

SigmaSystemCenter 3.3

ssc Command Reference

– Second Edition –

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1. About ssc Command

This chapter explains about the ssc commands of SigmaSystemCenter.

1.1. ssc Command

With the ssc command line tool, you can set various settings to multiple managed machines collectively by executing commands from a BAT file. This function dramatically reduces the burden of configuring large scale environment. In addition, some functions, including settings for configuration changes in the virtual environment, support operations only by the ssc command.

The functional enhancement for pvmutl command, that is a command line tool, will not be offered in the future SigmaSystemCenter versions. Please use the ssc command instead of it.

The ssc command provides you the following functions:

Command (Function)	Subcommand	Explanation
create	user	Creates a user account.
	group	Creates a group.
	host*	Creates a host in a group.
	machine	Creates virtual machines in a group.
	template	Creates a template in a group.
	diskvolume*	Creates a disk volume.
	datastore	Creates datastore.
	smartgroup*	Creates or modifies a smart group.
add	license	Adds a license.
	manager*	Adds a subsystem.
	ipaddress*	Adds an IP address (network) to a host in a group.
	software	Adds software in a group (group or model) or a distribution point of a host.
	storage*	Adds a disk volume of a disk array to a host in a group.
	lb	Adds a load balancer in a group.
	vmserver	Adds a virtual machine server in a datacenter.
update	environment	Sets environment settings.
	group	Edits and updates settings of a group.
	host	Edits and updates settings of a host.
	vmproperty	Edits virtual machines collectively.
	machine	Edits and updates settings of a machine.
	datastore	Updates datastore settings.
	diskvolume*	Updates a disk volume.
	storagepool	Updates storage pool.
delete	license	Deletes a license.
	user	Deletes a user account.
	vmserver	Deletes a virtual machine server from a datacenter.
	history	Deletes old history that distributed software to the machine.
	diskvolume*	Deletes the disk volume.

	template	Deletes templates.
	machine	Deletes virtual machines.
	datastore	Deletes datastore.
	smartgroup	Deletes a smart group.
collect	–	Collects information of a specified target.
register	machine	Registers a machine in a resource group or rack.
	hardware*	Registering Hardware.
unregister	machine	Unregisters a machine from a resource group or rack.
assign	machine	Executes Allocate Machine, Register Master Machine, or Add to Pool.
	diskvolume*	Assigns a disk volume to the machine.
set	hba	Sets HBA to a disk array.
	profile	Sets a machine profile in a group.
	hostprofile	Sets a host profile.
	datastore-setting	Sets the virtual machine creating datastore.
release (releasing assignment or releasing from a pool)	machine	Releases assignment of a machine or deletes a machine from a pool.
	hba	Releases HBA from a disk array.
	diskvolume*	Releases a disk volume from the machine.
change-passwd	–	Changes a password of a user account or VM server account.
migrate (moving a virtual machine)	machine	Moves (migrate) a virtual machine.
move (moving a virtual machine)	machine	Moves (move) a virtual machine.
vmop (placement rule)	set-rule*	Sets the placement rule of virtual machines.
	delete-rule	Deletes the placement rule of virtual machines.
	enable-rule	Enables the placement rule setting of virtual machines.
	disable-rule	Disables the placement rule setting of virtual machines.
	apply-rule	Places virtual machines according to placement rule.
	show-rule*	Displays placement rule settings of virtual machines.
	verify-rule	Verifies the placement rule setting of virtual machines.
	create-group	Creates the restriction group for VM Placement Rule feature.
	delete-group	Deletes the restriction group for VM Placement Rule feature.
	add-member	Adds member to a restriction group for VM Placement Rule feature.
	remove-member	Removes member from a restriction group for VM Placement Rule feature.
	show-group	Displays restriction group settings for VM Placement Rule feature.
	set-position	Configures the placement information for virtual machines.

	delete-position	Deletes the placement information for virtual machines.
	show-position	Displays the placement information for virtual machines.
	apply-position	Migrates virtual machines according to the placement information.
recover	machine	Recovers a virtual machine server.
evacuate	machine	Evacuates virtual machines on a virtual machine server to other virtual machine server.
	host	Evacuates virtual machines on a virtual machine server to other virtual machine server (with a host specified).
machine-account (creating, updating, deleting, and displaying)	create	Creates a machine account.
	update	Updates a machine account.
	delete	Deletes a machine account.
	show	Displays machine account information.
export	policy	Exports policy information to an XML file.
	smartgroup	Exports smart group settings to the XML file.
import	policy	Imports policy information from an XML file.
	smartgroup	Imports smart group settings from a XML file.
maintenance	cmdb	Maintains the configuration database.
	machine	Maintain a specified machine.
startup-collect-mode	—	Changes a collect mode in the startup.
show	license	Displays licenses.
	user*	Displays user account information.
	group	Displays settings of a group.
	host	Displays settings of a host.
	machine*	Displays machines information.
	log*	Displays the Operations log.
	diskarraypath*	Displays a disk array path.
	datastore	Displays datastore information.
	diskvolume	Displays the disk volume information.
	storagepool	Displays the storage pool information.
	smartgroup	Displays a smart group properties.
	storagetopology	Displays the storage topology information.
	diskarray*	Displays the disk array information.
reconfigure	machine	Reconfigures virtual machines.
set-machine-status	—	Updates status of a machine in a specified content.
deploy (deploying)	software	Deploys software to the selected machines.
replace (replacing)	machine	Replaces machine to standby machine.
power-control (power supply control)	machine	Controls of power to the machine.
clone (cloning)	machine	Clones the virtual machine.
scan (scanning)	datastore	Scans and updates datastore information which connected to a VM server.
resourcepool (creating, displaying, deleting)	create	Creates a Resource Pool.

	show	Displays resource Pool information.
	delete	Deletes a resource Pool.
network (creating, adding)	create	Creates a network.
	add-vlan	Adds a VLAN (a port group) definition to the network.
	add-addresspool	Adds an address pool to the network.
	add-virtualbridge	Adds a virtual bridge definition to the network.
	apply	Apply the setting of the network.
	delete	Deletes a network.
	delete-addresspool	Deletes an address pool from the network.
	delete-virtualbridge	Deletes a virtual bridge definition from the network.
	delete-vlan	Deletes a VLAN (a port group) definition from the network.
	show	Displays network information.
	add-firewallsetting	Adds the firewall setting to the network.
	delete-firewallsetting	Deletes the firewall setting from the network.
changehistory (displaying, deleting, setting)	show	Displays MachineAccessHistory detail information.
	delete	Deletes the MachineAccessHistory.
	set	Sets environment settings of MachineAccessHistory.
scalein (scale in)	–	Executes ScaleIn.
scaleout (scale out)	–	Executes ScaleOut.
group (adding)	set-network	Adds a network setting to a group.(Former name is "add vlan".)
logicalmachine (assigning, releasing, displaying etc.)	assign	Makes the specified machine logical and creates an association.
	release	Dissociates a logical machine.
	show	Displays logical machines information.
	create-account	Creates logical machine account for a host.
	update-account	Updates logical machine account for a host.
	delete-account	Deletes logical machine account from a host.
	show-account	Displays logical machine account information.
	create-profile	Creates logical machine profile for a host.
	update-profile	Updates logical machine profile for a host.
	delete-profile	Deletes logical machine profile from a host.
machine	backup	Backs up the machine.
	restore	Restores the machine.
	chcfg	Changes configuration for the activated machine.
dpminformation	delete	Deletes information of DPM.
dpm-location	notify	Notifies a tree of specified group to DPM.
hostprofile	create	Creates named host profile.
profile	create*	Creates named machine profile.
	show	Displays machine profile.
rdmstorage	show	Displays information of disk for RDM.
	update	Updates the use or the status of the RDM Disk.

portgroup	create	Creates a port group on the specifying switch (NetworkDevice).
	delete	Deletes a port group on the specifying switch (NetworkDevice).
	show	Displays a port group list.
	update	Updates a port group on the specifying switch (NetworkDevice).
privatevlan	create	Creates a private VLAN in the target distributed virtual switch.
	delete	Deletes a private VLAN of the distributed virtual switch.
	update	Updates a private VLAN in the target distributed virtual switch.
vlan	create	Creates a VLAN in the switch.
	delete	Deletes a VLAN in the switch.
image	add	Adds an image. (Former name is "add image".)
	delete	Deletes images.
	update	Updates images.
snapshot	create	Creates a snapshot of virtual machines. (Former name is "create snapshot".)
	delete	Deletes snapshots.
	revert	Reverts a snapshot.
	show	Displays snapshots information.
monitoringprofile	create	Creates a performance monitoring Profile.
	update*	Updates the profile settings for performance monitoring.
	delete	Deletes a performance monitoring profile.
	set*	Sets a performance monitoring profile to a group (Group/Model).
	show*	Displays the performance monitoring profile settings.
template	update	Updates a template.
apikey	create	Creates an API key.
	delete	Deletes an API key.
	show	Displays an API key.
	update	Updates an API key.
dependency	add*	Adds dependency between hosts. (Former name is "dependency set".)
	delete*	Deletes dependency between hosts.
	show*	Displays dependency between hosts.
datastorefile	show	Displays folder/file of datastore.
vm	create	Creates a virtual machine (no OS).
export	vm	Exports virtual machine.
import	vm	Imports virtual machine.
iso	mount	Mounts the ISO image to a virtual machine.
	unmount	Unmount the ISO image from a virtual machine.
	show	Show a mountable ISO image and a list of the CD / DVD drive on the virtual machine.
config-export	—	Exporting (Backing up) SSC configuration information.
config-import	—	Importing (Restoring) SSC configuration information.
firewallprofile	create	Creates the firewall profile.

	delete	Deletes the firewall profile.
	add	Adds a filtering rule to the firewall profile.
	show	Displays the list or the detail of the firewall profile.
sync	ldapuser*	Acquires information of user account and group.
customproperty	show*	Shows the custom setting
	add*	Adds the custom setting.
	delete*	Deletes the custom setting.
dependency	create-setting*	Creates dependency setting for hosts.
	delete-setting*	Deletes dependency setting for hosts.
	update-setting*	Updates dependency setting for hosts.
	show-setting*	Displays dependency setting for hosts.

*New commands or enhanced commands in SigmaSystemCenter 3.3 Update1.

1.1.1. Conditions to Use ssc Commands and Supplementary Information

The following conditions must be met to use the ssc command:

- Execute the ssc commands on a management server. Only users with administrator rights can execute the ssc commands.

Note: If the User Account Control, UAC, is valid, you need to execute with the Administrator mode. For example, right-click Command Prompt and click Run as administrator to launch the pvmutil commands.

- About backing up the database
The ssc command provides you various useful functions, such as configuring hosts collectively; however, if a specified command is wrong, in the case that the command is executed automatically by BAT command without advance verification, for example, unintended settings can be configured.
Extract backup of database in advance so that you can restore the condition of before executing the command in such cases.

Reference: For how to back up, see Chapter 10, "Backup and Restoration" in SigmaSystemCenter Configuration Guide.

1.1.2.Symbols

The following symbols are used in the explanation of the functions of ssc commands.

- [] (brackets) indicate optional items.
- | (vertical line) is a separator indicating that you can select either of the separated items.
- <> is an option that you need to specify.

1.1.3. Common Options

The following options can be used commonly in the ssc commands.
If you do not specify parameters when you start ssc from command line, the system displays list of all commands.

[Syntax]

```
ssc [option1] [option2] command [subcommand...]  
[parameter...] [cmd option [option parameter]...]
```

[Parameters and Options]

You can use the following options to [option1].

