	Bad Request	Parameter error The agent name is not specified.
404	Not Found	The agent does not exist. The manager does not exist.
409	Conflict	More than one resource exists, and it cannot be specified uniquely. * Occurs if ManagerName is omitted.
500	Internal Server Error	Internal server error

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object type	-
ID	string	Monitoring setting ID	Eight-digit hexadecimal character string that uniquely identifies the port monitoring settings in the agent
Manager	object	Manager object	-

Parameters	Data type	Description	Valid value
Manager.Name	string	Manager name	Name of the manager in which the agent exists, MoM name, or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-SYSMGR-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
POST /umf/fw/sysmgr/portmonitor/port/Windows HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 312

{
    "DisplayName" : "SysMonAgt",
    "PortNo" : 12570,
    "Protocol" : "TCP",
    "NormalStatus" : "OPEN",
    "UseInterval" : true,
    "Interval" : 60,
    "UseConnectTimeout" : true,
    "ConnectTimeout" : 4,
    "UseAddress" : true,
    "Address" : "127.0.0.1",
    "Report" : false,
    "Manager" : {
        "Name" : "mco-RM"
    }
}
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
```

```
Content-Type: application/json;charset=UTF-8
Content-Length: 99
Date: Wed, 16 Mar 2016 06:00:19 GMT

{
    "ID" : "56e8f66d",
    "Manager" : {
        "Name" : "mco-RM",
        "Status" : 200,
        "StatusCode" : 200,
        "ErrorMessage" : "200 OK"
    }
}
```

4.12.3 Updating the monitoring settings

1. Process overview

   Update the port monitoring settings for the specified agent.

2. HTTP method

```
PUT
```

3. URL

```
/umf/fw/sysmgr/portmonitor/port/HostName/ID
```

   Specify the agent name to be obtained in `HostName` within the range of 1 to 64 characters.

   The agent name to be specified in ***HostName*** can be checked in the agent list.

   `HostName` cannot be omitted.

   Specify the monitoring setting ID by using the eight-digit hexadecimal character string in ***ID***.

   Use the monitoring setting list to confirm the monitoring setting ID to be specified in ***ID***.

   ID cannot be omitted.

4. Parameters

Parameter	Data type	Description	Omission	Valid value
(Root)	object	Root object type	No	-
DisplayName	string	Display name This is not changed in the event of omitting.		1 to 64 characters Delete spaces before and after the characters.
PortNo	number	Port number This is not changed in the event of omitting.		1 to 65535
Protocol	string	Protocol This is not changed in the event of omitting.		"TCP" "UDP"
NormalStatus	string	Normal port status This is not changed in the event of omitting.		"CLOSE" "OPEN"

Parameter	Data type	Description	Omission	Valid value
UseInterval	Boolean	Specifying the monitoring interval This is not changed in the event of omitting.		false: Not specified. true: Specified.
Interval	number	Monitoring interval This cannot be specified if "Specifying the monitoring interval" is set to false. The monitoring interval is set according to the option setting value. If "Specifying the monitoring interval" is omitted, this value cannot be specified and changed.	This cannot be specified if "Specifying the monitoring interval" is set to true.	Agent: 10 to 86400 seconds Remote host: 60to 86400 seconds
UseConnectTimeout	Boolean	Specifying the connection timeout This is not changed in the event of omitting.		false: Not specified true: Specified
ConnectTimeout	number	Connection timeout This cannot be specified if "Specifying the connection timeout" is set to false. The connection timeout is set according to the option setting value. If "Specifying the connection timeout" is omitted, this value cannot be specified and changed.	This cannot be specified if "Specifying the connection timeout" is set to true.	1 to 60 seconds
UseRetryCount	Boolean	Specifying the retry count This is not changed in the event of omitting. If "Protocol" is set to TCP, this cannot be specified. This can be specified only if "Protocol" is set to UDP.		false: Not specified true: Specified
RetryCount	number	Retry count This cannot be specified if "Specifying the retry count" is set to false. The retry count is set according to the option setting value. If "Specifying the retry count" is omitted, this	This cannot be specified if "Specifying the retry count" is set to true.	0 to 10 times

Parameter	Data type	Description	Omission	Valid value
		value cannot be specified and changed.		
UseAddress	Boolean	Specifying the address This is not changed in the event of omitting.		false: Not specified true: Specified
Address	string	Address This cannot be specified if "Specifying the address" is set to false. The address is set as "localhost" for the agent. For the remote host, the address is the IP address of the remote host. If "Specifying the address" is omitted, this value cannot be specified and changed.	This cannot be specified if "Specifying the address" is set to true.	Specify IP address (IPv4/IPv6) consisting of up to 39 characters or "localhost". Delete spaces before and after the characters. Check the validity of the format only. If IPv6 is specified for an agent not compliant with IPv6, this check is not performed. For the agent, specifying addresses other than the agent address is prohibited. For the remote host, specifying addresses other than the remote host address is prohibited.
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager in which the agent exists, MoM name, or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring setting has been updated successfully.
400	Bad Request	Parameter error The agent name is not specified. The monitoring setting ID is not specified.
404	Not Found	The agent does not exist. The manager does not exist. The monitoring setting ID does not exist.
409	Conflict	More than one resource exists, and it cannot be specified uniquely. * Occurs if ManagerName is omitted.
500	Internal Server Error	Internal server error

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object type	-

Parameters	Data type	Description	Valid value
ID	string	Monitoring setting ID	Eight-digit hexadecimal character string that uniquely identifies the port monitoring settings in the agent
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager in which the agent exists, MoM name, or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-SYSMGR-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
PUT /umf/fw/sysmgr/portmonitor/port/Windows/56e8f66d HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json; charset=UTF-8
Content-Length: 194

{
    "UseInterval" : true,
    "UseConnectTimeout" : true,
    "UseAddress" : true,
    "Interval" : 10,
    "ConnectTimeout" : 5,
    "DisplayName" : "SysMonAgt_Update",
    "Address" : "192.168.0.243"
}
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
```

```
Content-Length: 99
Date: Thu, 17 Mar 2016 01:50:56 GMT

{
    "ID" : "56e8f66d",
    "Manager" : {
        "Name" : "mco-RM",
        "Status" : 200,
        "StatusCode" : 200,
        "ErrorMessage" : "200 OK"
    }
}
```

4.12.4 Deleting the monitoring settings

1. Process overview

   Delete the port monitoring settings for the specified agent.

2. HTTP method

```
DELETE
```

3. URL

```
/umf/fw/sysmgr/portmonitor/port/HostName/ID?ManagerName=ManagerName
```

   Specify the agent name to be obtained in `HostName` within the range from 1 to 64 characters.

   The agent name to be specified in ***HostName*** can be checked in the agent list.

   `HostName` cannot be omitted.

   Specify the monitoring setting ID by using the eight-digit hexadecimal character string in ***ID***.

   Use the monitoring setting list to confirm the monitoring setting ID to be specified in ***ID***.

   Specify "00000000" in ***ID*** to delete the monitoring settings of all ports in the target agent.

   ID cannot be omitted.

   If more than one manager exists, specify the manager name obtained from the agent list as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring setting has been deleted successfully.
400	Bad Request	Parameter error The agent name is not specified. The monitoring setting ID is not specified.
404	Not Found	The agent does not exist. The manager does not exist. The monitoring setting ID does not exist.

HTTP status code	Meaning	Description
409	Conflict	More than one resource exists, and it cannot be specified uniquely. * Occurs if ManagerName is omitted.
500	Internal Server Error	Internal server error

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object type	-
ID	string[]	Monitoring setting ID	Eight-digit hexadecimal character string that uniquely identifies the port monitoring settings in the agent If the monitoring setting count is 0, the number of elements of the array is set to 0.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager in which the agent exists, MoM name, or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-SYSMGR-API-Version: 1.0
     - Newly added

8. JSON Example

[Request]

```
DELETE /umf/fw/sysmgr/portmonitor/port/Windows/56e8f66d HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json
Content-Length: 0
```

[Response]

```
HTTP/1.1 200 OK
```

```
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 101
Date: Thu, 17 Mar 2016 07:58:48 GMT

{
    "ID" : [
        "56e8f66d"
    ],
    "Manager" : {
        "Name" : "mco-RM",
        "Status" : 200,
        "StatusCode" : 200,
        "ErrorMessage" : "200 OK"
    }
}
```

4.12.5 Obtaining the monitoring settings

1. Process overview

   Obtain the port monitoring settings for the specified agent.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/sysmgr/portmonitor/port/HostName/ID?ManagerName=ManagerName
```

   Specify the agent name to be obtained in `HostName` within the range of 1 to 64 characters.

   The agent name to be specified in ***HostName*** can be checked in the agent list.

   `HostName` cannot be omitted.

   Specify the monitoring setting ID by using the eight-digit hexadecimal character string in ***ID***.

   Use the monitoring setting list to confirm the monitoring setting ID to be specified in ***ID***.

   ID cannot be omitted.

   If more than one manager exists, specify the manager name obtained from the agent list as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring setting has been obtained successfully.
400	Bad Request	Parameter error

HTTP status code	Meaning	Description
		The agent name is not specified. The monitoring setting ID is not specified.
404	Not Found	The agent does not exist. The manager does not exist. The monitoring setting ID does not exist.
409	Conflict	More than one resource exists, and it cannot be specified uniquely. * Occurs if ManagerName is omitted.
500	Internal Server Error	Internal server error

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Port	object[]	Array of the monitoring settings	-
Port[n].DisplayName	string	Display name	1 to 64 characters
Port[n].ID	string	Monitoring setting ID	Eight-digit hexadecimal character string that uniquely identifies the port monitoring settings in the agent
Port[n].PortNo	number	Port number	1 to 65535
Port[n].Protocol	string	Protocol	"TCP" "UDP"
Port[n].NormalStatus	string	Normal port status	"CLOSE" "OPEN"
Port[n].UseInterval	Boolean	Specifying the monitoring interval	false: Not specified. true: Specified.
Port[n].Interval	number	Monitoring interval If "Specifying the monitoring interval" is set to false, return the current option setting values.	Agent: 10 to 86400 seconds Remote host: 60 to 86400 seconds
Port[n].UseConnectTimeout	Boolean	Specifying the connection timeout	false: Not specified. true: Specified.

Parameter	Data type	Description	Valid value
Port[n].ConnectTimeout	number	Connection timeout If "Specifying the connection timeout" is set to false, return the current option setting values.	1 to 60 seconds
Port[n].UseRetryCount	Boolean	Specifying the retry count If the protocol is set to TCP, this cannot be returned. This can be returned only if the protocol is set to UDP.	false: Not specified true: Specified
Port[n].RetryCount	number	Retry count If "Specifying the retry count" is set to false, the current option setting values are returned. If the protocol is set to TCP, this cannot be returned. This can be returned only if the protocol is set to UDP.	0 to 10 times
Port[n].UseAddress	Boolean	Specifying the address	false: Not specified. true: Specified.
Port[n].Address	string	Address If "Specifying the address" is set to false, return the default value. (The address is set as "localhost" for the agent.	IP address (IPv4/IPv6) consisting of up to 39 characters or "localhost"

Parameter	Data type	Description	Valid value
		For the remote host, the address is the IP address of the remote host.)	
Port[n].Report	Boolean	Report setting	false: Report setting disabled true: Report setting enabled
Port[n].ReportID	string	Report ID If "Report setting" is set to false, "00000000" is returned.	Eight-digit hexadecimal character string that uniquely identifies the report setting or "00000000"
Port[n].ErrorReport	Boolean	Reporting only in the event of abnormality If "Report setting" is set to false, return "false".	false: Report all cases. true: Report abnormal cases only.
HostType	number	Host type	0: Agent 1: Remote host
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager in which the agent exists, MoM name, or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-SYSMGR-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
GET /umf/fw/sysmgr/portmonitor/port/Windows/56e8f66d HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json; charset=utf-8
```

```
Content-Length: 0
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 375
Date: Thu, 17 Mar 2016 01:43:27 GMT

{
    "HostType" : 0,
    "Port" : {
        "ReportID" : "00000000",
        "Report" : false,
        "UseInterval" : true,
        "UseConnectTimeout" : true,
        "ErrorReport" : false,
        "NormalStatus" : "OPEN",
        "UseAddress" : true,
        "Interval" : 60,
        "Protocol" : "TCP",
        "ConnectTimeout" : 4,
        "ID" : "56e8f66d",
        "DisplayName" : "SysMonAgt",
        "Address" : "127.0.0.1",
        "PortNo" : 12570
    },
    "Manager" : {
        "Name" : "mco-RM",
        "Status" : 200,
        "StatusCode" : 200,
        "ErrorMessage" : "200 OK"
    }
}
```