-v	A mode to get the command to work, outputting status, such as command execution status
--verbose	"
-q	A mode to get the command to work with no message outputted (This mode is suitable for batch execution.)
--quiet	"
-d	A mode to get the command to work with debug messages outputted
--debug	"

You can use the following options to [option2].

-h	Outputs command Usage.
--help	"
help	"
--ver	Outputs version information.
--version	"

About command [subcommand...].

If inputted command (subcommand) doesn't exist, list of a command which narrowed down to the parameter as a key is outputted. If there is no target command, Usage is outputted.

You can use the following options to [cmd option].

-h	Outputs parameter explanation (help) for each command.
-help	"

1.1.4. Return Values of ssc Command

The execution results of ssc commands can be determined by their return values. Return values of ssc commands are as follows:

Values	Success/Failure	Causes
0	Succeeded	
1	Failed	Command format errors, such as insufficient parameters.
2	Failed	Executed by a user without administrator authority.
3	Failed	Parameter check error, such as specified resource is not found.
4	Failed	Cannot update SigmaSystemCenter configuration database.
5	Failed	Cannot collect the Job history of started action sequence.
6	Failed	SigmaSystemCenter connection error
7	Failed	Failed to run the action sequence (action sequence error).
10	Failed	Other error, such as system error

1.1.5. About Path and GroupPath Specification

Specify the topic path of the target resource that is shown in the Operation view, the Resource view, or the Virtual view as the path.
(You can confirm the topic path from the Web Console.)

E.g.) Assume that a target resource is on a machine named "VM1". The topic path of the target resource will be shown as:

in the Operation view -> operations:/category1/group1/vmmodel/VM1
in the Resource view -> resource:/vmgroup/VM1

in the Virtual view -> virtual:/VC1/DataCenter1/VMS1/VM1

You can specify “¥ (backslash)” or “/ (slash)” as the delimiter of the group path.

- When specifying the path in the Resource view, machines right under the root cannot be specified. Re-register the machines as group subordinates using machine registration command (register machine).
E.g.) ssc register machine /NewGroup / -e -n
- Smart groups cannot be specified except for a command (collect group).
- The Content of group path that can be specified is different for each command. For more information on the specification method of group path, please refer to the description of each command.

1.1.6. Caution Notes of ssc Command

- When a Resource (Machine, Host, Group etc.) Name begins with “-” (hyphen)
If an option is specified for a resource of which name begins with “-”, the option and / or the resource name might be misinterpreted.
Therefore, change a name of a resource if it begins with “-”, or operate the resource from the Web Console.
- About a Resource Name in a message
Even if a command is executed with specifying a host name, the host name might be changed to the resource name (the machine name) of the host in a message.
- Even if a job normally ends when having started action sequence of synchronous execution,
the command sometimes ends by a connection error (return value =6).
(You need to check the logs to determine which of above the cause is.)
- In the command such as “create machine” which is able to specify smart group,
if the result data of the command are across two or more operation groups,
the command execution process is divided into plural jobs correspond to the operation groups, and the jobs are processed sequentially.
When error occurred in any job, the jobs following are not processed.
In this case, fix error cause, and retry.
- When specifying a machines name in Path of a [resource] view by each command
when establishing [unit name] in machine property setting by a [resource] view of a web console,
please specify it by [unit name], not [machine name].
 - When it's specified in Path of other views or a machines name, please specify [machine name], not [unit name].
- You cannot specify leading or trailing spaces in the equal (“=”).

2. Command for Setup

This chapter explains commands regarding setting up SigmaSystemCenter.

2.1. License

2.1.1. Adding License

Adds a license.

Register an edition license first. To enable the setting, you need to restart SystemProvisioning. However, if you add only target licenses, you do not need to restart SystemProvisioning.

[Syntax]

```
ssc add license <LicenseKey | -filepath FilePath>
```

[Parameters and Options]

<LicenseKey -filepath FilePath>	Specify a target license key or the path of the text file.
--------------------------------------	--

[Syntax examples]

```
>ssc add license XXXXX-XXXXX-XXXXX-XXXXX-XXXXX
```

2.1.2. Deleting License

Deletes a license.

[Syntax]

```
ssc delete license LicenseKey
```

[Parameters and Options]

LicenseKey (Required)	Specify a target license key.
--------------------------	-------------------------------

[Syntax examples]

```
>ssc delete license XXXXX-XXXXX-XXXXX-XXXXX-XXXXX
```


2.1.3. Displaying Licenses

Displays licenses.

[Syntax]

```
ssc show license
```

[Parameters and Options]

No parameters or options.

[Syntax examples]

```
>ssc show license
```

2.2. User

2.2.1. Creating User Account

Creates a user account.

[Syntax]

```
ssc create user UserName [Password] [-permission AuthorityType | -role RoleName  
| -norole] [-description Description] [-type CertificationType]
```

[Parameters and Options]

<i>UserName</i> (Required)	Specify a user name. You can enter any character up to 32 characters, except the following symbols: * + , / : ; < = > ? ¥ []
[<i>Password</i>]	Specify a password. You can enter up to 128 alphabetic characters, numerals, and symbols, except spaces. You can specify a password when the -type option is "Local".
[-permission <i>AuthorityType</i>]	Specify the authority level from the following types: <i>Administrator</i> , <i>Operator</i> and <i>Observer</i> .
[-role <i>RoleName</i>]	Specify an initial role. You can specify the role whose setting object is "All Resource / System" or "System".
[-norole]	Creates a user without authority.
[-description <i>Description</i>]	Enter a description of the user. Up to 128 characters are available.
[-type <i>CertificationType</i>]	Specify the certification type from the following types: "Local", "SystemLDAP". If you do not specify this option, "Local" is set to it.

[Syntax examples]

```
>ssc create user User01 xxxxxx -permission Administrator  
>ssc create user User01 xxxxxx -role admin-users  
>ssc create user User01 xxxxxx -description "User01 is Administrator."  
>ssc create user User01 -type "SystemLDAP"
```

[Note]

- If you do specify neither -permission nor -role option, an Administrator user account will be created.
- If you specify both -permission and -role, the initial role that you specify by the -role option becomes invalid and the role which corresponds to the permission you specified in the -permission option is assigned.

2.2.2. Deleting User Account

Deletes a user account.

[Syntax]

```
ssc delete user UserName
```

[Parameters and Options]

<i>UserName</i> (Required)	Specify a user name of a target user account.
-------------------------------	---

[Syntax examples]

```
>ssc delete user User01
```

2.2.3. Displaying User Account

Displays the user account information in the CSV format.

[Syntax]

```
ssc show user
```

[Parameters and Options]

No parameters or options.

[Syntax examples]

```
>ssc show user
```

[Display examples]

```
>ssc show user
UserName,Permission,LoginDate,LoginIPAddress,Disabled,DisabledType,InitialRole,E
"admin","Administrator","2013/01/08 3:56:35","192.168.1.123","False","","Adminis
"admin2","Administrator","2013/01/08 4:56:35","","False","","Administrator","","
"oper","Operator","2013/01/08 5:56:35","","False","","Operator","","LocalUser",
"user","Observer","2013/01/08 6:56:35","","False","","Observer","","LocalUser",
"user-a","UserSetting","2013/01/08 7:56:35","","False","","RoleA","","LocalUser"
```

2.2.4. Changing User Account Password

Changes a password of a user account or VM server.

[Syntax]

```
ssc change-passwd Type Name NewPassword [-l Account] [-p Password]
```

[Parameters and Options]

<i>Type</i> (Required)	Specify the target type to be changed its password: "manager": Specify in the case of changing a password of a VM server. "user": Specify in the case of changing a password of a user account.
<i>Name</i> (Required)	Specify the target name. Specify the host name or the full path of the target virtual machine server if "manager" is specified in <i>Type</i> . (E.g.: <i>VirtualCenter/DataCenter/ESX</i>) If the same host name exists, specify the host with its path. Specify a user name when "user" is specified in <i>Type</i> .
<i>NewPassword</i> (Required)	Specify a new password.
[-l <i>Account</i>]	Specify the account name. Specify the account name of the VM Server when "manager" is specified in <i>Type</i> . If you do not specify it, the account name is not changed.

	Specify an administrator user name when "user" is specified in <i>Type</i> . If you do not specify it, specify an old password in the -p option as authentication information.
<code>[-p Password]</code>	You can specify this option when "user" is specified in <i>Type</i> . Specify an administrator user password if the -l option is specified. Specify an old password of target user if the -l option is not specified.

[Syntax examples]

```
Changes a password of VM server.
>ssc change-passwd manager Host1 "*****" -l user1
>ssc change-passwd manager "VirtualCenter/New DataCenter/Esx1" "*****"
Change a password of a user.
1) Authentication is old password of user.
>ssc change-passwd user user1 "****" -p "****"
2) Authentication is administrator user account.
>ssc change-passwd user user2 "****" -l Administrator -p "****"
```

2.2.5. Acquiring User Account and Group

Connects to the LDAP Server that is set in the LDAPConfig.xml and registers the acquired information of the user/group on the SigmaSystemCenter.

To execute this command, you must configure the following settings beforehand.

- Exist a valid Administrator User Account in SigmaSystemCenter.
- Complete the "Edition" license registration.
- Configure the LDAP information, which is to be connected, to LDAPConfig.xml. Refer to SigmaSystemCenter Overview Reference Guide for details of the description.

[Syntax]

```
ssc sync ldapuser Account Password
```

[Parameters and Options]

<i>Account</i>	Specify an account name for authentication which exists in the LDAP server. This account should be existed in the LDAP server while it is not necessary to be existed in SigmaSystemCenter. You can enter any character up to 32 characters, except the following symbols: * + , / : ; < = > ? \ [] For the use of characters the LDAP server, please refer to the related manuals of the LDAP server.
<i>Password</i>	Specify an account password for authentication which exists in the LDAP server. You can enter up to 128 alphabetic characters, numerals, and symbols, except spaces. For the use of characters the LDAP server, please refer to the related manuals of the LDAP server.

[Syntax examples]

```
>ssc sync ldapuser username password
```

2.3. Environment Setting

2.3.1. Updating Environment Setting

Configures environment settings.

[Syntax]

```
ssc update environment Key Value
```

[Parameters and Options]

<p><i>Key</i> (Required)</p>	<p>Specify an item to configure from the following Keys:</p> <p>"VMMSDefaultCapacity": Configures the initial capacity value of a virtual machine server referenced when moving virtual machines by policy operations. Specify this value in the range of 1 - 100000.</p> <p>"VMDefaultCost": Configures the initial cost value of the virtual machine referenced when moving virtual machines by policy operations. Specify this value in the range of 1 - 1000.</p> <p>"VMSRootPassword": Configures the default password of a virtual machine server referenced when restoring an ESX or executing failover.</p> <p>"ULogSize": Configures the initial log size of the operation log. Specify this value in more than 1000.</p> <p>"DLogSize": Configures the initial log size of the debug log. Specify this value in the range of 1 - 16.</p> <p>"DLogLevel": Configures the initial log level of the debug log level. Specify this value in the range of 0 - 7. "0": Gets the error log. "1": Gets the warning log. "2": Gets the information log. "3"- "7": Gets the trace log (level 1 to 5)</p> <p>"EnableMACAddressRange": Enables or disables the MAC address pool feature (for Hyper-V only). Specify "True" or "False".</p> <p>"TempWorkingDir": Temporary folder for a file transfer.</p> <p>"MaxLoginAttempts" : The threshold of lockout of the user account Specify this value in the range of 0 - 999.</p> <p>"HidePortalView" : The setting of Portal View Display Specify "True" or "False".</p>
<p><i>Value</i> (Required)</p>	<p>Specify the value for the item specified in <i>Key</i>.</p>

[Syntax examples]

```
>ssc update environment vmsdefaultcapacity 1
>ssc update environment vmdefaultcost 100
>ssc update environment vmsrootpassword xxxxxx
>ssc update environment enablemacaddressrange True
>ssc update environment tempworkingdir D:¥Work
```

2.3.2. Start Up Collecting Setting

Changes a collect mode in the stratup.

[Syntax]

```
ssc startup-collect-mode < on | off >
```

[Parameters and Options]

< on off > (Required)	on: The collection when the PVMService starts is turned ON. off: The collection when the PVMService starts is turned OFF.
----------------------------	--

[Syntax examples]

```
>ssc startup-collect-mode on
>ssc startup-collect-mode off
```

2.4. Subsystem

2.4.1. Adding Subsystem

Adds a subsystem.

[Syntax]

```
ssc add manager Type [-name HostName] [-account Account]  
[-port PortNumber] [-url URL] [-p Password]
```

[Parameters and Options]

<i>Type</i> (Required)	Specify a subsystem to add from the following Types: "dpm": DPM Server "vcenter" "virtualcenter": VMware vCenter Server "esxi": ESXi "xen": Citrix XenServer Pool Master "hyper-v": Hyper-V "hyper-v-cluster": Hyper-V Cluster "kvm": KVM "network": MasterScope Network Manager "slb": Software Load Balancer "pfc": ProgrammableFlow Controller "necstorage": NEC Storage Manager "clariion": EMC CLARiiON "symmetrix": EMC Symmetrix "netappstorage": NetApp Manager "smi-s": SMI-S Service
[-name <i>HostName</i>]	Specify a host name or IP address of a server on which the target is installed. If you specify its <i>URL</i> , a host name is automatically created, and you do not need to specify this item.
[-account <i>Account</i>]	Specify an account name or domain name of the target.
[-port <i>PortNumber</i>]	Specify a port number of the target.
[-url <i>URL</i>]	Specify a <i>URL</i> of the target. If you specify <i>HostName</i> , a <i>URL</i> is automatically generated, and you do not need to specify this item.
[-p <i>Password</i>]	Specify a password registered to the target.

- If you specify "esxi", "hyper-v", "kvm", "clariion", "symmetrix" or "netappstorage" in *Type*, you cannot specify the options; -name, -account, -port, -url, and -p.
- If you specify "dpm", "network", "slb" or "pfc" in *Type*, you need to specify the options; -name.
- If you specify "vcenter" or "xen" in *Type*, you need to specify the options; -account and -p.
- If you specify "smi-s" in *Type*, you need to specify the options; -account, -url and -p.

[Syntax examples]

```
>ssc add manager esxi  
>ssc add manager hyper-v  
>ssc add manager dpm -name 192.168.1.50 -p xxxxx
```

```
>ssc add manager vcenter -name 192.168.1.100 -account user01 -port 443 -url  
"https://192.168.1.100:443/sdk" -p xxxxx  
>ssc add manager xen -name 192.168.1.200 -account user02 -p xxxxx  
>ssc add manager hyper-v-cluster -name 192.168.1.100 -account domain¥userA  
-p xxxxx  
>ssc add manager smi-s -account user01 -url "http://172.16.0.69" -p xxxxx
```


2.5. Collect

2.5.1. Collecting Information

Collects information.

[Syntax]

```
ssc collect Type <[-name Name...] | [-uuid Uuid] | [-path Path] | [-target <
basic | sensor | software >] | [-priority < high | middle | low >] >
```

[Parameters and Options]

<i>Type</i> (Required)	Specify a target where you want to collect information from the following <i>Types</i> : "all": All subsystems "vms": VM Servers on subsystems. "machine": Physical machines, VM Servers, and virtual machines. "group": Machines under the group that is specified with -path.
[-name <i>Name...</i>]	This value is enabled if <i>Type</i> is "vms" or "machine". "vms": Subsystem's Hostname (or IP address). "machine": Resource Name. Multiple parameters can be specified.
[-uuid <i>Uuid</i>]	Specify UUID of the target. This value is enabled if <i>Type</i> is "machine". Multiple parameters can be specified.
[-path <i>Path</i>]	This value is enabled if "all" is not specified for <i>Type</i> . Specify the full path of the collection target, including each View. "machine" Virtual View : virtual:/VC1/DataCenter1/VMServer1/VM001 Resource View : resource:/Group1/VM001 "vms" Virtual View : virtual:/VC1/DataCenter1/VMServer1 Resource View : resource:/Group1/VMServer1 "group" Virtual View : virtual:/VC1/DataCenter1/ Resource View : resource:/Group1
[-target < basic sensor software >]	This value is enabled if <i>Type</i> is "machine" or "group". Select the division to collect from the following: "basic" : Essential information is collected. "sensor" : Momentary values of the sensor are collected. "software" : Essential information is collected.
[-priority < high middle low >]	This value is enabled if <i>Type</i> is "machine" or "group". Specify the priority of the collection processing.

[Syntax examples]

```
>ssc collect all
>ssc collect vms -name 192.168.1.1
>ssc collect vms -path virtual:/Manager/DataCenter/VMServer
>ssc collect machine -uuid xxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
```

2.6. Machine

2.6.1. Registering Machine

Registers unmanaged machine(s) in a specified resource group or rack. Also, you can create a new machine and register it for DPM.

[Syntax]

```
ssc register machine GroupName MachineName... [-e [GroupType]] [-n | < -c  
[DPMServerAddress] -uuid UUID [-mac PrimaryMacAddress] [-force] >]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify the path to a resource group or a rack in which you want to register a machine.
<i>MachineName...</i> (Required)	Specify target machine name(s). Note: You cannot specify managed machine(s). Also, you can specify only one machine when you create it.
[-e [<i>GroupType</i>]]	Create a new group or rack which you specified in <i>GroupName</i> . [<i>GroupType</i>] Select path type from "group" or "rack"(default is "group").
[-n]	Move machine(s) to the specified group from the root node (which is directly below Machine icon in the System Resource tree.) If you specify all machines in the root node, specify "/" in <i>MachineName</i> .
[-c [<i>DPMServerAddress</i>]]	Specify DPM Server's IP address. You must specify this option when you create a new machine. If you manage two or more DPM servers, select the most appropriate DPM server and specify it's IP address. Note: You cannot specify this option together with [-n] option.
[-uuid <i>UUID</i>]	Specify the UUID of the machine. You must specify this option when you create a new machine.
[-mac <i>PrimaryMacAddress</i>]	Specify the MAC address of the machine.
[-force]	When you register the machine that exists in SigmaSystemCenter to DPM Server, you can register even though the machine is running. You can specify this option when you create a new machine. Note: The running machine must be in the Maintenance mode.

[Syntax examples]

```
>ssc register machine Group1 machine01  
>ssc register machine Group1/Rack01 machine02 machine03  
>ssc register machine Group1/Group2 machine04  
>ssc register machine Group1/Group2/Group3 machine05 -e  
>ssc register machine Group1 / -n  
>ssc register machine Group2 blade1 -e -c  
-uuid 30381C00-D797-11DD-0000-001697A70000  
>ssc register machine Group2 blade1 -c 192.168.1.101  
-uuid 30381C00-D797-11DD-0000-001697A70000  
>ssc register machine Group2 blade1 -c 192.168.1.101  
-uuid 30381C00-D797-11DD-0000-001697A70000 -mac 00:16:97:A7:00:00  
>ssc register machine Group2 blade1 -c 192.168.1.101
```

```
-uuid 30381C00-D797-11DD-0000-001697A70000 -mac 00:16:97:A7:00:00 -force
```

2.6.2. Unregistering Machine

Unregisters a machine from a resource group or rack. Also, you can delete a machine and unregister it from DPM.

[Syntax]

```
ssc unregister machine GroupName MachineName... [-d]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a resource group or rack in which a machine that you want to unregister belongs. Specify a path to the resource group or rack. If you specify only "/", all managed machines in the Machine icon in the System Resource tree become the targets.
<i>MachineName...</i> (Required)	Specify a target machine name. You cannot specify a machine running in an operation group or standing by. You can specify multiple machines.
[-d]	Specify it when you delete the machine for SigmaSystemCenter and the DPM server.

[Syntax examples]

```
>ssc unregister machine / machine01  
>ssc unregister machine Group1 machine02  
>ssc unregister machine Group1/Rack01 machine03 machine04  
>ssc unregister machine Group1/Group2 machine05  
>ssc unregister machine Group1/Group2 machine05 -d
```

2.6.3. Allocating Machine, Registering Master Machine, or Adding Machine to Pool

Executes Allocate Machine, Register Master Machine, or Add Machine to Pool.

[Syntax]

```
ssc assign machine GroupName [MachineName...] [-sharedpool | -master | -addpool  
| -import]  
[-host HostName] [-resource ResourcePoolName]  
[-type Type] [-filePath FilePath] [-vms VmsName]  
[-datastore DatastoreName] [-newhost NewHostName]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify the group to which you intend to allocate a machine, register a machine, or to whose pool you intend to add a machine. Specify a path to the group or model. You cannot specify a tenant, category or group. (E.g. <i>Tenant/Category/Group/Model, Group/Model</i>)
<i>[MachineName...]</i>	Specify a machine name that you want to allocate, register, or add to a pool. If you do not specify <i>MachineName</i> , machines in a group pool become targets. If you specify -sharedpool, -master, or -addpool, you cannot

	omit this option. You can specify multiple machines when add a machine to a pool.
<code>[-sharedpool]</code>	Specify this option to add a machine in the shared pool to a group. If you do not specify this option, a machine in a group pool is added to a group. You cannot specify this option along with <code>-master</code> and <code>-addpool</code> .
<code>[-master]</code>	Specify this option to execute Register Master Machine. If you do not specify this option, a machine in a group pool is added to a group. You cannot specify this option along with <code>-sharedpool</code> and <code>-addpool</code> .
<code>[-addpool]</code>	Specify this option to add a machine to a pool. You cannot specify this option along with <code>-sharedpool</code> , <code>-master</code> , and <code>-host HostName</code> .
<code>[-import]</code>	Specify this option to importing VM and Register Machine.
<code>[-host HostName]</code>	Specify a name of a host where a target machine is activated. If you specify <code>-master</code> , you cannot omit this option. You cannot specify this option along with <code>-addpool</code> .
<code>[-resource ResourcePoolName]</code>	Specify the name of the resource pool to be used. This option is enabled if a model type of <code>GroupName</code> is VM. You cannot specify this option along with <code>-addpool</code> .
<code>[-type Type]</code>	Specify the file type of importing. If you specify option <code>-import</code> , you can specify this option.
<code>[-filePath FilePath]</code>	Specify the path of file that you want to import. When you don't specify <code>-import</code> , file type will auto-detect.
<code>[-vms VmsName]</code>	Specify the VM server. If you specify <code>-import</code> , you cannot omit this option.
<code>[-datastore DatastoreName]</code>	Specify the datastore. If you specify <code>-import</code> , you cannot omit this option.
<code>[-newhost NewHostName]</code>	Specify a new host name when you make a new host. If you do not specify this option, create new host by <code>MachineName</code> . If you specify option <code>-master</code> , you can specify this option. You cannot specify this option along with <code>-hostname</code> .

[Syntax examples]