4.12.6 Obtaining the monitoring status

1. Process overview

   Obtain the port monitoring status for the specified agent.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/sysmgr/portmonitor/status/HostName/ID?ManagerName=ManagerName
```

Specify the agent name to be obtained in `HostName` within the range of 1 to 64 characters.

The agent name to be specified in ***HostName*** can be checked in the agent list.

`HostName` cannot be omitted.

Specify the monitoring setting ID by using the eight-digit hexadecimal character string in ***ID***.

Use the monitoring setting list to confirm the monitoring setting ID to be specified in ***ID***.

Specify "00000000" in ***ID*** to obtain the status of monitoring all ports in the target agent.

ID cannot be omitted.

If more than one manager exists, specify the manager name obtained from the agent list as ***ManagerName***.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The monitoring status has been obtained successfully.
400	Bad Request	Parameter error The agent name is not specified. The monitoring setting ID is not specified.
404	Not Found	The agent does not exist. The manager does not exist. The monitoring setting ID does not exist.
409	Conflict	More than one resource exists, and it cannot be specified uniquely. * Occurs if ManagerName is omitted.
500	Internal Server Error	Internal server error

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Port	object[]	Array of the monitoring settings	If the monitoring setting count is 0, the number of elements of the array is set to 0.
Port[n].DisplayName	string	Display name	1 to 64 characters
Port[n].ID	string	Monitoring setting ID	Eight-digit hexadecimal character string that uniquely identifies the port monitoring settings in the agent
Port[n].PortStatus	string	Port status	"CLOSE" "OPEN" "UNKNOWN"
Port[n].Severity	number	Severity	264: Normal 257: Abnormal 262: Unknown

Parameter	Data type	Description	Valid value
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager in which the agent exists, MoM name, or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-SYSMGR-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/sysmgr/portmonitor/status/Windows4/00000000 HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 0
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 171
Date: Fri, 18 Mar 2016 07:23:16 GMT

{
    "Port" : [
        {
            "PortStatus" : "OPEN",
            "Severity" : 264,
            "ID" : "56ebac9c",
            "DisplayName" : "SysMonAgt"
        }
    ],
    "Manager" : {
        "Name" : "mco-RM",
```

```
        "Status" : 200,
        "StatusCode" : 200,
        "ErrorMessage" : "200 OK"
    }
}
```

4.12.7 Obtaining the option settings

1. Process overview

   Obtain the option settings of the service port monitoring for the specified manager.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/sysmgr/portmonitor/option?ManagerName=ManagerName
```

   Specify the manager name obtained from the agent list in ***ManagerName.***

   ManagerName cannot be omitted.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The option settings have been obtained successfully.
400	Bad Request	Parameter error
404	Not Found	The manager does not exist.
500	Internal Server Error	Internal server error

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Option	object[]	Option setting	The number of elements is one.
Option[n].Interval	number	Monitoring interval The default value is 30 seconds.	10 to 86400 seconds
Option[n].ConnectTimeout	number	Connection timeout The default value is 3 seconds.	1 to 60 seconds

Parameters	Data type	Description	Valid value
Option[n].RetryCount	number	Retry count The default value is 0 times.	0 to 10 times
Option[n].RemoteInterval	number	Remote host monitoring interval The default value is 60 seconds.	60 to 86400 seconds
Option[n].RemoteConnectTimeout	number	Remote host connection timeout The default value is 3 seconds.	1 to 60 seconds
Option[n].RemoteRetryCount	number	Remote host retry count The default value is 0 times.	0 to 10 times
Option[n].AgtStatusSave	Boolean	Retain the monitoring status while the agent is disconnected. The default value is false.	false: Not retained true: Retained
Option[n].Manager	object	Manager object	-
Option[n].Manager.Name	string	Manager name	Name of the manager for which option setting is obtained, MoM name, or RM name
Option[n].Manager.ErrorMessage	string	Error message	-
Option[n].Manager.Status	number	Communication error code	-
Option[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-SYSMGR-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
GET /umf/fw/sysmgr/portmonitor/option?ManagerName=mco-RM HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
```

```
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 0
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 231
Date: Fri, 18 Mar 2016 07:26:56 GMT

{
    "Option" : [
        {
            "RemoteRetryCount" : 0,
            "AgtStatusSave" : true,
            "RetryCount" : 2,
            "RemoteInterval" : 60,
            "RemoteConnectTimeout" : 3,
            "Interval" : 10,
            "ConnectTimeout" : 5,
            "Manager" : {
                "Name" : "mco-RM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.12.8 Updating the option settings

1. Process overview

   Update the option settings of the service port monitoring for the specified manager.

2. HTTP method

```
PUT
```

3. URL

```
/umf/fw/sysmgr/portmonitor/option
```

4. Parameters

   Parameters

Parameter	Data type	Description	Omission	Valid value
(Root)	object	Root object type	Not possible	-
Interval	number	Monitoring interval		10 to 86400 seconds
ConnectTimeout	number	Connection timeout		1 to 60 seconds
RetryCount	number	Retry count		0 to 10 times
RemoteInterval	number	Remote host monitoring interval		60 to 86400 seconds
RemoteConnectTimeout	number	Remote host connection timeout		1 to 60 seconds
RemoteRetryCount	number	Remote host retry count		0 to 10 times
AgtStatusSave	Boolean	Retain the monitoring status while the agent is disconnected.		false: Not retained true: Retained
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager for option settings, MoM name, or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The option settings have been updated successfully.
400	Bad Request	Parameter error
404	Not Found	The manager does not exist.
500	Internal Server Error	Internal server error

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Option	object[]	Option setting	The number of elements is one.
Option[n].Interval	number	Monitoring interval The default value is 30 seconds.	10 to 86400 seconds
Option[n].ConnectTimeout	number	Connection timeout The default value is 3 seconds.	1 to 60 seconds
Option[n].RetryCount	number	Retry count The default value is 0 times.	0 to 10 times
Option[n].RemoteInterval	number	Remote host monitoring interval The default value is 60 seconds.	60 to 86400 seconds
Option[n].RemoteConnectTimeout	number	Remote host connection timeout The default value is 3 seconds.	1 to 60 seconds

Parameters	Data type	Description	Valid value
Option[n].RemoteRetryCount	number	Remote host retry count The default value is 0 times.	0 to 10 times
Option[n].AgtStatusSave	Boolean	Retain the monitoring status while the agent is disconnected. The default value is false.	false: Not retained true: Retained
Option[n].Manager	object	Manager object	-
Option[n].Manager.Name	string	Manager name	Name of the manager for option settings, MoM name, or RM name
Option[n].Manager.ErrorMessage	string	Error message	-
Option[n].Manager.Status	number	Communication error code	-
Option[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-SYSMGR-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
PUT /umf/fw/sysmgr/portmonitor/option HTTP/1.1
Host: ClientHost
Date: Thu, 1 Oct 2015 00:00:00 GMT
Authorization: SharedKeyLite teTQgA08YR5D+kd5Hiua+DYfRVAFfEu5MRW4VeIyA
tw=:03rhfOK5YzLd+v8zf7y4YMQffbvVAPj5XWgSOtLme4Q=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 216

{
    "Interval" : 30,
    "ConnectTimeout" : 3,
    "RetryCount" : 0,
    "RemoteInterval" : 60,
    "RemoteConnectTimeout" : 3,
    "RemoteRetryCount" : 0,
    "AgtStatusSave" : false,
    "Manager" : {
        "Name" : "mco-RM"
    }
}
```

   [Response]

```
HTTP/1.1 200 OK
```

```
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 232
Date: Fri, 18 Mar 2016 07:28:42 GMT

{
    "Option" : [
        {
            "RemoteRetryCount" : 0,
            "AgtStatusSave" : false,
            "RetryCount" : 0,
            "RemoteInterval" : 60,
            "RemoteConnectTimeout" : 3,
            "Interval" : 30,
            "ConnectTimeout" : 3,
            "Manager" : {
                "Name" : "mco-RM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.13 Message view

4.13.1 Obtaining filters

1. Process overview

   Obtain the filter definition in the specified agent.

   Elements of the filter array is arranged in order of priority .

2. HTTP method

   ```
   GET
   ```

3. URL

   ```
   /umf/fw/sysmgr/messageview/filters/HostName?ManagerName=ManagerName
   ```

   Specify the target agent name in `HostName` within the range of 1 to 64 characters.

   The agent name to be specified in ***HostName*** can be checked in the agent list.

   `HostName` cannot be omitted.

   For an environment where more than one manager exists, specify the target manager name as **`ManagerName`**.

4. Parameters

None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	A filter has been obtained successfully.
400	Bad Request	Parameter error
404	Not Found	The agent does not exist. The manager does not exist. The agent name is not specified.
409	Conflict	More than one resource exists, and it cannot be specified uniquely. * Occurs if ManagerName is omitted.
500	Internal Server Error	Internal server error Parameter error

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object type	-
HostName	string	Agent name	Character string that identifies the agent uniquely
Filter	object[]	Filter definition array	-
Filter[n].FilterID	string	Filter ID	Eight-digit hexadecimal character string that uniquely identifies the filter definition in the agent
Filter[n].FilterName	string	Filter name	1 to 256 characters
Filter[n].CategoryNot	number	Category negation specification	0: Positive 1: Negative
Filter[n].Category	string	Category	Up to 32 characters
Filter[n].ApplicationNot	number	Application negation specification	0: Positive 1: Negative
Filter[n].Application	string	Application	Up to 128 characters
Filter[n].ObjectNot	number	Object negation specification	0: Positive 1: Negative
Filter[n].Object	string	Object	Up to 128 characters
Filter[n].MessageIDNot	number	Message ID negation specification	0: Positive 1: Negative
Filter[n].MessageID	string	Message ID	Up to 128 characters

Parameters	Data type	Description	Valid value
Filter[n].MessageTextNot	number	Message text negation specification	0: Positive 1: Negative
Filter[n].MessageText	string	Message text	Up to 1024 characters
Filter[n].SeverityNot	number	Severity negation specification	0: Positive 1: Negative
Filter[n].Severity	number	Severity	256 to 286, 512 to 543 0 is not specified. *See "Severity (page 395)".
Filter[n].SelPos	object[]	Position specification array	Eight elements of array Omit all parameters (negation specification, position, comparison type, comparison value) of the elements for which the position is not specified. Even if some elements are not used, the subsequent elements are not moved forward.
Filter[n].SelPos[m].Type	number	Negation specification	0: Positive 1: Negative
Filter[n].SelPos[m].Position	number	Position	1 to 1024
Filter[n].SelPos[m].Compare Type	number	Comparison type	0: = 1: <>\ 2: >= 3: >\ 4: <= 5: <
Filter[n].SelPos[m].Value	string	Comparison value	1 to 64 characters
Filter[n].SelKey	object[]	Key specification array	Eight elements of array Omit all parameters (negation specification, key character string, comparison type, comparison value) of the elements for which the key is not specified. Even if some elements are not used, the subsequent elements are not moved forward.
Filter[n].SelKey[m].Type	number	Negation specification	0: Positive 1: Negative
Filter[n].SelKey[m].Key	string	Key character string	1 to 64 characters
Filter[n].SelKey[m].Compare Type	number	Comparison type	0: = 1: <>\ 2: >= 3: >\ 4: <= 5: <
Filter[n].SelKey[m].Value	string	Comparison value	Up to 128 characters

Parameters	Data type	Description	Valid value
			If the comparison type is set to "=", regular expression format is used. If the comparison type is set to values other than "=", the normal character string is used.
Filter[n].OverWriteSeverity	number	Severity change	256 to 286, 512 to 543 When 0 is set, no change will be made. *See "Severity (page 395)".
Filter[n].DisplayPosition	number	Position from which to start display	1 to 1024
Filter[n].HelpApplication	string	Help application	Up to 256 characters
Filter[n].HelpDirectory	string	Work directory at startup of the help application	Up to 256 characters
Filter[n].HelpOption	string	Startup option of the help application	Up to 128 characters
Filter[n].Relation1	number	Related information 1	0: Invalid 1: Valid
Filter[n].Relation1Def	object	Definition of Related information 1	Return this only if Related information 1 is valid.
Filter[n].Relation1Def.DisplayText	string	Display name	Up to 16 characters
Filter[n].Relation1Def.Application	string	Application	Up to 256 characters
Filter[n].Relation1Def.Directory	string	Work directory	Up to 256 characters
Filter[n].Relation1Def.Option	string	Option	Up to 1024 characters
Filter[n].Relation2	number	Related information 2	0: Invalid 1: Valid
Filter[n].Relation2Def	object	Definition of Related information 2	Return this only if Related information 2 is valid.
Filter[n].Relation2Def.DisplayText	string	Display name	Up to 16 characters
Filter[n].Relation2Def.Application	string	Application	Up to 256 characters
Filter[n].Relation2Def.Directory	string	Work directory	Up to 256 characters
Filter[n].Relation2Def.Option	string	Option	Up to 1024 characters

Parameters	Data type	Description	Valid value
Filter[n].Report	number	Report specification	0: Invalid 1: Valid
Filter[n].ReportID	string	Report ID	Eight-digit hexadecimal number
Filter[n].ReportAutoConfirm	number	Automaticall y confirmed on completion of reporting	0: Auto confirmation disabled. 1: Auto confirmation enabled.
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager in which the agent exists, MoM name, or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communicati on error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-SYSMGR-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/sysmgr/messageview/filters/AGENT01 HTTP/1.1
Host: ClientHost
Date: Wed, 20 Apr 2016 00:00:00 GMT
Authorization: SharedKeyLite ZIrgoOV5r1JOJwt3/M6e3M9PIDRntc37o375njmXo
Pk=:X+HnXjAP9jXuD/nz5khRVDMggIY5aR0wmjGCK0bBnr4=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 0
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 1365
Date: Wed, 20 Apr 2016 00:55:24 GMT

{
```

```
    "HostName" : "AGENT01",
    "Filter" : [
        {
            "HelpOption" : "",
            "DisplayPosition" : 1,
            "Application" : "tpmsg",
            "ReportID" : "00000000",
            "Report" : 0,
            "Relation1Def" : {
                "Application" : "relation1.exe",
                "Option" : "",
                "Directory" : "",
                "DisplayText" : "relation1"
            },
            "ObjectNot" : 0,
            "FilterID" : "5716d87d",
            "SelKey" : [
                {
                    "CompareType" : 0,
                    "Type" : 0,
                    "Key" : "Key1",
                    "Value" : "Value1"
                }, {

                }, {

                }, {

                }, {

                }, {

                }, {

                }, {

                }
            ],
            "CategoryNot" : 0,
            "MessageIDNot" : 0,
            "ReportAutoConfirm" : 0,
            "Severity" : 0,
            "OverWriteSeverity" : 0,
            "SelPos" : [
                {
                    "CompareType" : 0,
                    "Type" : 0,
                    "Value" : "Value1",
                    "Position" : 1
                }, {

                }, {

                }, {

                }, {

                }, {
```

```
                }, {

                }, {

                }
            ],
            "MessageTextNot" : 0,
            "MessageID" : "00000000",
            "Relation1" : 1,
            "Relation2" : 0,
            "HelpDirectory" : "",
            "SeverityNot" : 0,
            "Object" : "",
            "HelpApplication" : "",
            "ApplicationNot" : 0,
            "Category" : "System",
            "MessageText" : "This is test message",
            "FilterName" : "FilterName1"
        }
    ],
    "Manager" : {
        "Name" : "mco-MoM",
        "Status" : 200,
        "StatusCode" : 200,
        "ErrorMessage" : "200 OK"
    }
}
```

4.13.2 Filter setting

1. Process overview

   Set the filter definition in the specified agent.

   The filter array elements are in priority order.

   The filter setting replaces all filters of the target agent.

   Only anyone filter cannot be specified, and it cannot be added, renewed, deleted, or rearranged.

2. HTTP method

```
PUT
```

3. URL

```
/umf/fw/sysmgr/messageview/filters/HostName
```

   Specify the target agent name in `HostName` within the range from 1 to 64 characters.

   The agent name to be specified in ***HostName*** can be checked in the agent list.

   `HostName` cannot be omitted.

4. Parameters

Parameter	Data type	Description	Omission	Valid value
(Root)	object	Root object type	No	-

Parameter	Data type	Description	Omission	Valid value
Filter	object[]	Filter array	No	If deleting all filters, set the number of the array element to 0.
Filter[n].FilterID	string	Filter ID	No	Eight-digit hexadecimal character string that uniquely identifies the filter definition in the agent Specify "00000000" for a new one. Specify the original filter ID for renewing.
Filter[n].FilterName	string	Filter name	No	Specify a value within the range from 1 to 256 characters. Note that a replacement character string can be specified. *See "Replacement character string (page 396)".
Filter[n].CategoryNot	number	Category negation specification		0: Positive 1: Negative Set 0 in the event of omitting.
Filter[n].Category	string	Category	Cannot be omitted if the category negation specification is set to 1.	Specify this item by using up to 32 characters. Leave this blank in the event of omitting.
Filter[n].ApplicationNot	number	Application negation specification		0: Positive 1: Negative Set 0 in the event of omitting.
Filter[n].Application	string	Application	Cannot be omitted if the application negation specification is set to 1.	Specify this by using up to 128 characters in regular expression format. The maximum length of the application is 32 characters. Leave this blank in the event of omitting.
Filter[n].ObjectNot	number	Object negation specification		0: Positive 1: Negative Set 0 in the event of omitting.
Filter[n].Object	string	Object	Cannot be omitted if the object negation specification is set to 1.	Specify this by using up to 128 characters in regular expression format. The maximum length of a message object is 32 characters. Leave this blank in the event of omitting.
Filter[n].MessageIDNot	number	Message ID negation specification		0: Positive 1: Negative Set 0 in the event of omitting.

Parameter	Data type	Description	Omission	Valid value
Filter[n].MessageID	string	Message ID	Cannot be omitted if the message ID negation specification is set to 1.	Specify this by using up to 128 characters in regular expression format. The maximum length of a message ID of a message is 32 characters. Leave this blank in the event of omitting.
Filter[n].MessageTextNot	number	Message text negation specification		0: Positive 1: Negative Set 0 in the event of omitting.
Filter[n].MessageText	string	Message text	Cannot be omitted if the message text negation specification is set to 1.	Specify this by using up to 1024 characters in regular expression format. The maximum length of a message text of a message is 1024 characters. Leave this blank in the event of omitting.
Filter[n].SeverityNot	number	Severity negation specification		0: Positive 1: Negative Set 0 in the event of omitting.
Filter[n].Severity	number	Severity	Cannot be omitted if the severity negation specification is set to 1.	0, 256 to 286, 512 to 543 0 is not specified. Set 0 (not specified) in the event of omitting. *See "Severity (page 395)".
Filter[n].SelPos	object[]	Position specification array		Specify up to eight elements of the array. If all parameters (negation specification, position, comparison type, comparison value) are omitted, the related element array is set as unavailable. Even if some elements are not used, the subsequent elements are not moved forward. If the negation specification is set to 0, the position to 1, the comparison type to 0, and the comparison value to "", the position specification is omitted.
Filter[n].SelPos[m].Type	number	Negation specification		0: Positive 1: Negative Set 0 in the event of omitting.

Parameter	Data type	Description	Omission	Valid value
Filter[n].SelPos[m].Position	number	Position	Cannot be omitted if the position is specified.	1 to 1024
Filter[n].SelPos[m].CompareType	number	Comparison type	Cannot be omitted if the position is specified.	0: = 1: <> 2: >= 3: > 4: <= 5: <
Filter[n].SelPos[m].Value	string	Comparison value	Cannot be omitted if the position is specified.	Specify a value within the range from 1 to 64 characters. Double quotation marks cannot be used for the comparison value. Spaces in front and behind the value cannot be trimmed.
Filter[n].SelKey	object[]	Key specification array		Specify up to eight elements of the array. If all parameters (negation specification, key character string, comparison type, comparison value) are omitted, the related array is set as unavailable. If the element in the middle is not used, the setting cannot be moved forward. If the negation specification is set to 0, the key value to 1, the comparison type to 0, and the comparison value to "", the key specification is omitted.
Filter[n].SelKey[m].Type	number	Negation specification		0: Positive 1: Negative Set 0 in the event of omitting.
Filter[n].SelKey[m].Key	string	Key character string	Cannot be omitted if the key is specified.	Specify a value within the range from 1 to 64 characters. Double quotation marks cannot be used for the key character string. Spaces in front and behind the value cannot be trimmed. * The key value and comparison value used for the key specification must be enclosed in separators in the message. Recognizable separators are one-byte space, (,), [,], {, }, <, and >. A character string

Parameter	Data type	Description	Omission	Valid value
				containing one or more two-byte spaces cannot be specified for the key value. Note that spaces between the key, “=” and the value are ignored.
Filter[n].SelKey[m].CompareType	number	Comparison type	Cannot be omitted if the key is specified.	0: = 1: <>\ 2: >= 3: >\ 4: <= 5: <
Filter[n].SelKey[m].Value	string	Comparison value	Cannot be omitted if the key is specified.	Specify a value within the range from 1 to 128 characters. If the comparison type is set to "=", regular expression format is used. If the comparison type is set to values other than "=", the normal character string is used. Double quotation marks cannot be used for the comparison value.
Filter[n].OverWriteSeverity	number	Severity change		0, 256 to 286, 512 to 543 0 is set in the event of no change. Set 0 (no change) in the event of omitting. *See "Severity (page 395)".
Filter[n].DisplayPosition	number	Display start position		Specify a value within the range from 1 to 1024. Set 1 in the event of omitting.
Filter[n].HelpApplication	string	Help application		Specify this item by using up to 256 characters. Leave this blank in the event of omitting.
Filter[n].HelpDirectory	string	Work directory at startup of the help application		Up to 256 characters Leave this blank in the event of omitting. Specify this if the help application does not leave a space.
Filter[n].HelpOption	string	Startup option of the help application A replacement character string is valid only if using the option for the monitoring terminal.		Specify this item by using up to 128 characters. Leave this blank in the event of omitting. A replacement character string can be specified.

Parameter	Data type	Description	Omission	Valid value
				Specify this if the help application does not leave a space. *See "Replacement character string (page 396)".
Filter[n].Relation1	number	Related information 1		0: Invalid 1: Valid Set 0 in the event of omitting.
Filter[n].Relation1Def	object	Definition of related information 1	Cannot be omitted if related information 1 is set to 1.	Specify this only if related information 1 is valid.
Filter[n].Relation1Def.DisplayText	string	Display name	Cannot be omitted if related information 1 is set to 1.	Specify this item by using up to 16 characters.
Filter[n].Relation1Def.Application	string	Application	Cannot be omitted if related information 1 is set to 1.	Specify this item by using up to 256 characters.
Filter[n].Relation1Def.Directory	string	Work directory		Specify this item by using up to 256 characters. Leave this blank in the event of omitting.
Filter[n].Relation1Def.Option	string	Option A replacement character string is valid only if using the option for the monitoring terminal.		Specify this item by using up to 1024 characters. Leave this blank in the event of omitting. A replacement character string can be specified. *See "Replacement character string (page 396)".
Filter[n].Relation2	number	Related information 2		0: Invalid 1: Valid Set 0 in the event of omitting.
Filter[n].Relation2Def	object	Definition of related information 2	Cannot be omitted if related information 2 is set to 1.	Specify this only if related information 2 is valid.
Filter[n].Relation2Def.DisplayText	string	Display name	Cannot be omitted if related information 2 is set to 1.	Specify this item by using up to 16 characters.
Filter[n].Relation2Def.Application	string	Application	Cannot be omitted if related information 2 is set to 1.	Specify this item by using up to 256 characters.
Filter[n].Relation2Def.Directory	string	Work directory		Specify this item by using up to 256 characters. Leave this blank in the event of omitting.
Filter[n].Relation2Def.Option	string	Option A replacement character string is valid only if using the option		Specify this item by using up to 1024 characters. Leave this blank in the event of omitting.