```

1) Allocate Machine by auto selection
>ssc assign machine Category/Group1/Model001
2) Allocate Machine from a group pool
>ssc assign machine Category/Group1/Model001 machine001
>ssc assign machine Category/Group1/Model001 machine002 -host host002
>ssc assign machine Category/Group1/Model001 -host03
3) Allocate Machine from the shared pool
>ssc assign machine Category/Group1/Model001 machine001 -sharedpool
>ssc assign machine Category/Group1/Model001 machine002 -sharedpool
-host host002
4) Register Master Machine
>ssc assign machine Category/Group1/Model001 machine001 -master -host host001
5) Add Machine to Pool
>ssc assign machine Category/Group1/Model001 machine001 machine002 -addpool
6) Allocate Machine with the resource pool name
>ssc assign machine Category/Group1/Model001 machine002 -host host002
-resource MyPool

```

2.6.4. Releasing or Deleting From Pool

Releases assignment of a machine or deletes a machine from a pool.

[Syntax]

```
ssc release machine GroupName < [HostName...] [-sharedpool] [-force] | -del
MachineName[...] > < [-c] [-x [lm]] | [-t] >
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify the group from which you intend to release or delete a machine. Specify a path to the group. You cannot specify a tenant, category or model. (E.g. <i>Tenant/Category/Group</i>)
[<i>HostName...</i>]	Specify a name of a host with which a target machine is running. If you do not specify this option, a running machine is selected automatically and is returned to a group pool. If you specify -sharedpool or -force, you cannot omit this option. You cannot specify this option along with -del. You can specify multiple hosts.
[-sharedpool]	Returns a running machine from group to the shared pool. If you do not specify this option, the machine is returned to a group pool. If you specify this option, you cannot omit <i>HostName</i> . You cannot specify this option along with -del.
[-force]	Releases assignment forcedly by operating the database. If you do not specify this option, a Job is executed. If you specify this option, you cannot omit <i>HostName</i> . However, you cannot specify multiple host names. You cannot specify this option along with -sharedpool and -del.
-del <i>MachineName</i> [...]	Specify this parameter to delete a target machine from a pool. You cannot specify this option along with <i>HostName</i> , -sharedpool, and -force.
-c	Specify this parameter to take apart machine. If you specify this option for VirtualMachine, the VirtualMachine is deleted. If you specify this option for VirtualMachine, you cannot specify along with [-sharedpool].
-x [<i>lm</i>]	Specify part that not take apart. This option supports a case that not take apart LogicalMachine. Specify this option along with [-c]
-t	Specify this option a case that not take apart machine.

[Note]

- "ssc release machine" executes "Scale In" until SSC2.1u3. But "Scale In" is executed by "ssc scalein" with SSC3.0.

[Syntax examples]

```
=====
Wait in a group pool. Taka a part machine.
Take a part logical machine.
(For Physical Machine and Virtual Machine Server)
=====
>ssc release machine Category/Group1 -c
```

```
In case Physical Machine,
the following statements are also available.
>ssc release machine Category/Group1
>ssc release machine Category/Group1 host001
```

```
=====
Wait in a group pool. Take a part machine.
Not take a part logical machine.
(For Physical Machine and Virtual Machine Server)
```

```
=====
>ssc release machine Category/Group1 -c -x lm
>ssc release machine Category/Group1 host001 -c -x lm
```

```
=====
Wait in a group pool. Not take a part machine.
(For Physical Machine and Virtual Machine)
```

```
=====
>ssc release machine Category/Group1 -t
>ssc release machine Category/Group1 host001 -t
```

```
In case Virtual Machine,
the following statements are also available.
>ssc release machine Category/Group1
>ssc release machine Category/Group1 host001
```

```
=====
Return to the shared pool. Take a part machine.
Take a part logical machine.
(For Physical Machine and Virtual Machine Server)
```

```
=====
>ssc release machine Category/Group1 host001 -sharedpool -c
```

```
In case Physical Machine,
the following statement is also available.
>ssc release machine Category/Group1 host001 -sharedpool
```

```
=====
Return to the shared pool. Take a part machine.
Not take a part logical machine.
(For Physical Machine and Virtual Machine Server)
```

```
=====
>ssc release machine Category/Group1 host001 -sharedpool -c -x lm
```

```
=====
Return to the shared pool. Not take a part machine.
(For Physical Machine and Virtual Machine
and Virtual Machine Server)
```

```
=====
>ssc release machine Category/Group1 host001 -sharedpool -t
```

```
In case Virtual Machine,
the following statement is also available.
>ssc release machine Category/Group1 host001 -sharedpool
```

```
In case Virtual Machine Server,
the following statements are also available.
>ssc release machine Category/Group1
>ssc release machine Category/Group1 host001
>ssc release machine Category/Group1 host001 -sharedpool
>ssc release machine Category/Group1 -t
>ssc release machine Category/Group1 host001 -t
```

```
=====
Delete Virtual Machine.
(For Virtual Machine)
```

```
=====
>ssc release machine Category/Group1 -c
>ssc release machine Category/Group1 host001 -c
```

```
=====
In case Virtual Machine,
you cannot use the following statements.
```

```
=====
>ssc release machine Category/Group1 -c -x lm
>ssc release machine Category/Group1 host001 -c -x lm
>ssc release machine Category/Group1 host001 -sharedpool -c
```

```

>ssc release machine Category/Group1 host001 -sharedpool -c -x lm
=====
Return from a pool to the shared pool
=====
>ssc release machine Category/Group1 -del machine001 machine002
=====
Wait in a group pool. (Force)
=====
>ssc release machine Category/Group1 host001 -force
=====
Return to the shared pool. (Force)
=====
>ssc release machine Category/Group1 host002 -sharedpool -force

```

2.6.5. Displaying Machine

Displays the machine information.

[Syntax]

```

ssc show machine [ -ms [on | off] ] [ [-vms [VMSName] ] [ -vm [VMName] ] |
[-smartgroup SmartGroupName] ] [ [-perf] [-resource] | [-spec] ] [-vertical]

```

[Parameters and Options]

<p>[-ms [on off]]</p>	<p>Specify the management status of the machines to be displayed. If omitted, all machines are displayed. If you specify "on", machines being managed are displayed. If you specify "off", machines not being managed are displayed. If you do not specify "on" or "off", all machines are displayed.</p>
<p>[-vms [<i>VMSName</i>]]</p>	<p>Specify a VM Server to be displayed. If you do not specify <i>VMSName</i>, all VM Servers are displayed. If you specify <i>VMSName</i>, a list of virtual machines and templates under the VM Server are displayed.</p>
<p>[-vm [<i>VMName</i>]]</p>	<p>Specify a virtual machine to display. If you do not specify <i>VMName</i>, all virtual machines are displayed.</p>
<p>[-smartgroup <i>SmartGroupName</i>]</p>	<p>Specify a smart group's path in the Operations or Resource view in order to display information of machines correspond to the condition of the specified smart group. Note: * The group path must exist. If you want to specify it in the Operations view, add "operations:" to the beginning of the path. Or if you want to specify it in the Resource view, add "resource:" to the beginning of the path. Setting examples: [operations:/category1/group11/smartgroup101] Smartgroup101 below the group11 node of the category1 of the Operations view is specified. [resource:/smartgroup102] smartgroup102 below the machine node of the Resource view is specified.</p>
<p>[-perf]</p>	<p>Displays performance information. Target machine types are VM Servers and virtual machines. It may take time to obtain the latest information.</p>

[-resource]	Displays virtual resource information. Target machine types are VM Servers and virtual machines. It may take time to obtain the latest information.
[-spec]	Displays specification information.
[-vertical]	Specify format. If you do not specify this option, information is displayed in the csv format.

[Syntax examples]

```
>ssc show machine -ms
>ssc show machine -ms on
>ssc show machine -ms on -perf
>ssc show machine -vms HYPER-V222 -perf
>ssc show machine -vm -vertical
>ssc show machine -vm -resource
>ssc show machine -smartgroup resource:/smartgroup102
>ssc show machine -ms on -smartgroup resource:/smartgroup102 -spec
>ssc show machine -vms XenServer01 -vm VM-W2K8
```

[Display examples]

```
>ssc show machine -ms on
#Name, ManagedStatus, Uuid, MacAddress, Type, SummaryStatus, RunningStatus, ExecuteStatus
"192.168.10.174", "Managed", "80dfbf4d-2de0-d811-8001-003013f10162", "00:30:13:F1:01:
"MasterMachine", "Managed", "42043949-9fde-6cb5-297c-bc5cd39a6de7", "00:50:56:84:78:F
"MasterVM", "Managed", "42049b63-168e-86d0-83c8-e57319cb622d", "00:50:56:84:09:86", "V
```

```
>ssc show machine -ms on -vms 192.168.10.174 -resource
[VMServer]
#MachineName, MachineType, Uuid, MacAddress, ProductName, ModelName, ManagedStatus, Summa
"192.168.10.174", "Blade, VMware, VM Server", "80dfbf4d-2de0-d811-8001-003013f10162"
[VirtualMachine]
#MachineName, MachineType, Uuid, MacAddress, ProductName, ModelName, ManagedStatus, Summa
"MasterMachine", "VMware, Virtual Machine", "42043949-9fde-6cb5-297c-bc5cd39a6de7", "
"MasterVM", "VMware, Virtual Machine", "42049b63-168e-86d0-83c8-e57319cb622d", "00:50
[Template]
#SoftwareName, CreateTime, SoftwareCost, SoftwareType, VMServerName, SoftwareLocation, I
"FullCloneTemplate", "", "0", "Template, FullClone", "192.168.10.174", "Storage1", "Full
```

```
>ssc show machine -ms on -vms 192.168.10.174 -perf -vertical
[VMServer-01]
MachineName      : 192.168.10.174
MachineType     : Blade, VMware, VM Server
Uuid            : 80dfbf4d-2de0-d811-8001-003013f10162
MacAddress      : 00:30:13:F1:01:62
ProductName     :
ModelName       :
ManagedStatus  : Managed
SummaryStatus   : -
PowerState      : Running
HardwareStatus  : -
MaintenanceStatus : Off
RunningStatus   : -
ExecuteStatus   : -
EventPolicyStatus : -
OperatingSystem : VMware ESX
OSVersion       : 4.0.0 Build-208167
HostName        :
IPAddress       : 192.168.10.174, 192.168.10.58
ConnectionStatus :
VmsTotalCost    : 0
Capacity        : 200
```



```

VmCount          : 0
MemorySize (MB) : 3071
Uptime           : 1 days, 06:52:49
LastStartTime    : 2010/07/12 9:29:19
CpuUsage (%)     : 5
HostCpuUsage (%) : 0
MemoryUsage (%)  : 24
HostMemoryUsage (%) : 0
[VirtualMachine-01]
MachineName      : MasterMachine
MachineType      : VMware, Virtual Machine
Uuid             : 42044847-c340-8ec6-a0bf-36b248db25eb
:
:
:
[VirtualMachine-02]
:
:
:
[Template-01]
SoftwareName     : FullCloneTemplate
CreateTime       :
SoftwareCost     : 0
SoftwareType     : Template, FullClone
VMServerName     : 192.168.10.174
SoftwareLocation : Storage1
ImageName        : FullCloneTemplate
DiskSize (MB)   :
Description      :

```

```

>ssc show machine -ms on -smartgroup resource://"Usable ESX" -spec
#UnitName, Uuid, MachineType, MacAddress, SummaryStatus, HardwareStatus, VendorID, Machin
"esx41-1.local", "1b29e313-3000-0180-dc11-f0e92b2e8004", "Unitary, VMware, VM Server
"esx41-9.local", "1429e313-3000-0180-dc11-be70a8d0808a", "Unitary, VMware, VM Server

```

```

>ssc show machine -vms XenServer01 -vm VM-W2K8
[VirtualMachine]
#Name, ManagedStatus, Uuid, MacAddress, Type, SummaryStatus, RunningStatus, ExecuteStatus,
"VM-W2K8", "Managed", "f72af3f3-5a91-27a9-c555-6a3021a58854", "96:62:7A:57:23:BC", "Uni
[VMServer]
#Name, ManagedStatus, Uuid, MacAddress, Type, SummaryStatus, RunningStatus, ExecuteStatus,
"XenServer01", "Managed", "ae3cd500-c0ca-11da-8001-001d924476bb", "00:1D:92:44:78:91",
[Datastore]
#DatastoreName, DatastoreSize (GB), DatastoreUsage (GB), DatastoreFree (GB), DatastoreU
"SAN1", "200.0", "98.5", "101.5", "49", "virtual:/172.16.0.16/XS61", "XenServer01, XenServ

```

[Note]

- If a virtual machine server cannot be connected or the virtual machine server's information cannot be obtained temporarily, the virtual machine server or its performance data (performance, virtual resources) may be displayed as a space.
- If omitted, all machines are displayed.