Parameter	Data type	Description	Omission	Valid value
		for the monitoring terminal.		A replacement character string can be specified. *See "Replacement character string (page 396)".
Filter[n].Report	number	Report specification		0: Invalid 1: Valid Set 0 in the event of omitting.
Filter[n].PatlitePolicyID	string[]	Patlite policy ID	Cannot be omitted if the report specification is set to 1 and the mail policy ID and action policy ID are not specified when adding a filter.	Eight-digit hexadecimal number Specify the Patlite policy ID. The Patlite policy is not set (registered, updated) in the event of omitting.
Filter[n].MailPolicyID	string	Mail policy ID	Cannot be omitted if the report specification is set to 1 and the Patlite policy ID and action policy ID are not specified when adding a filter.	Eight-digit hexadecimal number Specify the mail policy ID. The mail policy is not set (registered, renewed) in the event of omitting (or if "00000000" is specified).
Filter[n].ActionPolicyID	string	Action policy ID	Cannot be omitted if the report specification is set to 1 and the mail Patlite policy ID and mail policy ID are not specified when adding a filter.	Eight-digit hexadecimal number Specify the action policy ID. The action policy is not set (registered, renewed) in the event of omitting (or if "00000000" is specified).
Filter[n].ReportID	string	Report ID	Cannot be omitted if the report specification is set to 1 and the Patlite policy ID, mail policy ID, or action policy ID is not specified when updating a filter.	Eight-digit hexadecimal number Specify the report ID set in a filter before it is renewed. Set "00000000" in the event of omitting.
Filter[n].ReportAutoConfirm	number	Automatically confirmed at completion of reporting.		0: Auto confirmation disabled. 1: Auto confirmation enabled. Set 0 in the event of omitting.
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager in which the agent exists, MoM name, or RM name

"In the event of omitting" means omitting of parameter keys.

A parameter error occurs if the parameter key is specified but null is specified as the value.

Omit the parameter key itself.

Combination of the report specification is shown below.

The report can be set even if 0 (invalid) is set in Filter.Report.

By switching ON/OFF of the report setting, use of a report can be stopped or resumed temporarily while the report setting is retained.

Type	Filter ID FilterID	Policy ID PatlitePolicyID MailPolicyID ActionPolicyID	Report ID ReportID	Remarks
New Reporting setting disabled	00000000	Omitted or 00000000 (The patrol lamp policy ID cannot be set to 00000000.)	Omitted or 00000000	
New Reporting setting enabled	00000000	Combination of the Patlite ID, mail policy ID, or action policy ID	Omitted or 00000000	
Renewal Reporting setting disabled → disabled	Filter ID before renewal	Omitted or 00000000	Omitted or 00000000	
Renewal Reporting setting disabled → enabled	Filter ID before renewal	Combination of the Patlite ID, mail policy ID, or action policy ID	Omitted or 00000000	
Renewal Reporting setting enabled → enabled Report not changed	Filter ID before renewal	Omitted or 00000000	Report ID before renewal	
Renewal Reporting setting enabled → enabled Report changed	Filter ID before renewal	Combination of the Patlite ID, mail policy ID, or action policy ID	Omitted, 00000000, or report ID before renewal	The report ID before renewal is deleted.
Renewal Reporting setting enabled → disabled	Filter ID before renewal	Omitted or 00000000	Omitted or 00000000	The report ID before renewal is deleted.
Deleted Reporting setting disabled	-	-	-	
Deleted Reporting setting enabled	-	-	-	The report ID is deleted.

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	A filter has been set successfully.
400	Bad Request	Parameter error
404	Not Found	The agent name is not specified. The agent does not exist.

HTTP status code	Meaning	Description
		The manager does not exist. The filter ID does not exist. The report (mail policy) does not exist.
409	Conflict	More than one resource exists, and it cannot be specified uniquely. * Occurs if ManagerName is omitted. The filter settings conflict with each other.
500	Internal Server Error	Internal server error Parameter error

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object shape	-
FilterID	string[]	Filter ID array	Eight-digit hexadecimal character string that uniquely identifies the filter definition in the agent
Manager	object	Manager object	-
Manager.Name	string	Manager name	Name of the manager in which the agent exists, MoM name, or RM name
Manager.ErrorMessage	string	Error message	-
Manager.Status	number	Communication error code	-
Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-SYSMGR-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
PUT /umf/fw/sysmgr/messageview/filters/AGENT01 HTTP/1.1
Host: ClientHost
Date: Wed, 20 Apr 2016 00:00:00 GMT
Authorization: SharedKeyLite ZIrgoOV5r1JOJwt3/M6e3M9PIDRntc37o375njmXo
Pk=:X+HnXjAP9jXuD/nz5khRVDMggIY5aR0wmjGCK0bBnr4=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 917

{
    "Filter":[
    {
```

```
        "FilterID":"00000000",
        "FilterName":"FilterName1",
        "CategoryNot":0,
        "Category":"System",
        "ApplicationNot":0,
        "Application":"tpmsg",
        "ObjectNot":0,
        "Object":"",
        "MessageIDNot":0,
        "MessageID":"00000000",
        "MessageTextNot":0,
        "MessageText":"This is test message",
        "SeverityNot":0,
        "Severity":0,
        "SelPos":[
            {
                "Type":0,
                "Position":1,
                "CompareType":0,
                "Value":"Value1"
            }
        ],
        "SelKey":[
            {
                "Type":0,
                "Key":"Key1",
                "CompareType":0,
                "Value":"Value1"
            }
        ],
        "OverWriteSeverity":0,
        "DisplayPosition":1,
        "HelpApplication":"",
        "HelpDirectory":"",
        "HelpOption":"",
        "Relation1":1,
        "Relation1Def":{
            "DisplayText":"relation1",
            "Application":"relation1.exe",
            "Directory":"",
            "Option":""
        },
        "Relation2":0,
        "Report":0
    }
    ],
    "Manager":{
        "Name":"mco-MoM"
    }
}
```


[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
```

```
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 152
Date: Wed, 20 Apr 2016 00:31:47 GMT

{
    "FilterID" : [
        "5716d87d"
    ],
    "Manager" : {
        "Name" : "mco-MoM",
        "Status" : 200,
        "StatusCode" : 200,
        "ErrorMessage" : "200 OK"
    }
}
```

4.13.3 Obtaining messages (search)

1. Process overview

   Obtain (search) messages under the specified search conditions.

   Messages are searched under the AND condition if the search conditions specified in parameters are combined.

   The obtained messages are sorted in reverse chronological order of reception date if the search direction is set to 0 or 1, while they are sorted in chronological order of reception date if the search direction is set to 2.

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/sysmgr/messageview/messages
```

4. Parameters

Parameters	Data type	Description	Omission	Valid value
MessageCnt	number	Maximum number of obtained messages		Specify a value within the range from 1 to 1000. Set 100 in the event of omitting.
ConfirmStatus	number	Messages confirmed or not confirmed to be searched		0: All messages 1: Messages not confirmed 2: Message confirmed Set 1 in the event of omitting.
Direction	number	Search direction		0: Search the latest messages. 1: Search the messages from the source to the past. 2: Search the messages from the source to the future.

Parameters	Data type	Description	Omission	Valid value
				Set 0 in the event of omitting.
BaseReceiveDate	string	A message to be the search source (reception date)	Cannot be omitted if Direction is set to 1 or 2.	yyyy/mm/dd format Specify a pair for BaseReceiveDate and BaseMessageNo. Specify yyyy/mm/dd value between 1971/01/01 and 2036/12/31. The date information is based on the manager time zone.
BaseMessageNo	number	A message to be the search source (message no.)	Cannot be omitted if Direction is set to 1 or 2.	0 to 999999999, -1 Specify a pair for BaseReceiveDate and BaseMessageNo. The source message can be obtained (searched) as well. If the last message number on the previous day is unknown when searching messages toward the past, set the reception date to the previous day and the message number to -1. When searching newly created messages toward the future after obtaining the latest message (Direction = 0), set the maximum messages number + 1 on obtaining the latest message.
TimeZone	string	Time zone		Specify the time zones of the start creation date/time (StartCreateDate), end creation date/time (EndCreateDate), start reception date/time (StartReceiveDate), and end reception date/time (EndReciveDate) in the search conditions, and specify the time zones of the creation date/time (Message[n].CreateDateTime) and reception date/time (Message[n].ReceiveDateTime) of the messages to be obtained. - <Time zone ID>, <DST> format - ±hh:mm format or Z specification (UTC) Set the time zone of the manager in <Time zone ID>, <DST> format in the event of omitting.

Parameters	Data type	Description	Omission	Valid value
				Example: Specify "86,0" to convert into the time zone of Tokyo. *See "Time zone (page 398)".
ResultDateTimtFormat	number	Obtaining date/time format		Specify the date/time format when converting the creation date/time (Message[n].CreateDateTime) and reception date/time (Message[n].ReceiveDateTime) of the message to be obtained into the specified time zone and outputting them. 0: "yyyy/mm/dd hh:mm:ss zzz" format 1: "YYYY-MM-DDThh:mm:ssTZD" format (ISO8601 expansion format) 2: "YYYY-MM-DDThh:mm:ssTZD" format (Z description of UTC in ISO8601 expansion format) Set 0 in the event of omitting.
ConditionFlag	number	Search mode		1: Regular expression 2: Wild card Set "2" in the event of omitting.
StartCreateDate	string	Start creation date/time		Specify the date/time in "yyyy/mm/dd" or "yyyy/mm/dd hh:mm:ss" format. The yyyy/mm/dd format is equivalent to yyyy/mm/dd 00:00:00. This is not specified as the search condition in the event of omitting. Specify yyyy/mm/dd value between 1971/01/01 and 2036/12/31. The date/time information is the time zone specified in the time zone (TimeZone) of the search condition. The start creation date/time must be equal to or earlier than the end creation date/time or earlier.
EndCreateDate	string	End creation date/time		Specify the date/time in "yyyy/mm/dd" or "yyyy/mm/dd hh:mm:ss" format. The yyyy/mm/dd format is equivalent to yyyy/mm/dd 23:59:59.

Parameters	Data type	Description	Omission	Valid value
				This is not specified as the search condition in the event of omitting. Specify yyyy/mm/dd value between 1971/01/01 and 2036/12/31. The date/time information is the time zone specified in the time zone (TimeZone) of the search condition. The start creation date/time must be equal to or earlier than the end creation date/time.
StartReceiveDate	string	Start reception date/time		Specify the date/time in "yyyy/mm/dd" or "yyyy/mm/dd hh:mm:ss" format. The yyyy/mm/dd format is equivalent to yyyy/mm/dd 00:00:00. This is not specified as the search condition in the event of omitting. Specify yyyy/mm/dd value between 1971/01/01 and 2036/12/31. The date/time information is the time zone specified in the time zone (TimeZone) of the search condition. The start reception date/time must be equal to or earlier than the end reception date/time.
EndReceiveDate	string	End reception date/time		Specify the date/time in "yyyy/mm/dd" or "yyyy/mm/dd hh:mm:ss" format. The yyyy/mm/dd format is equivalent to yyyy/mm/dd 23:59:59. This is not specified as the search condition in the event of omitting. Specify yyyy/mm/dd value between 1971/01/01 and 2036/12/31. The date/time information is the time zone specified in the time zone (TimeZone) of the search condition. The start reception date/time must be equal to or earlier than the end reception date/time.

Parameters	Data type	Description	Omission	Valid value
Severity	number[]	Severity		256 to 287, 512 to 543 This is not specified as the search condition in the event of omitting.
Mark	number[]	Mark		0, 768 to 895 This is not specified as the search condition in the event of omitting. 0 means "No mark".
Node	string	Node name		Up to 128 characters This is not specified as the search condition in the event of omitting. Specify the search character string according to the search mode. Spaces before and after the value cannot be trimmed. This cannot be specified if NodeList is specified.
NodeList	string[]	Node name list		Character string consisting of up to 256 characters This is not specified as the search condition in the event of omitting. Fixed character string that does not depend on the search mode. Spaces before and after the value cannot be trimmed. This cannot be specified if Node is specified.
Category	string	Category name		Up to 128 characters This is not specified as the search condition in the event of omitting. Specify the search character string according to the search mode. Spaces before and after the value cannot be trimmed.
Application	string	Application name		Up to 128 characters This is not specified as the search condition in the event of omitting. Specify the search character string according to the search mode. Spaces before and after the value cannot be trimmed.

Parameters	Data type	Description	Omission	Valid value
Object	string	Object name		Up to 128 characters This is not specified as the search condition in the event of omitting. Specify the search character string according to the search mode. Spaces before and after the value cannot be trimmed.
MessageID	string	Message ID		Up to 128 characters This is not specified as the search condition in the event of omitting. Specify the search character string according to the search mode. Spaces before and after the value cannot be trimmed.
MessageText	string	Message text		Up to 1024 characters This is not specified as the search condition in the event of omitting. Specify the search character string according to the search mode. Spaces before and after the value cannot be trimmed.
Manager	object	Manager object		-
Manager.Name	string	Manager name		Name of the manager in which the agent exists, MoM name, or RM name

"In the event of omitting" means omitting of parameter keys.

A parameter error occurs if the parameter key is specified but null is specified as the value.

Omit the parameter key itself in the event of omitting.

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The message has been obtained (searched) successfully.
206	Partial Content	Although the manager name was not specified when more than one manager exists, a request has been issued successfully in one manager.
400	Bad Request	Parameter error
404	Not Found	The manager does not exist.
500	Internal Server Error	Internal server error Parameter error

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Message	object[]	Object where messages are stored	-
Message[n].ContiueFlag	boolean	Continuous flag Indicates that the maximum number of messages could not be obtained. For messages returned from the same manager, the same information is stored.	false: Not continuous true: Continuous
Message[n].BaseReceiveDate	string	Reception date/time to be the next source For messages returned from the same manager, the same information is stored.	yyyy/mm/dd format The message is returned only if ContinueFlag is set to true. The date information is based on the manager time zone.
Message[n].BaseMessageNo	number	A message to be the next source For messages returned from the same manager, the same information is stored.	0 to 999999999 The message is returned only if ContinueFlag is set to true.
Message[n].MessageNo	number	Message number	0 to 999999999
Message[n].FilterID	string	Filter ID The filter ID may not exist in the filter setting obtained in the filter obtaining API.	Eight-digit hexadecimal number

Parameters	Data type	Description	Valid value
		In this case, the message of the target host that is not related to the filter setting or the filter is deleted.	
Message[n].ConfirmStatus	boolean	Confirmation condition	false: Not confirmed. true: Confirmed.
Message[n].Description	string	Message overview Store the results of replacement of the character string in the filter name.	Up to 2000 characters If more than 2000 characters are replaced, up to 2000 characters are returned. *See "Replacement character string (page 396)".
Message[n].Severity	number	Severity	256 to 287, 512 to 543 *See "Severity (page 395)".
Message[n].Mark	number	Mark	0, 768 to 895 0 is returned in case of no mark. *See "Mark (page 396)".
Message[n].CreateDate	string	Occurrence date	yyyy/mm/dd format The date information is based on the manager time zone.
Message[n].CreateTime	string	Creation time	hh:mm:ss format The date information is based on the manager time zone.
Message[n].ReceiveDate	string	Reception date	yyyy/mm/dd format The date information is based on the manager time zone.
Message[n].ReceiveTime	string	Reception time	hh:mm:ss format The date information is based on the manager time zone.
Message[n].CreateDateTime	string	Creation date/time (specifying the time zone)	Output the creation date/time according to the time zone specified in TimeZone when a request is issued. - If the obtaining date/time format is set to 0 yyyy/mm/dd hh:mm:ss zzz format Example: 2015/12/10 09:47:00 +09:00 -If the obtaining date/time format is set to 1 YYYY-MM-DDThh:mm:ssTZD format Example: 2015-12-10T09:47:00+09:00 - If the obtaining date/time format is set to 2 YYYY-MM-DDThh:mm:ssTZD format (Z description of UTC)

Parameters	Data type	Description	Valid value
			Example: 2015-12-10T00:47:00Z
Message[n].ReceiveDateTime	string	Reception date/time (specifying the time zone)	Output the reception date/time according to the time zone specified in TimeZone when a request is issued. - If the obtaining date/time format is set to 0 yyyy/mm/dd hh:mm:ss zzz format Example: 2015/12/10 09:47:00 +09:00 - If the obtaining date/time format is set to 1 YYYY-MM-DDThh:mm:ssTZD format Example: 2015-12-10T09:47:00+09:00 - If the obtaining date/time format is set to 2 YYYY-MM-DDThh:mm:ssTZD format (Z description of UTC) Example: 2015-12-10T00:47:00Z
Message[n].Node	string	Node	Up to 256 characters
Message[n].Category	string	Category	Up to 32 characters
Message[n].Application	string	Application	Up to 32 characters
Message[n].Object	string	Object	Up to 32 characters
Message[n].MessageID	string	Message ID	Up to 32 characters
Message[n].MessageText	string	Message text	Up to 1024 characters
Message[n].Report	number	Report result	0: No result 1: Reporting 2: Abnormal termination 3: Normal termination
Message[n].ReportActionID	string	Report ID	Eight-digit hexadecimal number
Message[n].ReportActionIDStr	string	Report ID character string	Up to eight characters
Message[n].CommentFlag	boolean	Existence of comments	false: None true: Exists
Message[n].Manager	object	Manager object	-
Message[n].Manager.Name	string	Manager name	Name of the manager in which the agent exists, MoM name, or RM name
Message[n].Manager.ErrorMessage	string	Error message	-
Message[n].Manager.Status	number	Communication error code	-
Message[n].Manager.StatusCode	number	Internal error code	-

7. Change history

- X-SYSMGR-API-Version: 1.0
  - `Newly added`

8. JSON Example

[Request]

```
POST /umf/fw/sysmgr/messageview/messages HTTP/1.1
Host: ClientHost
Date: Wed, 20 Apr 2016 00:00:00 GMT
Authorization: SharedKeyLite ZIrgoOV5r1JOJwt3/M6e3M9PIDRntc37o375njmXo
Pk=:X+HnXjAP9jXuD/nz5khRVDMggIY5aR0wmjGCK0bBnr4=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 215

{
    "MessageCnt":1,
    "ConfirmStatus":1,
    "Direction":1,
    "BaseReceiveDate":"2016/04/20",
    "BaseMessageNo":0,
    "TimeZone":"86,0",
    "ConditionFlag":2,
    "Node":"AGENT01",
    "Manager":{
        "Name":"mco-MoM"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 857
Date: Wed, 20 Apr 2016 01:30:44 GMT

{
    "Message" : [
        {
            "Node" : "AGENT01",
            "ReceiveTime" : "11:15:27",
            "Application" : "tpmsg",
            "ReceiveDate" : "2016/04/20",
            "Report" : 0,
            "ContinueFlag" : false,
            "FilterID" : "5715d97e",
            "ReportActionID" : "00000000",
            "CreateTime" : "11:15:27",
            "CreateDate" : "2016/04/20",
            "Severity" : 264,
            "CommentFlag" : false,
            "ReportActionIDStr" : "",
```

```
            "MessageID" : "00000001",
            "ReceiveDateTime" : "2016/04/20 11:15:27 +09:00",
            "Mark" : 0,
            "Object" : "0000",
            "ConfirmStatus" : false,
            "Category" : "Application",
            "CreateDateTime" : "2016/04/20 11:15:27 +09:00",
            "MessageText" : "This is test message.",
            "Description" : "",
            "MessageNo" : 0,
            "Manager" : {
                "Name" : "mco-MoM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.13.4 Confirmation/Cancellation

1. Process overview

   Confirm or cancel the message of the specified agent.

2. HTTP method

```
PUT
```

3. URL

```
/umf/fw/sysmgr/messageview/confirm
```

4. Parameters

Parameters	Data type	Description	Omission	Valid value
(Root)	object	Root object type	Not possible	-
HostName	string	Agent name	Not possible	Character string up to 256 characters that identifies the agent uniquely
ReceiveDate	string	Reception date	Not possible	yyyy/mm/dd format Specify yyyy/mm/dd value between 1971/01/01 and 2036/12/31. The date information is based on the manager time zone.
MessageNo	number[]	Message number	Not possible	Values in the range of 0 to 999999999
Confirm	boolean	Confirmation/ Cancellation	Not possible	true: Confirmation false: Cancellation
Manager	object	Manager object	If an agent name that does not exist in the	-

Parameters	Data type	Description	Omission	Valid value
			topology is specified, this cannot be omitted.	
Manager.Name	string	Manager name	If an agent name that does not exist in the topology is specified, this cannot be omitted.	Name of the manager in which the agent exists, MoM name, or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	Confirmation/Cancellation has been performed successfully.
206	Partial Content	Although the manager name was not specified when more than one manager exists, a request has been issued successfully in one manager.
400	Bad Request	Parameter error The agent name is not specified. The reception date is not specified. The message no. is not specified. Confirmation/cancellation is not specified. The manager name is not specified.
404	Not Found	The agent does not exist. The manager does not exist. The message does not exist.
500	Internal Server Error	Internal server error Parameter error

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Confirm	object[]	Object with the results of confirmation/ cancellation	-
Confirm[n].HostName	string	Agent name	Character string that identifies the agent uniquely Up to 256 characters
Confirm[n].ReceiveDate	string	Reception date	yyyy/mm/dd format The date information is based on the manager time zone.
Confirm[n].MessageNo	number[]	Message number	Values in the range of 0 to 999999999
Confirm[n].Confirm	boolean	Confirmation/ Cancellation	true: Confirmation false: Cancellation
Confirm[n]Manager	object	Manager object	-

Parameters	Data type	Description	Valid value
Confirm[n]Manager.Name	string	Manager name	Name of the manager in which the agent exists, MoM name, or RM name
Confirm[n]Manager.ErrorMessage	string	Error message	-
Confirm[n]Manager.Status	number	Communication error code	-
Confirm[n]Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-SYSMGR-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
PUT /umf/fw/sysmgr/messageview/confirm HTTP/1.1
Host: ClientHost
Date: Wed, 20 Apr 2016 00:00:00 GMT
Authorization: SharedKeyLite ZIrgoOV5r1JOJwt3/M6e3M9PIDRntc37o375njmXo
Pk=:X+HnXjAP9jXuD/nz5khRVDMggIY5aR0wmjGCK0bBnr4=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 146

{
    "HostName":"AGENT01",
    "ReceiveDate":"2016/04/20",
    "MessageNo":[
        0,
        1
    ],
    "Confirm":true,
    "Manager":{
        "Name":"mco-MoM"
    }
}
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 279
Date: Wed, 20 Apr 2016 01:40:21 GMT
```

```
{
    "Confirm" : [
        {
            "HostName" : "AGENT01",
            "ReceiveDate" : "2016/04/20",
            "Confirm" : true,
            "MessageNo" : [
                0, 1
            ],
            "Manager" : {
                "Name" : "mco-MoM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.13.5 Obtaining a comment

1. Process overview

   Obtain the comment of the specified agent.