2.6.6. Updating Machine

Edits and updates settings of a machine.

[Syntax]

```

ssc update machine < -name Machine | -uuid UUID > [-model ModelName] [-location
Location] [-unitname name] [-tag Tag...] [-slot SlotNo] [-type Type] [-network
NICNo, MAC, Switch, Port...] [-storage HBANo, WWN...] [-vendor [Vendor]] [-cpu
[Clock(MHz), ProductName]] [-socket SocketCount] [-thread ThreadCount] [-lcpu
LCPUCount] [-core CoreCount] [-memory [size(MB)] [-newuuid Uuid]]

```

[Parameters and Options]

<-name <i>Machine</i> -uuid <i>UUID</i> > (Required)	Specify the name or UUID of the machine.
[-model <i>ModelName</i>]	Specify the model name of the machine.
[-location <i>Location</i>]	Specify the location of the machine. You can not specify this option for virtual machines.
[-unitname <i>name</i>]	Specify the unit name.
[-tag <i>Tag...</i>]	Specify the tag. You can specify multiple tags.
[-slot <i>SlotNo</i>]	Specify the slot number of the machine.
[-type <i>Type</i>]	Specify the type of the machine. You can specify "unitary" or "blade". You can specify this option only for Unitary or Blade machine.
[-network <i>NICNo,MAC,Switch,Port[...]</i>]	Specify the following network information: NIC No, MAC address, switch, port. Separate the data with "," (comma). Multiple options can be specified. Specify the NIC number in the range of numbers from 1 to 10. You can not specify this option for virtual machines.
[-storage <i>HBANo,WWN[...]</i>]	Specify the following storage information: HBA No., address. Separate the data with "," (comma). Multiple options can be specified. Specify the HBA number in the range of numbers from 0 to 9999. You can not specify this option for virtual machine.
[-vendor [<i>Vendor</i>]]	Specify the vendor of the machine. You can specify "IBM", "HP", "NEC", "DELL", "Cisco". You can also specify the number corresponding to the vendor. http://www.iana.org/assignments/enterprise-numbers If you do not specify Vendor, Unknown(0) will be set as the vendor. You can not specify this option for virtual machines and virtual machine servers.
[-cpu <i>[Clock(MHz),ProductName]</i>]	Specify the following CPU information: CPU clock speed, CPU type Separate the data with "," (comma). Specify the CPU clock speed in MHz. If you do not specify both Clock and ProductName, the CPU info is deleted. However, CPU socket count, CPU thread count, logical CPU count and CPU core count are not deleted. You can not specify this option for virtual machines and virtual machine servers.
[-socket <i>SocketCount</i>]	Specify the CPU socket count of the machine. You can not specify this option for virtual machines and virtual machine servers.
[-thread <i>ThreadCount</i>]	Specify the CPU thread count of the machine. You can not specify this option for virtual machines and virtual machine servers.

<code>[-lcpu <i>LPCUCount</i>]</code>	Specify the logical CPU count of the machine. You can not specify this option for virtual machines and virtual machine servers.
<code>[-core <i>CoreCount</i>]</code>	Specify the CPU core count of the machine. You can not specify this option for virtual machines and virtual machine servers.
<code>[-memory [<i>size(MB)</i>]]</code>	Specify the memory size(MB) of the machine. If you do not specify size, the memory info is deleted. You can not specify this option for virtual machines and virtual machine servers.
<code>[-newuuid <i>Uuid</i>]</code>	Specify the UUID.

- The information is updated for each information item.
If any error is included in an information item, the information item is not updated, and the updating process is stopped at that point.

[Syntax examples]

```

setting the general information
>ssc update machine -name machine1 -model "Express5800 110Rd-1" -location web
>ssc update machine -uuid 00B9771D-29BB-DB11-8001-003013B8F50D -slot 1 -type blade
setting the network information
>ssc update machine -name machine1 -network 1,00:31:13:B8:F6:1D, switch1, lan2
>ssc update machine -name machine1 -network 1,00:31:13:B8:F6:1D, switch1, lan2
2,00:31:13:B8:F6:1E
setting the storage information
>ssc update machine -name machine1 -storage 0,00:10:48:60:69:00:60:48
>ssc update machine -name machine1 -storage 0,00:10:48:60:69:00:60:48
1,00:10:48:60:68:00:60:48
setting the machine specs information
>ssc update machine -name machine1 -vendor NEC
-cpu 1600,"Intel(R) Xeon(R) CPU 5110 @ 1.60GHz"
>ssc update machine -name machine1 -socket 2 -thread 4 -lcpu 4 -core 4
-memory 2048

```

2.6.7. Control of Power to the Machine

Controls of power to the machine.

[Syntax]

```

ssc power-control machine Operation <GroupName [HostName[...]] |
<-name MachineName[...] | -path Path[...] | -uuid UUID[...] | -mac MAC[...]>>
[-status < wait | abort >] [-quick]

```

[Parameters and Options]

<i>Operation</i> (Required)	Specify the operation of machine power control. startup : Start up Machines shutdown : Shutdown Machines reboot : Reboot Machines suspend : Suspend Machines(enabled only for virtual machines)
<i>GroupName</i>	Specify a target group name. Specify a tenant name, category name, group name or model name. (E.g. Category, Category/Group/Model) But if "HostName" is specified, a group name must be specified for this option.

[<i>HostName</i>]	Specify the name of an activated host. Multiple hosts that exist in the specified group (for <i>GroupName</i>) can be specified. If you do not specify this option, all the machines activated in the group are the targets.
-name <i>MachineName</i> -path <i>Path</i> -uuid <i>UUID</i> -mac <i>MAC</i>	Specify the target to be set. Specify at least one of -name, -path, -uuid, and -mac. Multiple parameters can be specified. -name : Specify the name of the machine. -path : Specify the path of the target. E.g.) When specifying a machine, specify it as follows: Operations view: operations: /Category/Group/Machine Resource view: resource: /Group/Machine Group/Machine Virtual view: virtual: /VC/DC/VMS/VM When specifying a group or rack, specify it as follows: Resource view: resource: /Group/Rack Group/Rack Operations view: operations: /Category/Group You can omit View Type ("resource:"). -uuid : Specify the uuid of the machine. -mac : Specify the primary mac address of the machine. If you specify -path and do not specify any view, the specified path is treated as the path to the Resource view.
[-status < wait abort >]	Specify the status of the target. wait : The target is machines that are not executed. abort : The target is machines that have been executed in failure.
[-quick]	Check of machines status for facility starts when the machines start. Processing is completed in a shorter time than that of when this option is not specified. This option is enabled only for VM Ware virtual machines.

[Note]

The quick start by “-quick” option executes simplified power on completion confirmation process. So the possibility of operation’s ending with an error becomes higher than the normal start operation in a situation like a machine cannot be used after the operation’s completion, for example. However, the process of the operation is complete faster.

[Syntax examples]

```
>ssc power-control machine on Category1
>ssc power-control machine on Category1/Group1
>ssc power-control machine shutdown Category1/Group1 Host01
>ssc power-control machine shutdown Category1/Group1 Host01 Host02 Host03
>ssc power-control machine on -path resource:/VMGroup -quick
>ssc power-control machine reboot -name machine1
>ssc power-control machine reboot -uuid 00B9771D-29BB-DB11-8001-003013B8F50D
>ssc power-control machine reboot -mac 00:31:13:B8:F6:1D
```

2.6.8. Backup

Backs up the machine.

[Syntax]

```
ssc machine backup Path -host HostName... [-concurrent Value] [-interval Value]
```

[Parameters and Options]

<i>Path</i> (Required)	Specify the full path to the group.
-host <i>HostName...</i> (Required)	Specify the running host name. (You can specify multiple hosts.)
[-concurrent <i>Value</i>]	Specify the max number of concurrent Processing. (The default value is 1) Specify the value in the range of 1 to 100.
[-interval <i>Value</i>]	Specifies the execution interval. (The default value is 0) Specify the value in the range of 0 to 99999 seconds.

[Syntax examples]

```
>ssc machine backup category1/group1 -host host1
>ssc machine backup category1/group1 -host host1 host2 host3
>ssc machine backup category1/group1 -host host1 host2 host3
-concurrent 2 -interval 500
```

2.6.9. Restore

Restores the machine.

[Syntax]

```
ssc machine restore Path -host HostName... [-concurrent Value] [-interval Value]
```

[Parameters and Options]

<i>Path</i> (Required)	Specify the full path to the group.
-host <i>HostName...</i> (Required)	Specify the running host name. (You can specify multiple hosts.)
[-concurrent <i>Value</i>]	Specify the max number of concurrent Processing. (The default value is 1) Specify the range of 1-100.
[-interval <i>Value</i>]	Specifies the execution interval. (The default value is 0) Specify the value in the range of 0 to 99999 seconds.

[Syntax examples]

```
>ssc machine restore category1/group1 -host host1
>ssc machine restore category1/group1 -host host1 host2 host3
>ssc machine restore category1/group1 -host host1 host2 host3
  -concurrent 2 -interval 500
```

2.6.10. Registering Hardware

Registers hardware to be managed.

[Syntax]

```
ssc register hardware Type HardwareName [-account Account] [-p Password]
[-scope Scope] [-serialno SerialNumber]
```

[Parameters and Options]

<i>Type</i> (Required)	Specify a hardware type. [Network Devices] "switch": Switch "lb": LoadBalancer "firewall": Firewall [Storage Devices] "necstorage": NEC Storage "symmetrix": Symmetrix "smi-s": SMI-S "clariion": CLARiiON "netappstorage": NetApp
<i>HardwareName</i> (Required)	Specify a host name or IP address of the target. If you specify "firewall", "clariion" or "netappstorage" in <i>Type</i> , you must specify the IP address. If you specify other types of storage in <i>Type</i> , you must specify the disk array name.
[-account <i>Account</i>]	Specify an account name or domain name of the target. If you specify "firewall", "clariion" or "netappstorage" in <i>Type</i> , you can specify this option.
[-p <i>Password</i>]	Specify a password of the target. If you specify "firewall", "clariion" or "netappstorage" in <i>Type</i> , you can specify this option.
[-scope <i>Scope</i>]	Specify a scope. "0": global, "1": local, "2": LDAP (The default value is 0) If you specify "clariion" in <i>Type</i> , you can specify this option.
[-serialno <i>SerialNumber</i>]	Specify a serial number of disk array. If there are multiple disk arrays with the same name, specify a serial number. If you specify "necstorage", "symmetrix", "smi-s" in <i>Type</i> , you can specify this option.

[Syntax examples]

```
>ssc register hardware switch Switch01
>ssc register hardware lb LB01
>ssc register hardware firewall 192.168.1.2 -account root -p xxxxx
>ssc register hardware smi-s 0123456789ABCDEF
>ssc register hardware necstorage M100 -serialno 0123456789ABCDEF
>ssc register hardware clariion 192.168.1.3 -account root -p xxxxx -scope 1
>ssc register hardware netappstorage 192.168.1.4 -account root -p xxxxx
```

2.6.11. Operation of Maintenance to the Machine

Maintains a specified machine.