   If no comment is added, an empty string is returned.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/sysmgr/messageview/comment?HostName=HostName&ReceiveDate=ReceiveDate&M
essageNo=MessageNo&ManagerName=ManagerName
```

   Specify the target agent name in `HostName` by using up to 256 characters.

   The agent name to be specified in ***HostName*** can be checked in the agent list or "Obtaining messages (search)”.

   `HostName` cannot be omitted.

   Specify the reception date of the target comment in ***ReceiveDate*** in yyyy/mm/dd format.

   The reception date to be specified in `ReceiveDate` can be checked in "Obtaining messages (search)".

   ReceiveDate cannot be omitted.

   Specify the number of target messages in ***ManagerNo*** within the range of 0 to 999999999.

   The reception date to be specified in `ManagerNo` can be checked in "Obtaining messages (search)".

   ManagerNo cannot be omitted.

   For an environment where more than one manager exists, specify the target manager name as ***ManagerName***.

   If an agent name that does not exist in the topology is specified, specify the manager name obtained in "Obtaining messages (search)".

If an agent name that does not exist in the topology is specified, `ManagerName` cannot be omitted.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	A comment has been obtained successfully.
206	Partial Content	Although the manager name was not specified when more than one manager exists, a request has been issued successfully in one manager.
400	Bad Request	Parameter error The reception date is not specified. The message number is not specified. The manager name is not specified.
404	Not Found	The agent does not exist. The manager does not exist. The message does not exist.
500	Internal Server Error	Internal server error Parameter error The agent name is not specified.

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Comment	object[]	Object with the results of obtaining comments	-
Comment[n].HostName	string	Agent name	Character string that identifies the agent uniquely Up to 256 characters
Comment[n].ReceiveDate	string	Reception date	yyyy/mm/dd format Specify yyyy/mm/dd value between 1971/01/01 and 2036/12/31. The date information is based on the manager time zone.
Comment[n].MessageNo	number	Message number	0 to 999999999
Comment[n].Comment	string	Comment	Up to 1024 characters Line feed characters can be included.
Comment[n].Manager	object	Manager object	-
Comment[n].Manager.Name	string	Manager name	Name of the manager in which the agent exists, MoM name, or RM name

7. Change history
   - X-SYSMGR-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
GET /umf/fw/sysmgr/messageview/comment?HostName=AGENT01&ReceiveDate=20
16/04/20&MessageNo=1&ManagerName=mco-MoM HTTP/1.1
Host: ClientHost
Date: Wed, 20 Apr 2016 00:00:00 GMT
Authorization: SharedKeyLite ZIrgoOV5r1JOJwt3/M6e3M9PIDRntc37o375njmXo
Pk=:X+HnXjAP9jXuD/nz5khRVDMggIY5aR0wmjGCK0bBnr4=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 0
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 276
Date: Wed, 20 Apr 2016 02:06:56 GMT

{
    "Comment" : [
        {
            "HostName" : "AGENT01",
            "ReceiveDate" : "2016/04/20",
            "Comment" : "This is Comment",
            "MessageNo" : 1,
            "Manager" : {
                "Name" : "mco-MoM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.13.6 Adding a comment

1. Process overview

   Add the comment to the specified agent.
2. HTTP method

```
PUT
```

3. URL

```
/umf/fw/sysmgr/messageview/comment
```

4. Parameters

Parameter	Data type	Description	Omission	Valid value
(Root)	object	Root object shape	Not possible	-
HostName	string	Agent name	Not possible	Character string up to 256 characters that identifies the agent uniquely
ReceiveDate	string	Reception date	Not possible	yyyy/mm/dd format Specify yyyy/mm/dd value between 1971/01/01 and 2036/12/31. The date information is based on the manager time zone.
MessageNo	number	Message number	Not possible	0 to 999999999
Comment	string	Comment	Not possible	0 to 1024 characters Line feed characters can be included. Spaces in front and behind the value cannot be trimmed.
Manager	object	Manager object	If an agent name that does not exist in the topology is specified, this cannot be omitted.	-
Manager.Name	string	Manager name	If an agent name that does not exist in the topology is specified, this cannot be omitted.	Name of the manager in which the agent exists, MoM name, or RM name

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	A comment has been added successfully.
206	Partial Content	Although the manager name was not specified when more than one manager exists, a request has been issued successfully in one manager.
400	Bad Request	Parameter error The agent name is not specified. The reception date is not specified. The message is not specified. The comment is not specified. The manager name is not specified.
404	Not Found	The agent does not exist. The manager does not exist.

HTTP status code	Meaning	Description
		The message does not exist.
500	Internal Server Error	Internal server error Parameter error

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Comment	object[]	Object with the results of adding comments	-
Comment[n].HostName	string	Agent name	Character string that identifies the agent uniquely Up to 256 characters
Comment[n].ReceiveDate	string	Reception date	yyyy/mm/dd format The date information is based on the manager time zone.
Comment[n].MessageNo	number	Message number	0 to 999999999
Comment[n].Comment	string	Comment	Up to 1024 characters Line feed characters can be included.
Comment[n].Manager	object	Manager object	-
Comment[n].Manager.Name	string	Manager name	Name of the manager in which the agent exists, MoM name, or RM name

7. Change history
   - X-SYSMGR-API-Version: 1.0
     - `Newly added`

8. JSON Example

   [Request]

```
PUT /umf/fw/sysmgr/messageview/comment HTTP/1.1
Host: ClientHost
Date: Wed, 20 Apr 2016 00:00:00 GMT
Authorization: SharedKeyLite ZIrgoOV5r1JOJwt3/M6e3M9PIDRntc37o375njmXo
Pk=:X+HnXjAP9jXuD/nz5khRVDMggIY5aR0wmjGCK0bBnr4=
X-SYSMGR-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 144

{
    "HostName":"AGENT01",
    "ReceiveDate":"2016/04/20",
    "MessageNo":1,
```