[Syntax]

```
ssc maintenance machine Operation <-name MachineName | -fullpath FullPath |  
-uuid UUID | -mac MAC>
```

[Parameters and Options]

<p><i>Operation</i> (Required)</p>	<p>Specify the operation of the maintenance machine.</p> <p>poweron: Powers on a machine.</p> <p>poweroff: Forces to shut down a machine.</p> <p>reset: Resets a machine.</p> <p>powercycle: Executes power cycle of a machine.</p> <p>dump: Dumps a machine.</p> <p>ledon: Turns on an LED of a machine.</p> <p>ledoff: Turns off an LED of a machine.</p> <p>acpishutdown: Executes ACPI shutdown to a machine.</p>
<p>-name <i>MachineName</i> -fullpath <i>FullPath</i> -uuid <i>UUID</i> -mac <i>MAC</i></p>	<p>Specify the target machine.</p> <p>One of the following options must be specified: -name, -fullpath, -uuid, -mac.</p> <p>-name: Specify the name of the target machine.</p> <p>-fullpath: Specify the full path to the target machine. The path string must begin with the specified view. If you omit View Type, the specified path is treated as the path to the Resource view.</p> <p>-uuid: Specify the UUID of the target machine. Input format of UUID: dddddddd-dddd-dddd-dddd-dddddddddddd d:0-9, a-f or A-F</p> <p>-mac: Specify the primary MAC address of the target machine. Input format of MAC address: xx:xx:xx:xx:xx:xx or xx-xx-xx-xx-xx-xx x:0-9, a-f or A-F</p>

[Note]

```
The usable operations are different depending on the type of machine in this command
|| Type of machine || poweron || poweroff || reset || powercycle || dump || ledon || | | | |
|| Physical machine || (including Virtual machine server) || O || O || O ||
|| Virtual machine || O || O || O || O || x || x || x || x ||
If you want to operate physical machine (including virtual machine server), you have
''' [Syntax examples] '''
{{{
>ssc maintenance machine poweron -name machine1
>ssc maintenance machine poweroff -fullpath resource:/Group1/machine1
>ssc maintenance machine reset -fullpath virtual:/VC1/DataCenter/ESXi1
>ssc maintenance machine powercycle -fullpath operation:/Category/Group/host1
>ssc maintenance machine dump -fullpath Group1/machine1
>ssc maintenance machine ledon -uuid 00B9771D-29BB-DB11-8001-003013B8F50D
>ssc maintenance machine ledoff -mac 00:31:13:B8:F6:1D
>ssc maintenance machine acpishutdown -name machine1
}}}
[[Include(Ticket/12922/FDDD/maintenancemachine/en/history)]]
```

2.6.12. Configuration Change to the Machine

Changes configuration of the activated machine.

[Syntax]

```
ssc machine chcfg GroupName HostName  
[-storage] [-vlan] [-pflow] [-virtualnetwork] [-lb] [-shutdown]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify the path to the group. You cannot specify a tenant, category or model. (E.g.: Tenant/Category/Group, Group)
<i>HostName</i> (Required)	Specify the running host name.
[-storage]	Configuration change in storage is executed. You cannot specify this option for a virtual machine.
[-vlan]	Configuration change in a VLAN is executed. You cannot specify this option for a virtual machine.
[-pflow]	Configuration change in P-Flow is executed. You cannot specify this option for a virtual machine.
[-virtualnetwork]	Configuration change in a virtual network is executed. You cannot specify this option for a virtual machine.
[-lb]	The machine is detached from the load balancer before the configuration change.
[-shutdown]	The machine is shut down before the configuration change. You cannot specify this option for a virtual machine.

[Syntax examples]

```
>ssc machine chcfg Tenant/Category/Group Host  
>ssc machine chcfg Tenant/Category/Group Host -shutdown  
>ssc machine chcfg Group2 Host -vlan -virtualnetwork
```

[Note]

- If you omit all the configuration options (-storage, -vlan, -virtualnetwork and -lb), the configuration change is executed to all configurations. If you specify one or more of the configuration options, the configuration change corresponding to the specified options is executed.

2.7. Machine Account

2.7.1. Creating Machine Account

Creates an account of a managed machine or unmanaged machine. In SigmaSystemCenter, you can configure an account for each connection type used in management, monitoring, and controlling managed machines.

[Syntax]

```
ssc machine-account create < -uuid UUID | -machine MachineName > -type ConnectionType -ip IPAddress -u UserName [-p Password] [-overwrite]
```

[Parameters and Options]

< -uuid <i>UUID</i> -machine <i>MachineName</i> > (Required)	Specify UUID of a machine or a name of the machine to which you intend to register an account. You can specify an unmanaged machine.
-type <i>ConnectionType</i> (Required)	Specify a connection type. Only "oob" is supported. OOB is used for Out-of-Band-Management.
-ip <i>IPAddress</i> (Required)	Specify an IP address.
-u <i>UserName</i> (Required)	Specify a user name. Depending on a login system of a connection destination, a specification might be case sensitive.
[-p <i>Password</i>]	Specify a password. If you do not specify this option, no password is specified. If you specify a null character ("") in <i>Password</i> , the password is regarded as not specified.
[-overwrite]	If a machine account is already registered, overwrites the account. If you do not specify this option, if an account is already registered, an error occurs.

[Syntax examples]

```
>ssc machine-account create -machine SV0100 -type oob -ip  
192.168.1.100 -u User01 -p xxxxxx  
>ssc machine-account create -uuid  
7DEB0F09-0BC6-495f-9CF6-A15EBC88BCC9 -type oob -ip  
192.168.1.101 -u User02  
>ssc machine-account create -machine SV0200 -type oob -ip  
192.168.1.102 -u User01 -p "" -overwrite  
>ssc machine-account update -uuid  
1CC9EBCC-7091-498d-84D2-B2F168690BC8 -type oob -p xxxxxx
```

2.7.2. Updating Machine Account

Updates an account of a managed machine or unmanaged machine.

[Syntax]

```
ssc machine-account update < -uuid UUID | -machine MachineName > -type ConnectionType [-ip IPAddress] [-u UserName] [-p Password]
```

[Parameters and Options]

<code>< -uuid <i>UUID</i> -machine <i>MachineName</i> ></code> (Required)	Specify a UUID of a target machine or machine name.
<code>-type <i>ConnectionType</i></code> (Required)	Specify a connection type. Only "oob" is supported. OOB is used for Out-of-Band-Management.
<code>[-ip <i>IPAddress</i>]</code>	Specify an IP address to update.
<code>[-u <i>UserName</i>]</code>	Specify a user name to update. Depending on a login system of a connection destination, a specification might be case sensitive
<code>[-p <i>Password</i>]</code>	Specify a password to update. If you specify a null character (""), the password is deleted.

- Specify at least one of the `-ip`, `-u`, and `-p` options.

[Syntax examples]

```
>ssc machine-account update -machine SV0100 -type oob -ip
192.168.1.100 -u User01a -p xxxxxx
>ssc machine-account update -uuid
1CC9EBCC-7091-498d-84D2-B2F168690BC8 -type oob -ip
192.168.1.200
>ssc machine-account update -machine SV0200 -type oob -u
User02a
>ssc machine-account update -uuid
3571C728-EE55-4a43-A8AE-DDDA3ED8EBA0 -type oob -p xxxxxxx
```

2.7.3. Deleting Machine Account

Deletes an account of a managed machine or unmanaged machine.

[Syntax]

```
ssc machine-account delete < -uuid UUID | -machine MachineName > -type
ConnectionType
```

[Parameters and Options]

<code>< -uuid <i>UUID</i> -machine <i>MachineName</i> ></code> (Required)	Specify a UUID of a target machine or machine name.
<code>-type <i>ConnectionType</i></code> (Required)	Specify a connection type. Only "oob" is supported. OOB is used for Out-of-Band-Management.

[Syntax examples]

```
>ssc machine-account delete -machine SV0100 -type oob
>ssc machine-account delete -uuid 503BDAA8-19A1-793F-8A39-198D1EFEC439 -type oob
```

2.7.4. Displaying Machine Account

Displaying information of an account of a managed machine or unmanaged machine.

[Syntax]

```
ssc machine-account show [ -uuid UUID | -machine MachineName ] [-setting]
```

[Parameters and Options]

[-uuid <i>UUID</i> -machine <i>MachineName</i>]	Specify a UUID of a target machine or machine name. If you do not specify <i>UUID</i> or <i>MachineName</i> , all registered machines become targets
[-setting]	Displays in the csv format.

[Syntax examples]

```
>ssc machine-account show
>ssc machine-account show -setting
>ssc machine-account show -machine SV0100
>ssc machine-account show -machine SV0100 -setting
>ssc machine-account show -uuid 503BDAA8-19A1-793F-8A39-198D1EFEC439
>ssc machine-account show -uuid 503BDAA8-19A1-793F-8A39-198D1EFEC439 -setting
```

[Display examples]

```
>ssc machine-account show
[1]
MachineName      : SV0100
UUID             : 503BDAA8-19A1-793F-8A39-198D1EFEC439
MachineAccount
  UserName       : user01
  HostName       : 192.168.1.100
  Connection Status : Connected [2009/06/09 13:00:00]
[2]
MachineName      : SV0101
UUID             : 555BDAA8-19A1-793F-8A39-198D1EFEEEEEE
MachineAccount
  UserName       : user02
  HostName       : 192.168.1.101
  Connection Status : Connected [2009/06/09 13:15:00]
```

```
>ssc machine-account show -setting
#MachineName, UUID, UserName, HostName, Connection Status
SV0100, 503BDAA8-19A1-793F-8A39-198D1EFEC439, user01, 192.168.1.100, Connected [2009/0
SV0101, 555BDAA8-19A1-793F-8A39-198D1EFEEEEEE, user02, 192.168.1.101, Connected [2009/0
```

```
>ssc machine-account show -machine SV0101
MachineName      : SV0101
UUID             : 555BDAA8-19A1-793F-8A39-198D1EFEEEEEE
MachineAccount
  UserName       : user02
  HostName       : 192.168.1.101
  Connection Status : Connected [2009/06/09 13:15:00]
```

```
>ssc machine-account show -uuid
555BDAA8-19A1-793F-8A39-198D1EFEEEEEE
MachineName      : SV0101
UUID             : 555BDAA8-19A1-793F-8A39-198D1EFEEEEEE
MachineAccount
  UserName       : user02
  HostName       : 192.168.1.101
  Connection Status : Connected [2009/06/09 13:15:00]
```

```
>ssc machine-account show -uuid  
555BDAA8-19A1-793F-8A39-198D1EFEEEEEE -setting  
#MachineName, UUID, UserName, HostName, Connection Status  
SV0101, 555BDAA8-19A1-793F-8A39-198D1EFEEEEEE, user02, 192.168.1.101, Connected [2009/0
```

2.8. Group

2.8.1. Creating Group

Creates a tenant, category, group or model.

[Syntax]

```
ssc create group GroupName <[-tenant] | [-category] | [-ostype
OperatingSystemType] | [-modeltype ModelType]> [-machinetype MachineType]
[-count Count] [-priority Priority] [-pool <group | shared>] [-dpmmanager
DPMManager] [-vnet VirtualNetworkName...] [-optimized <on | off | none>] [-dc
DatacenterName] [-prestriction] [-resource ResourcePoolName] [-resourceid Id]
[-scaleoutgroup <off | [max=Value] [min=Value] [scaleoutcount=Value]
[scaleincount=Value] [shutdown=<on | off>]>] [-mailto E-mailAddress]
```

[Parameters and Options]

<p><i>GroupName</i> (Required)</p>	<p>Specify the name of the tenant, category, group or model to be created. <i>GroupName</i> must be specified with a path to a category, group or model. (E.g. <i>Tenant</i>, <i>Category</i>, <i>Category/Group</i>, <i>Category/Group/Model</i>)</p> <p>Note: If there is an uncreated category in the path of a category or group, the category is created. In addition, a group in the path of a model must be an existing group. If you specify the -tenant option, a tenant is created; if you specify the -category option, a category is created; if you specify the -ostype option, a group is created; if you specify the -modeltype option, a model is created.</p>
<p>[-tenant]</p>	<p>Specify this option to create a tenant.</p>
<p>[-category]</p>	<p>Specify this option to create a category.</p>
<p>[-ostype <i>OperatingSystemType</i>]</p>	<p>Specify the OS type. You cannot omit this option to create a group. You can specify one of the following <i>OperatingSystemTypes</i>.</p> <p><i>OperatingSystemType</i> : OS type "Linux": Linux "Windows-client": Windows Client "Windows": Windows Server</p>
<p>[-modeltype <i>ModelType</i>]</p>	<p>Specify a model type that you configure to a model from the following types:</p> <p><i>ModelType</i>: a model type "Physical": Creating a Physical model "VM": Creating a VM model "VMServer": Creating a VM Server model</p> <p>You cannot omit this option to create a model. If you do not specify this option, a group is created.</p>
<p>[-machinetype <i>MachineType</i>]</p>	<p>Specify a machine type that you configure to a group from the following types:</p> <p><i>MachineType</i>: a machine type "Physical": Physical "VM": VM</p>

	<p>"VMServer": VM Server</p> <p>If you do not specify -machinetype, "VM" is specified.</p>
[-count <i>Count</i>]	<p>Specify the number of groups or models. Specify the number greater than 0. If you specify the number greater than 1, <i>GroupName</i> is sequentially numbered starting with 1. The default number is 1.</p>
[-priority <i>Priority</i>]	<p>Specify priority of a group or model in the range of the number from 1 to 10. The default priority is 1.</p>
[-pool <group shared>]	<p>Specify a search mode of a pool machine. You can specify this option only when you create a group.</p> <p>"group": To search only machines in a group pool. (GroupOnly) "shared": To search the shared pool if the target machine cannot be found in the group pool. (GroupAndShared)</p>
[-dpmmanager <i>DPMManager</i>]	<p>Specify an IP address of DPM Server. This option is enabled if the <i>GroupType</i> is tenant or category or if the <i>ModelType</i> or the <i>MachineType</i> is VM.</p>
[-vnet <i>VirtualNetworkName...</i>]	<p>Specify a virtual network name. This option is enabled if the <i>ModelType</i> or the <i>MachineType</i> is VM. You can specify up to four names dividing them with a space. NICs are assigned in the specified order from NIC #1.</p> <p>Note: Even if an error occurred in configuring a virtual network setting, a model is created. In that case, you need to reconfigure a virtual network setting of the target model through the Web Console.</p>
[-optimized <on off none>]	<p>Specify this option to enable, disable or release Optimized Startup. This option is enabled if the <i>GroupType</i> is tenant or category, or if the <i>ModelType</i> or the <i>MachineType</i> is VM.</p>
[-dc <i>DatacenterName</i>]	<p>Specify a datacenter name. Specify a path of the Virtual view. This option is enabled if the <i>ModelType</i> or the <i>MachineType</i> is VMServer. (E.g. <i>Virtual manager/Datacenter</i>)</p>
[-prestriction]	<p>Enables the Optimized Placement Rule. If you do not specify this option, the setting of the Optimized Placement Rule is disabled. This option is enabled if the <i>ModelType</i> or the <i>MachineType</i> is VMServer.</p>
[-resource <i>ResourcePoolName</i>]	<p>Specify the resource pool name to be used. This option is enabled if the <i>GroupType</i> is category, or if the <i>ModelType</i> or the <i>MachineType</i> is VM.</p>
[-resourceid <i>Id</i>]	<p>Specify a resource management ID. This option is enabled if the <i>GroupType</i> is tenant.</p>
[-scaleoutgroup <off [max= <i>Value</i>] [min= <i>Value</i>] [scaleoutcount= <i>Value</i>] [scaleincount= <i>Value</i>] [shutdown=<on off>]>]	<p>Configures the group as a scale out group. You cannot specify leading or trailing spaces in the equal ("=").</p> <p>off : The group is not configured as a scale out group. You cannot specify this option along with the other options.</p> <p>max=<i>Value</i> : Specify the maximum running machine count</p>

	<p>in the range of the number from 1 to 10000.</p> <p>min= <i>Value</i> : Specify the minimum running machine count in the range of the number from 0 to 10000.</p> <p>scaleoutcount= <i>Value</i> : Specify the running machine count at scale-out in the range of the number from 1 to 100.</p> <p>scaleincount= <i>Value</i> : Specify the running machine count at scale-in in the range of the number from 1 to 100.</p> <p>shutdown=<on off> : Specify whether the running machine is shut down at scalein. on : Shuts down the machine. off : Does not shut down the machine.</p>
[-mailto E-mailAddress]	<p>Specify an e-mail address. You can specify this option only when you create a group.</p>

[Available options for each create type]

Create Types	Options
Tenant	-tenant -resourceid -dpmmanager -optimized
Category	-category -resource -dpmmanager -optimized
Group (Physical)	-ostype -machinetype -count -priority -pool -scaleoutgroup -mailto
Group (VM)	-ostype -machinetype -count -priority -pool -scaleoutgroup -mailto -dpmmanager -resource -vnet -optimized
Group (VMServer)	-ostype -machinetype -count -priority -pool -scaleoutgroup -mailto -dc -prestriction

Model (Physical)	-modeltype -count -priority
Model (VM)	-modeltype -count -priority -dpmmanager -resource -vnet -optimized
Model (VMServer)	-modeltype -count -priority -dc -prestriction

[Syntax examples]

```
>ssc create group VMGroup -ostype Windows -machinetype VM
  -resource ResourcePool -dpmmanager 127.0.0.1
>ssc create group Category1/Group001/model1 -modeltype vm
  -count 2 -priority 3 -vnet "VM Network"
>ssc create group Category1/Group001/model2 -modeltype vm
  -dpmmanager 192.168.1.1
>ssc create group Group003 -ostype windows -count 2
>ssc create group Group003/model1 -modeltype vm
  -priority 4
>ssc create group Category1/Group01/VmsModel01
  -modeltype VMServer -dc VC/Datacenter1 -prestriction
```

2.8.2. Updating Group Setting

Edits or updates a setting for a tenant, category, group or model.

[Syntax]

```
ssc update group GroupName [-pool <group | shared>] [-policy PolicyName...]
[-higherpolicy <on | off>] [-priority Priority] [-dpmmanager [DPMManager]]
[-vnet VirtualNetworkName...] [-optimized <on | off | none>] [-dc
[DatacenterName]] [-vmoptimize <on | off>] [-loadbound <[low=value]
[high=value] [dl=value] [du=value]] [-reserve ReserveMachineNumber]
[-prestriction <on | off>] [-domain name [account] [password]] [-dns [primary]
[secondary] [tertiary]] [-resource[ResourcePoolName]] [-balancelevel n]
[-scaleoutgroup <off | [on] [max=Value] [min=Value] [scaleoutcount=Value]
[scaleincount=Value] [shutdown=<on | off>]] [-mailto E-mailAddress]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a tenant, category, group or model to be updated. Specify a path to the group or model. E.g.) <i>Tenant, Category, Category/Group, Group/Model</i>
[-pool <group shared>]	Specify a search mode of a pool machine. You can specify this option only when you intend to create a group. "group" : Searches machines in a group pool. (GroupOnly) "shared": Searches machines in the shared pool if the target machine cannot be found in the group pool.

	(GroupAndShared)
[-policy [<i>PolicyName</i>]]	Updates a policy name. If you do not specify <i>PolicyName</i> , the policy setting is not configured.
[-higherpolicy <on off>]	Specify whether you use the policy setting of the group. This option is enabled if <i>GroupName</i> is Model. on: Enables the setting of whether you use the policy setting of the group. off: Disables the setting of whether you use the policy setting of the group.
[-priority <i>Priority</i>]	Updates priority of a group or model. Specify it in the range of the number from 1 to 10.
[-dpmmanager [<i>DPMManager</i>]]	Specify an IP address of DPM Server. If you do not specify <i>DPMManager</i> , the setting is not configured. This option is enabled if <i>GroupName</i> is tenant or category or model type or machine type of <i>GroupName</i> is VM.
[-vnet [<i>VirtualNetworkName...</i>]]	Specify a virtual network name. This option is enabled if a model type or machine type of <i>GroupName</i> is VM. You can specify up to four names (from NIC#1 to NIC#4). This option deletes all configured settings and configures newly specified settings. You cannot add, edit, or delete the existing settings. In configuring, you need to include a virtual network name that you do not intend to change. If you do not specify <i>VirtualNetworkName</i> , the virtual network name is not configured.
[-optimized <on off none>]	Configures the Optimized Startup. This option is enabled if <i>GroupName</i> is tenant or category, or if a model type or machine type of <i>GroupName</i> is VM. on: Enables the Optimized Startup. off: Disables the Optimized Startup. none: Releases the Optimized Startup.
[-dc [<i>DatacenterName</i>]]	Specify a datacenter name. Specify a path of the Virtual view. (E.g. <i>Virtual manager/Datacenter</i>) If you do not specify <i>DatacenterName</i> , the datacenter name is not configured. This option is enabled if a model type or machine type of <i>GroupName</i> is VM Server.
[-vmoptimize <on off>]	Configures the Optimized Startup. This option is enabled if a model type or machine type of <i>GroupName</i> is VM Server. on: Enables the VM Optimized Startup. off: Disables the VM Optimized Startup.
[-loadbound <[low= <i>value</i>] [high= <i>value</i>] [dl= <i>value</i>] [du= <i>value</i>]>]	Configures load balancing and power save of the VM Optimized Placement. Specify it in the range of the number from 0 to 100 for <i>value</i> . You cannot specify leading or trailing spaces in the equal ("="). You need to specify "low", "high", "dl", or "du". This option is enabled if a model type or machine type

	<p>of <i>GroupName</i> is VM Server.</p> <p>"low": Specifies a low-load border. "high": Specifies a high-load border. "dl": Specifies a lower limit of activation target range. "du": Specifies an upper limit of activation target range.</p>
<p>[-reserve <i>ReserveMachineNumber</i>]</p>	<p>Specify the number of spare machines for the VM Optimized Placement. Specify it in the range of the number from 0 to 9. This option is enabled if a model type or machine type of <i>GroupName</i> is VM Server.</p>
<p>[-prestriction <on off>]</p>	<p>Configures the Optimized Placement Rule. This option is enabled if a model type or machine type of <i>GroupName</i> is VM Server.</p> <p>on: Enables the Optimized Placement Rule. off: Disables the Optimized Placement Rule.</p>
<p>[-domain <i>name</i> [<i>account</i>] [<i>password</i>]]</p>	<p>Specify a domain (suffix) name. If your environment is Windows, specify <i>account</i> and <i>password</i> as well.</p>
<p>[-dns [<i>primary</i>][<i>secondary</i>] [<i>tertiary</i>]]</p>	<p>Specify the IP address of a DNS server.</p> <p>"primary": Specify a primary IP address. "secondary": Specify a secondary IP address. (Windows, Linux) "tertiary": Specify a tertiary IP address.(Linux) If you do not specify ipaddress, dns setting is not configured.</p>
<p>[-resource [<i>ResourcePoolName</i>]]</p>	<p>Specify the resource pool name to be used. If you do not specify <i>ResourcePoolName</i>, the resource pool name is not configured. This option is enabled if <i>GroupName</i> is category or a model type or machine type of <i>GroupName</i> or a model that belongs to <i>GroupName</i> is VM.</p>
<p>[-balancelevel <i>n</i>]</p>	<p>Specify balance level for Optimized Startup. The value of <i>n</i> can be 0, 1, 2, 3, or "inherit".</p> <p>0: When starting VM, the current VM server, which hosts the target VM, is given priority. -If total value of active VM's cost exceeds capacity value in the current VM server, the target VM will start on another VM server. In this case, active VM servers with large capacity remaining are given priority. -If the current VM server is inactive, active VM servers with large capacity remaining are given priority. -Neither CPU usage nor memory usage is considered when searching destination VM server.</p> <p>1: When starting VM, the current VM server, which hosts the target VM, is given priority. -If total value of active VM's cost exceeds capacity value at the current VM server, the target VM will start on another VM server. In this case, active VM servers with low CPU usage are given priority. -If the current VM server is inactive, active VM servers with low CPU usage are given priority. -If CPU usage exceeds upper limit of target range or memory usage exceeds upper limit in the current VM server, active VM servers with low CPU usage are</p>