```
    "Comment":"This is Comment",
    "Manager":{
        "Name":"mco-MoM"
    }
}
```

[Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 276
Date: Wed, 20 Apr 2016 01:55:40 GMT

{
    "Comment" : [
        {
            "HostName" : "AGENT01",
            "ReceiveDate" : "2016/04/20",
            "Comment" : "This is Comment",
            "MessageNo" : 1,
            "Manager" : {
                "Name" : "mco-MoM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.13.7 Severity

- The severity is shown below.

  The severity must be registered in advance when setting the options of the monitoring terminal.

Severity name (default)	Internal name	Severity ID
STOP	SEV_STOP	256
FATAL	SEV_FATAL	257
CRITICAL	SEV_CRITICAL	258
MAJOR	SEV_MAJOR	259
MINOR	SEV_MINOR	260
WARNING	SEV_WARNING	261
UNKNOWN	SEV_UNKNOWN	262
NOMESSAGE	SEV_NOMESSAGE	263
NORMAL	SEV_NORMAL	264

Severity name (default)	Internal name	Severity ID
PROCESSSTOP	SEV_PROCESSSTOP	265
SERVICESTOP	SEV_SERVICESTOP	266
PERFUPERROR	SEV_PERFUPERROR	267
PERFLOWERROR	SEV_PERFLOWERROR	268
HOSTEMPTY	SEV_HOSTEMPTY	269
PERFUPWARNING	SEV_PERFUPWARNING	270
PERFLOWWARNING	SEV_PERFLOWWARNING	271
PROCESSUNKNOWN	SEV_PROCESSUNKNOWN	272
SERVICEUNKNOWN	SEV_SERVICEUNKNOWN	273
PERFUNKNOWN	SEV_PERFUNKNOWN	274
PROCESSRUN	SEV_PROCESSRUN	275
SERVICERUN	SEV_SERVICERUN	276
PERFNORMAL	SEV_PERFNORMAL	277
HOSTNORMAL	SEV_HOSTNORMAL	278
PROCESSUPERROR	SEV_PROCESSUPERROR	279
FORCEEND	SEV_FORCEEND	280
DELAY	SEV_DELAY	281
CONDSTOP	SEV_CONDSTOP	282
EXECUTING	SEV_EXECUTING	283
NOTEXEC	SEV_NOTEXEC	284
CONFIRMATION	SEV_CONFIRMATION	285
UNMANAGED	SEV_UNMANAGED	286
(User severity*)	USER1 to USER32	512 to 543

* The severity ID of User*n* (the user severity) is 511+*n*.

4.13.8 Mark

- The mark is shown below.

  The mark must be registered in advance when setting the options of the monitoring terminal.

Mark name (default)	Internal name	Mark ID
Reporting	MARK1	768
Processing	MARK2	769
Processed	MARK3	770
(User mark *)	MARK4 to MARK128	771 to 895

* The mark ID of the user mark User*n* is 511+*n*.

4.13.9 Replacement character string

- The replacement character strings are shown below.

The replacement character strings set for the option information of the help information, related information 1, and related information 2 are available only in the monitoring terminal.

Replacement character string	Description	Remarks
$SEVERITY$	Replaced with the severity of a message.	
$GENERATEDDATE$	Replaced with the message creation date.	
$GENERATEDTIME$	Replaced with the message creation time.	
$RECEIVEDATE$	Replaced with the message reception date.	
$RECEIVETIME$	Replaced with the message reception time.	
$NODE$	Replaced with the node name of a message.	
$APPLICATION$	Replaced with the application name of a message.	
$OBJECT$	Replaced with the object name of a message.	
$MESSAGEID$	Replaced with the message ID of a message.	
$MESSAGETEXT$	Replaced with the message text of a message. Before replacing the text, replace the double quotation marks (") with single quotation marks (') in the message text, and replace the line feed characters with spaces in the message text.	
$MARK$	Replaced with the marks of a message.	This can be specified only for the following options. Help application Related information 1 Related information 2
$REPEXP("<Start key value>", "<End key value>")	Select the contents to be replaced from the message text, and specify them. Specify the start key value and the end key value to replace the text with the contents starting from a character next to the start key value to a character before the end key value. Start key value: Specify the value before the character string to be replaced in regular expression format. End key value: Specify the value next to the character string to be replaced in regular expression format. The start key value and end key value must be enclosed in double quotation marks ("). If there is no corresponding character string in the message, it is replaced with ("<Start key value>", "<End key value>"). Before replacing the text, replace the double quotation marks (") with single quotation marks (') in the message text, and replace the line feed characters with spaces in the message text. Example: $REPEXP("\(","\)")	This can be specified only for the following options. Help application Related information 1 Related information 2
$REPPOS(<Position>, <Character string length>)	Specify the position of the contents to be replaced in the message text. Position: Specify the replacement start position in the message text with the number of characters. Specify a value within the range of 0 to 1023.	This can be specified only for the following options. Help application Related information 1 Related information 2

Replacement character string	Description	Remarks
	Character string length; Specify the length of the character string to be replaced. Specify a value within the range of 1 to 1024. Specify a value so that the total of the values specified as a position and as a length does not exceed 1024. If there is no character string within the specified range, the value is replaced with an empty string. If characters other than the numerical value are specified as the position, the specified character is regarded as 0. If characters other than the numerical value are specified as the character string length, the specified character is replaced with an empty string. Before replacing the text, replace the double quotation marks (") with single quotation marks (') in the message text, and replace line feed characters with spaces in the message text. Example: $REPPOS(5,8)	
$REPKEY("<Key value>")	Replace with the right side value (character string after "=") corresponding to the key value in the message text. Key value: Specify the key in the message text. This must be enclosed in double quotation marks. If there is no character string corresponding to the key value specified in the message text, the value is replaced with a space. "=" must be provided between the character string corresponding to the key value specified in the message text and the character string to be replaced. The character string to be replaced in the message text must be enclosed in double quotation marks ("), or a closing bracket ">" or one-byte space must be provided next to the character string to be replaced. Note that spaces between the key value, "=", and the character string to be replaced are ignored. Before replacing the text, replace the double quotation marks (") with single quotation marks (') in the message text, and replace line feed characters with spaces in the message text. Example: $REPKEY("ErrorNumber") Message text: (ErrorNumber=1)	This can be specified only for the following options. Help application Related information 1 Related information 2

4.13.10 Time zone

- The time zones are shown below.

Time zone ID	DST	Time zone name
1	0	(GMT+04:30) Kabul
2	1	(GMT-09:00) Alaska
3	0	(GMT+03:00) Kuwait, Riyadh

Time zone ID	DST	Time zone name
4	0	(GMT+04:00) Abu Dhabi, Muscat
5	0	(GMT+03:00) Baghdad
6	0	(GMT-03:00) Buenos Aires
7	1	(GMT+04:00) 2.Yerevan
8	1	(GMT-04:00) Atlantic Standard Time (Canada)
9	0	(GMT+09:30) Darwin
10	1	(GMT+10:00) Canberra, Melbourne, Sydney
11	1	(GMT+04:00) Baku
12	1	(GMT-01:00) Azores
13	0	(GMT+06:00) Dhaka
14	0	(GMT-06:00) Saskatchewan
15	0	(GMT-01:00) Cape Verde Islands
16	0	(GMT+04:00) Caucasus Standard Time
17	1	(GMT+09:30) Adelaide
18	0	(GMT-06:00) Central America
19	0	(GMT+06:00) Astana
20	1	(GMT-04:00) Cuiaba
21	1	(GMT+01:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague
22	1	(GMT+01:00) Sarajevo, Skopje, Warsaw, Zagreb
23	0	(GMT+11:00) Solomon Islands, New Caledonia
24	1	(GMT-06:00) Central Standard Time (US and Canada)
25	1	(GMT-06:00) Guadalajara, Mexico City, Monterrey - New
26	0	(GMT+08:00) Beijing, Chongqing, Hong Kong SAR, Urumqi
27	0	(GMT-12:00) International Date Line West
28	0	(GMT+03:00) Nairobi
29	0	(GMT+10:00) Brisbane
30	1	(GMT+02:00) Minsk
31	1	(GMT-03:00) Brasilia
32	1	(GMT-05:00) Eastern Standard Time (US and Canada)
33	0	(GMT+02:00) Cairo
34	0	(GMT+06:00) Yekaterinburg
35	1	(GMT+12:00) Fiji Islands
36	1	(GMT+02:00) Helsinki, Kiev, Riga, Skopje, Sofia, Tallinn, Vilnius
37	0	(GMT+04:00) Tbilisi
38	1	(GMT) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London
39	1	(GMT-03:00) Greenland
40	0	(GMT) Monrovia, Reykjavik

Time zone ID	DST	Time zone name
41	1	(GMT+02:00) Athens, Bucharest
42	0	(GMT-10:00) Hawaii
43	0	(GMT+05:30) Chennai, Kolkata, Mumbai, New Delhi
44	1	(GMT+03:30) Tehran
45	1	(GMT+02:00) Jerusalem
46	1	(GMT+02:00) Amman
47	0	(GMT+03:00) Kaliningrad
48	1	(GMT+12:00) Petropavlovsk-Kamchatsky - Discarded
49	0	(GMT+09:00) Seoul
50	0	(GMT+12:00) Magadan
51	0	(GMT+04:00) Port Louis
52	1	(GMT-06:00) Guadalajara, Mexico City, Monterrey - Old
53	1	(GMT-07:00) Chihuahua, La Paz, Mazatlan - Old
54	1	(GMT-02:00) Mid-Atlantic
55	1	(GMT+02:00) Beirut
56	1	(GMT-03:00) Montevideo
57	1	(GMT) Casablanca
58	1	(GMT-07:00) Mountain Standard Time (US and Canada)
59	1	(GMT-07:00) Chihuahua, La Paz, Mazatlan - New
60	0	(GMT+06:30) Yangon (Rangoon)
61	0	(GMT+07:00) Novosibirsk
62	1	(GMT+01:00) Windhoek
63	0	(GMT+05:45) Kathmandu
64	1	(GMT+12:00) Auckland, Wellington
65	1	(GMT-03:30) Newfoundland
66	0	(GMT+09:00) Irkutsk
67	0	(GMT+08:00) Krasnoyarsk
68	1	(GMT-04:00) Santiago
69	1	(GMT-08:00) Pacific Standard Time (US and Canada)
70	1	(GMT-08:00) Baja California
71	0	(GMT+05:00) Islamabad, Karachi
72	1	(GMT-04:00) Asuncion
73	1	(GMT+01:00) Brussels, Copenhagen, Madrid, Paris
74	0	(GMT+04:00) Moscow, St. Petersburg, Volgograd
75	0	(GMT-03:00) Cayenne, Fortaleza
76	0	(GMT-05:00) Bogota, Lima, Quito
77	0	(GMT-04:00) Georgetown, La Paz, Manaus, San Juan
78	1	(GMT-11:00) Samoa

Time zone ID	DST	Time zone name
79	0	(GMT+07:00) Bangkok, Hanoi, Jakarta
80	0	(GMT+08:00) Kuala Lumpur, Singapore
81	0	(GMT+02:00) Harare, Pretoria
82	0	(GMT+05:30) Sri Jayawar denepura Kotte
83	1	(GMT+02:00) Damascus
84	0	(GMT+08:00) Taipei
85	1	(GMT+10:00) Hobart
86	0	(GMT+09:00) Osaka, Sapporo, Tokyo
87	0	(GMT+13:00) Nuku'alofa
88	1	(GMT+02:00) Istanbul
89	0	(GMT+08:00) Ulaanbaatar
90	1	(GMT-05:00) Indiana (East)
91	0	(GMT-07:00) Arizona
92	0	(GMT) Universal Time Coordinated
93	0	(GMT+12:00) Universal Time Coordinated+12
94	0	(GMT+12:00) Universal Time Coordinated-02
95	0	(GMT+12:00) Universal Time Coordinated-11
96	0	(GMT-04:30) Caracas
97	0	(GMT+11:00) Vladivostok
98	0	(GMT+08:00) Perth
99	0	(GMT+01:00) West Central Africa
100	1	(GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna
101	0	(GMT+05:00) Tashkent
102	0	(GMT+10:00) Guam, Port Moresby
103	0	(GMT+10:00) Yakutsk

4.14 Performance statistics

4.14.1 Obtaining the performance counter list

1. Process overview

   Obtain the performance counter list.

   A regular expression can be used to specify the obtained counter names. However, a large-quantity counter list may be returned according to the specified regular expression.

   Narrow down the specifications of the regular expression, and obtain the list multiple times.

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/perfstatistics/indicators?IndicatorName=IndicatorName&ManagerName=Mana
gerName
[&MaxIndicatorCount=MaxIndicatorCount]
```

Specify the counter name to be obtained as a list using a regular expression in ***IndicatorName***.

Delete spaces before and after the characters. This item cannot be omitted.

Specify the name of the manager in which the counter exists in ***ManagerName***. This item cannot be omitted.

Specify the upper-limit value of the number of the counter to be returned in ***MaxIndicatorCount***.

Specify a value within the range of 1 to 2147483647.

If the number of the counter corresponding to the regular expression exceeds the upper limit, an error (500) occurs.

Set "1000" in the event of omitting.

4. Parameters

   None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The counter list has been obtained successfully.
400	Bad Request	The parameter is specified incorrectly. (The required parameter is not specified.)
404	Not Found	The manager does not exist.
500	Internal Server Error	Internal server error The parameter is specified incorrectly.

6. Response

Parameter	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Indicator	object[]	Indicator object	-
Indicator[n].StatisticsInterval	string[]	Statistical data creation interval list	d.hh:mm:ss format A value within the range from 0 to 365 is set in d. Leave a space if statistical data is not created. ***See Note**
Indicator[n].IndicatorList	object[]	Counters	Blank characters are specified if the corresponding counter does not exist.
Indicator[n].IndicatorList[m].Name	string	Counter name	1 to 1024 characters
Indicator[n].IndicatorList[m].Interval	string	Performance data	d.hh:mm:ss format

Parameter	Data type	Description	Valid value
		collection interval	
Indicator[n].IndicatorList[m].RegistStatistics	boolean	Registration of target counters for statistics	Indicates whether target counters for statistics are registered or not. true: Registered false: Unregistered For a counter set as true (Registered), statistical data is created at the interval set in StatisticsInterval.
Indicator[n].Manager	object	Manager object	-
Indicator[n].Manager.Name	string	Manager name	Manager name, MoM name, or RM name
Indicator[n].Manager.ErrorMessage	string	Error message	-
Indicator[n].Manager.Status	number	Communication error code	-
Indicator[n].Manager.StatusCode	number	Internal error code	-

* **Note:** The statistical data creation interval list is common to all counters.

If the collection interval of performance data is longer than the creation interval of the statistical data of the counter, the data created at the listed interval may not be created partially since statistical data is created based on performance data.

If statistical data is used in other functions such as the multi-graph view, a list including such creation interval is returned.

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
GET /umf/fw/perfstatistics/indicators?IndicatorName=^System\|.*&Manage
rName=mco-MoM&MaxIndicatorCount=2000 HTTP/1.1
Host: ClientHost
Date: Tue, 19 Apr 00:00:00 GMT
Authorization: SharedKeyLite ZIrgoOV5r1JOJwt3/M6e3M9PIDRntc37o375njmXo
Pk=:X+HnXjAP9jXuD/nz5khRVDMggIY5aR0wmjGCK0bBnr4=
X-FW-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 0
Connection:close
```

   [Response]

```
HTTP/1.1 200 OK
```

```
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 492
Date: Tue, 19 Apr 2016 06:42:24 GMT
Connection: close

{
    "Indicator" : [
        {
            "IndicatorList" : [
                {
                    "RegistStatistics" : true,
                    "Interval" : "0.00:00:30",
                    "Name" : "System|AGENT01|Processor|_Total|% Proces
sor Time"
                }, {
                    "RegistStatistics" : true,
                    "Interval" : "0.00:00:30",
                    "Name" : "System|AGENT01|LogicalDisk|C:|Disk Trans
fers/sec"
                }, {
                    "RegistStatistics" : true,
                    "Interval" : "0.00:00:30",
                    "Name" : "System|AGENT01|Memory|% Memory Used Ex"
                }
            ],
            "StatisticsInterval" : [
                "0.00:10:00", "0.01:00:00", "1.00:00:00"
            ],
            "Manager" : {
                "Name" : "mco-MoM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```

4.14.2 Obtaining performance information

1. Process overview

   Obtain the performance information of the specified counter.

   Although the performance information on the specified period and interval can be obtained, a large quantity of data may be returned according to the specified period and interval.

   To obtain an enormous volume of performance information, narrow down the period and divide the information into several volumes to obtain the information multiple times.

   Example: To obtain performance information every minute, divide the information into day units, and obtain it.

2. HTTP method

```
POST
```

3. URL

```
/umf/fw/perfstatistics/performances
```

4. Parameters

Parameter	Data type	Description	Omission	Valid value
(ROOT)	object	Root object type	Not possible	-
Performance	object	Performance information object	Not possible	-
Performance.Name	string	Counter name	Not possible	1 to 1024 characters Specifying regular expressions is not allowed.
Performance.DataType	number	Type of performance information to be obtained	Not possible	Specify the following values. 0: Performance data 1: Statistics data ***Note 1**
Performance.Statistics	string[]	Calculation method for the performance information to be obtained	Cannot be omitted if DataType is set to 1 (Statistical data).	Specify the following values. **Maximum**: Maximum value **Average**: Average value **Minimum**: Minimum value It is ignored if DataType is set to 0.
Performance.StartTime	string	Start date/time of the performance information to be obtained	No	The format is shown below. yyyy-MM-ddThh:mm:ss[+|-]hh:mm Example: 2011-12-31T23:59:59+09:00 Specify yyyy-MM-dd within the range of 1971-01-01 to 2036-12-31. For the time zone ([+|-]hh:mm), specify hh within the range of 00 to 14 while specifying mm within the range of 00 to 59.
Performance.EndTime	string	End date/time of the performance information to be obtained	No	The format is shown below. yyyy-MM-ddThh:mm:ss[+|-]hh:mm Example: 2011-12-31T23:59:59+09:00 Specify yyyy-MM-dd within the range from 1971-01-01 to 2036-12-31. For the time zone ([+|-]hh:mm), specify hh within the range of 00 to 14 while specifying mm within the range of 00 to 59.

Parameter	Data type	Description	Omission	Valid value
				If the time zone value is not the same as StartTime, a parameter error occurs.
Performance.Interval	string	Interval at which performance information is to be obtained	Cannot be omitted if DataType is set to 1 (Statistical data).	d.hh:mm:ss format Specify any value from 0 to 365(ms) for d. The statistical data or performance data corresponding to the specified value are returned. The interval when the performance information is returned may differ from the specified interval. It is ignored if DataType is set to 0. In this case, the information is returned at the intervals at which the performance information is collected.
Performance.MaxPastData	number	Upper-limit value of the data count to be returned when responding	Yes	If DataType is set to 1 (Statistical data), specify the upper limit of the data count to be returned in percent (%) figures. Specify a value within the range of 100 to 2147483647. Set "100" in the event of omitting. Compare the interval value specified in Performance.Interval or interval of collecting the performance information with the interval of the statistical/performance data to be returned. If the upper limit (%) is exceeded, an error (404) occurs. For example, if the interval of returning data is set to a value within the range of 30 minutes to 1 hour while Interval is set to 1 hour and MaxPastData to 200, the data is returned successfully. However, if there is data with a returning interval of 29 minutes or less only, an error (404) occurs.
Manager	object	Manager object	Not possible	-
Manager.Name	string	Manager name	Not possible	Manager name, MoM name, or RM name

*** Note 1**: If Performance.DataType is set to 0 (Performance data), the information is returned without processing such as calculation of the average value at the interval at which the performance information is collected.

If Performance.DataType is set to 1 (Statistics data), the performance information obtained at the interval specified in Performance.Interval is returned after calculation performed by the method specified in Performance.Statistics

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	The performance information has been obtained successfully.
400	Bad Request	The parameter is specified incorrectly. (Manager.Name is not specified.)
404	Not Found	The manager does not exist. The specified counter name or the performance information of the specified period does not exist.
500	Internal Server Error	Internal server error The parameter is specified incorrectly.

6. Response

Parameters	Data type	Description	Valid value
(ROOT)	object	Root object type	-
Performance	object[]	Performance information object	-
Performance[n].Performance List	object[]	Performance information list	-
Performance[n].Performance List[n].Name	string	Counter name	1 to 1024 characters
Performance[n].Performance List[m].Statistics	string	Performance information calculation method	For the performance data, set the following values. **RawData** For the statistical data, set the following values. **Maximum**: Maximum value **Average**: Average value **Minimum**: Minimum value
Performance[n].Performance List[m].Timestamps	string[]	Array of performance information dates	The format is shown below. yyyy-MM-ddThh:mm:ss[+|-]hh:mm Example: 2011-12-31T23:59:59+09:00 Set the time zone value specified in Performance.StartTime as described in "4. Parameter". ***Note 2**

Parameters	Data type	Description	Valid value
Performance[n].Performance List[n].Datum	string[]	Array of performance information data	Set the performance value by integer values or a character string consisting of actual numbers. The value range is provided below. Integer: 0 to 18,446,744,073,709,551,615 Up to 20 characters can be set. Real number: 1.7E +/- 308 (15 digits) Up to 17 characters including exponent characters can be set.
Performance[n].Manager	object	Manager object	-
Performance[n].Manager.Name	string	Manager name	Manager name, MoM name, or RM name
Performance[n].Manager.ErrorMessage	string	Error message	-
Performance[n].Manager.Status	number	Communication error code	-
Performance[n].Manager.StatusCode	number	Internal error code	-

*** Note 2:** The performance information during the period from the "Start date/time" to "End date/time" as specified in the parameter is returned. However, if the performance information during the specified period does not exist due to the stop of agent, etc., the performance information during such period is not returned.

Example: Although the performance information is specified so that it can be obtained every hour within the time from 10:00:00 to 16:00:00, the performance information from 13:00:00 to 14:00:00 does not exist.

If the performance information does not exist during any period, the date information (Timestamps) of the response JSON and the data information (Datum) do not include the performance information during such period.

```
{
            :
            :
            :
        "Timestamps":[
            "2016-06-06T10:00:00+09:00",
            "2016-06-06T11:00:00+09:00",
            "2016-06-06T12:00:00+09:00",
            "2016-06-06T15:00:00+09:00",
            "2016-06-06T16:00:00+09:00"
        ],
        "Datum": [
            "2.0",
            "3.0",
            "4.0",
            "1.0",
            "3.0"
```

```
        ],
             :
             :
             :
}
```

7. Change history
   - X-FW-API-Version: 1.0
     - Newly added
8. JSON Example

   [Request]

```
POST /umf/fw/perfstatistics/performances HTTP/1.1
Host: ClientHost
Date: Tue, 19 Apr 2016 00:00:00 GMT
Authorization: SharedKeyLite ZIrgoOV5r1JOJwt3/M6e3M9PIDRntc37o375njmXo
Pk=:X+HnXjAP9jXuD/nz5khRVDMggIY5aR0wmjGCK0bBnr4=
X-FW-API-Version: 1.0
Content-Type: application/json; charset=utf-8
Content-Length: 330
Connection:close

{
    "Performance":{
        "Name":"System|AGENT01|Processor|_Total|% Processor Time",
        "DataType":1,
        "Statistics":[
            "Maximum",
            "Average"
        ],
        "Interval":"0.00:10:00",
        "MaxPastData":100,
        "StartTime":"2016-04-19T16:30:00+09:00",
        "EndTime":"2016-04-19T16:50:00+09:00"
    },
    "Manager":{
        "Name":"mco-MoM"
    }
}
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 632
Date: Tue, 19 Apr 2016 07:05:53 GMT
Connection: close
```

```
{
    "Performance" : [
        {
            "PerformanceList" : [
                {
                    "Statistics" : "Maximum",
                    "Timestamps" : [
                        "2016-04-19T16:30:00+09:00",
                        "2016-04-19T16:40:00+09:00",
                        "2016-04-19T16:50:00+09:00"
                    ],
                    "Datum" : [
                        "3.7784646512508679",
                        "4.7923696604509569",
                        "7.4004162661826527"
                    ],
                    "Name" : "System|AGENT01|Processor|_Total|% Proces
sor Time"
                }, {
                    "Statistics" : "Average",
                    "Timestamps" : [
                        "2016-04-19T16:30:00+09:00",
                        "2016-04-19T16:40:00+09:00",
                        "2016-04-19T16:50:00+09:00"
                    ],
                    "Datum" : [
                        "0.90731655056146554",
                        "0.76526857169453177",
                        "2.4476399787104097"
                    ],
                    "Name" : "System|AGENT01|Processor|_Total|% Proces
sor Time"
                }
            ],
            "Manager" : {
                "Name" : "mco-MoM",
                "Status" : 200,
                "StatusCode" : 200,
                "ErrorMessage" : "200 OK"
            }
        }
    ]
}
```


4.14.3 Meta characters in a regular expression used for specifying the counter name

- If you use meta characters in a regular expression for specifying the counter name, escape these characters before specifying them.

  If meta characters are used as such, escaping is not required.

  The meta characters to be escaped are as follows.

```
. ^ $ [ ] + ? | ( ) { } ! \ *
```

4.14.4 Parameters that can be omitted in request JSON

- If you omit parameters that can be omitted in the request JSON, omit the key itself.

  Omitting of value is not allowed.

4.15 Obtaining the other information

4.15.1 Obtaining the severity

1. Process overview

```
Obtain the information on the severity (system severity, user
severity, user mark).
The severity is output in order of priority.
```

2. HTTP method

```
GET
```

3. URL

```
/umf/fw/severity?ManagerName=ManagerName
```

For an environment where more than one manager exists, specify the manager name as ***ManagerName***.

4. Parameters

None

5. Response (HTTP status code)

HTTP status code	Meaning	Description
200	OK	`The severity has been obtained successfully.`
404	Not Found	`The specified manager does not exist.`

6. Response

Parameter	Data type	Description	Valid value
(Root)	object	Root object	-
ManagerProperty	object[]	Array of the information per manager	-
ManagerProperty[n].Severity	object[]	Array of the severity information	-

ManagerProperty[n].Severity[m].SeverityType	number	Severity type	`1: System severity`
			`2: User severity`
			`3: User mark`

ManagerProperty[n].Severity[m].DisplayName	string	Display name of the severity	-
ManagerProperty[n].Severity[m].InternalName	string	Severity internal name	-

Parameter	Data type	Description	Valid value
ManagerProperty[n].Severity[m].SeverityID	number	Severity ID	<table><tr><th>Severity type</th><th>Severity ID</th></tr><tr><td>1 (System severity)</td><td>256 to 286</td></tr><tr><td>2 (User severity)</td><td>512 to 543</td></tr><tr><td>3 (User mark)</td><td>768 to 895</td></tr></table>
ManagerProperty[n].Severity[m].SeverityColor	number	Display color of the severity	Decimal RGB value

ManagerProperty[n].Severity[m].SoundType	number	Sound type	`0: Not specified`
			`1: Single tone`
			`2: Intermittent tone`
			`3: Constant tone`
			`4: WAVE tone`

ManagerProperty[n].Severity[m].SoundFile	string	File name of the sound (WAVE)	* Information if the sound type is set to "4: WAVE tone"
ManagerProperty[n].Severity[m].SoundCount	number	Ring count of sound	`* Information if the sound type is set to "4: WAVE tone" Ring count 0 means the endless sound.`
ManagerProperty[n].Manager	object	Manager object	-
ManagerProperty[n].Manager.Name	string	Manager name	Manager name MoM name or RM name
ManagerProperty[n].Manager.ErrorMessage	string	Error message	-
ManagerProperty[n].Manager.Status	number	Communication error code	-
ManagerProperty[n].Manager.StatusCode	number	Internal error code	-

7. Change history
   - X-FW-API-Version: 1.0
     - `Newly added`
8. JSON Example

   [Request]

```
GET /umf/fw/severity HTTP/1.1
Accept: application/json, */*
Date: Fri, 13 May 2016 07:40:18 GMT
Content-Type:  application/json; charset=utf-8
Authorization: SharedKeyLite +SrNGV3kz33vLedCtzQHp4WOcJyLcbTp28IylwP4Q
hs=:bQKj9l0i6ngVuy9/ZsWK6q8uuTG0eL5Qv13U19oqnNU=
X-FW-API-Version:  1.0
Cache-Control: no-cache
Pragma: no-cache
User-Agent: Java/1.8.0_72
Host: 192.168.17.49:12080
Connection: keep-alive
```

   [Response]

```
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Pragma: no-cache
X-XSS-Protection: 1
X-Content-Type-Options: nosniff
Cache-Control: no-store
Content-Type: application/json;charset=UTF-8
Content-Length: 5550
Date: Fri, 13 May 2016 07:56:53 GMT

{
  "ManagerProperty" : [ {
    "Severity" : [ {
      "SoundType" : 0,
      "SeverityColor" : 255,
      "SeverityID" : 256,
      "SeverityType" : 1,
      "SoundFile" : "",
      "DisplayName" : "STOP",
      "SoundCount" : 0,
      "InternalName" : "STOP"
    }, {
      "SoundType" : 0,
      "SeverityColor" : 16776960,
      "SeverityID" : 770,
      "SeverityType" : 3,
      "SoundFile" : "",
      "DisplayName" : "Processed",
      "SoundCount" : 0,
      "InternalName" : "MARK3"
    } ],
    "Manager" : {
      "Name" : "localhost",
      "Status" : 200,
      "StatusCode" : 200,
      "ErrorMessage" : ""
    }
  } ]
}
```

MasterScope MCOperations/SystemManager
WebAPI Reference

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