	<p>given priority.</p> <p>2: When starting VM, the active VM servers with low CPU usage are given priority.</p> <p>3: When starting VM, the VM servers with low CPU usage, including inactive ones, are given priority. The inactive VM servers are likely to be selected because their CPU usage are considered to be zero.</p> <p>inherit: Inherits the balance level of the upper layer. If all layers are set to "inherit", balance level "1" is used.</p>
<pre>[-scaleoutgroup <off [on] [max= Value] [min= Value] [scaleoutcount= Value] [scaleincount= Value] [shutdown=<on off>]>]</pre>	<p>It's established as a scale out group. You cannot specify leading or trailing spaces in the equal ("=").</p> <p>off : Disables the setting for a scale out group. You cannot specify this option with other options.</p> <p>on : Enables the setting of a scale out group.</p> <p>max= <i>Value</i> : Specify the maximum running machine count in the range of the number from 1 to 10000.</p> <p>min= <i>Value</i> : Specify the minimum running machine count in the range of the number from 0 to 10000.</p> <p>scaleoutcount= <i>Value</i> : Specify the running machine count at scale-out in the range of the number from 1 to 100.</p> <p>scaleincount= <i>Value</i> : Specify the running machine count at scale-in in the range of the number from 1 to 100.</p> <p>shutdown=<on off> : Specify whether the running machine is shut down at scalein. on : Shuts down the machine. off : Does not shut down the machine.</p>
<pre>[-mailto E-mailAddress]</pre>	<p>Specify an e-mail address. This option is enabled when you specify a group in GroupName.</p>

[Available options for each group type]

Group Type	Options
Tenant	-tenant -dpmmanager -optimized
Category	-category -resource -dpmmanager -optimized
Group (Physical)	-priority -pool -policy -domain -dns -scaleoutgroup -mailto

Group (VM)	-priority -pool -policy -domain -dns -scaleoutgroup -mailto -dpmmanager -vnet -optimized -resource -balancelevel
Group (VMServer)	-priority -pool -policy -domain -dns -scaleoutgroup -mailto -dc -vmoptimize -loadbound -reserve -prestriction
Model (Physical)	-priority -policy -higherpolicy
Model (VM)	-priority -policy -higherpolicy -dpmmanager -vnet -optimized -resource -balancelevel
Model (VMServer)	-priority -policy -higherpolicy -dc -vmoptimize -loadbound -reserve -prestriction

[Syntax examples]

```
>ssc update group VMGroup -resource ResourcePool -dpmmanager 127.0.0.1
>ssc update group Category/group1 -pool shared -policy "PolicyName"
>ssc update group Category/group1 -priority 2 -policy
>ssc update group Category/group1/model -dpmmanager 192.168.1.1 -optimized on
>ssc update group Category/group1/model -dpmmanager -optimized off
```

2.8.3. Displaying Group Setting

Displays a setting for a tenant, category or group.

[Syntax]

```
ssc show group GroupName [-group] [-model [ModelName...]]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a group to display. Specify a path to the tenant, category or group. When you specify a path to the category, target is groups which are belonged in it. When you specify '/' , target is all group settings. (E.g. <i>Category, Category/Group</i>)
[-group]	Displays contents of a group setting.
[-model[<i>ModelName...</i>]]	Displays contents of a model setting. You can specify a target model name.

[Syntax examples]

```
>ssc show group Category1
>ssc show group Category1/Group01
>ssc show group Group-A001 -group
>ssc show group Group-B001 -model
>ssc show group Group-B001 -model Model-B001 Model-B002
```

2.8.4. Setting Machine Profile

Sets a machine profile.

[Syntax]

```
ssc set profile Path <ProfileName | [-cost costValue] [-cpu count=value
[share=value] [reservation=value] [limit=value]] [-mem size=value [share=value]
[reservation=value] [limit=value]] [-vnet VirtualNetworkName...] [-vnettype
<vlan | network | edit>...] [-systemdisk [size=value] [type=<thin | thick>]
[independent] [datastoretag=value | datastore] [file=value]] [-extdisk
[size=value] [ctrl=value [position=value]] [type=<thin | thick | rdm-p |
rdm-v>] [independent] [datastoretag=value | datastore] [lun] [file=value], ...]
| -delete [cost | cpu | mem | vnet | systemdisk | extdisk]> [-host HostName]
```

[Parameters and Options]

<i>Path</i> (Required)	Specify the path to the target operation group or host. You can omit View Type ("operations:/"). E.g.: When specifying a group name: Category/Group When specifying a model name: Category/Group/Model When specifying a host name: Category/Group/Host When specifying a host name (full path): operations:/Category/Group/Host
<i>ProfileName</i>	Specify the name of the named machine profile. You can specify this option along with only [-host].
[-cost <i>costValue</i>]	Specify a cost value. Specify a value in the range of 1-1000. You cannot specify this option along with ProfileName and -delete.
[-cpu count= <i>value</i> [share= <i>value</i>] [reservation= <i>value</i>] [limit= <i>value</i>]]	Specify the number of CPUs, shared value, reservation value and limit value. The number of CPUs must be specified. You cannot specify leading or trailing spaces in the

	<p>equal ("="). You cannot specify this option along with ProfileName and -delete.</p> <p>count: Specify the number of CPUs. Specify a value in the range of 1-9999. (E.g.: count=2)</p> <p>share: Specify a CPU shared value. CPU shared value settings for each virtualization infrastructure are as follows: VMware Setting * CPU count Hyper-V Setting/10 Xen Setting * 256/1000 KVM Setting * 1024 / 1000 Specify one of the following values. "he": Highest (4000) "h": High (2000) "n": Normal (1000) "l": Low (500) "le": Lowest (250) "1" - "99999": Manual (E.g.: share=h, share=30) Optional. The default value is "n".</p> <p>reservation: Specify a CPU allocation value (MHz). Specify a value in the range of 0-99999. (E.g.: reservation=1000) Optional. The default value is 0.</p> <p>limit: Specify the upper limit of a CPU resource assignment (MHz). Specify a value in the range of 0-99999. (E.g.: limit=1500) Optional. The default value is 0 (unlimited).</p>
<p><code>[-mem size=<i>value</i></code> <code>[share=<i>value</i>]</code> <code>[reservation=<i>value</i>]</code> <code>[limit=<i>value</i>]</code></p>	<p>Specify a memory size, shared value, reservation value and limit value. You cannot specify leading or trailing spaces in the equal ("="). You cannot specify this option along with ProfileName and -delete.</p> <p>size: Specify memory size (MB). Specify a value in the range of 1-9999999 (MB). (E.g.: size=512)</p> <p>share: Specify a memory shared value. Memory shared value settings for each virtualization infrastructure are as follows: VMware Setting * the Memory size / 100 Hyper-V Setting * 5 Xen you cannot specify. KVM you cannot specify. Specify one of the following values. "h": High (2000) "n": Normal (1000) "l": Low (500) "0" - "10000": Manual (E.g.: share=h, share=100) Optional. The default value is "n".</p>

	<p>reservation: Specify a memory allocation value (MB). Specify the value in the range of 0-99999. (E.g.: reservation=1024) Optional. The default value is 0.</p> <p>limit: Specify the upper limit of a memory size (MB). Specify the value in the range of 0-99999. (E.g.: limit=2048) Optional. The default value is 0 (unlimited).</p>
[-vnet <i>VirtualNetworkName</i> ...]	<p>Specify a virtual network name. You can specify up to ten names divided by a space. NICs are assigned in the specified order from NIC #1. You cannot specify this option along with ProfileName and -delete.</p> <p>The upper limit of the setting number of possible NICs uses reflecting machine-specific information of DPM. And if after Windows Vista, it's "8", and if Windows 2000, Windows Server 2003 and Windows XP, it's "4".</p>
[-vnettype <vlan network edit>...]	<p>Specify the network type. Enter the same number as the number of virtual networks that you specified for the -vnet option. NICs are assigned in the specified order from NIC #1. When you want to specify a VLAN name, set "vlan." When you want to specify a logical network name, set "network." When you want to specify arbitrary network name, set "edit." When omitted, it'll be VLAN or arbitrary network. You cannot specify this option along with ProfileName and -delete.</p>
[-systemdisk [size= <i>value</i>] [type=<thin thick>] [independent] [datastoretag= <i>value</i> <i>datastore</i>] [file= <i>value</i>]]	<p>Set the system disk information. You cannot specify this option along with ProfileName and -delete.</p> <p>size: Specify the size of a system disk in megabytes (MB). type: Specify the type of system disk. Specify either thin or thick. Optional. The default type is thick.</p> <p>independent: A disk is set to the Independent mode by specifying "independent" for this option. The Independent mode is only used in the VMware environment.</p> <p>datastore: Specify the datastore name of the system disk. datastoretag: Specify the datastore tag of the system disk. Specify either "datastore" or "datastoretag". Optional.</p> <p>file: Specify the path of disk file.</p>
[-extdisk [size= <i>value</i>] [ctrl= <i>value</i> [position= <i>value</i>]] [type=<thin thick rdm-p rdm-v>] [independent] [datastoretag= <i>value</i> <i>datastore</i>]	<p>Set the extended disk information.(You can specify multiple items.) When you specify multiple items, separate the data with commas (","). (Max 6) You cannot specify this option along with ProfileName and -delete.</p>

[*lun*] [file=value], ...]

size: Specify the disk size.
Specify a value in the range of 10-999999999 (MB).
When Disk Type is specified 'rdm-p' or 'rdm-v',
specify a value in the range of 1-100000000 (GB) and a
multiple of the LUN size range (default value is 10).

ctrl: Specify the controller on which an extended disk
is connected.

Specify the following value

PCIx

IDEx

SCSIx

AutoDetect (auto detection)

x: Bus Number

position: Specify the position where an extended disk
is connected.

You can specify the following value

0-31 (for PCI)

0-1 (for IDE)

0-63 (for SCSI)

When 'ctrl' is 'AutoDetect', it can't be specified.

The possible value for controllers and positions where
the extended disk is attached depends on
virtualization infrastructures.

For possible values, refer to the "3.2.1. Changing
Configuration of Virtual Machines [The controller and
the location prepared by each virtual foundation]".

type: Specify the type of extended disk.

Specify either thin / thick / rdm-p / rdm-v.

The default type is thick.

rdm-p: RDM (physical)

rdm-v: RDM (virtual)

independent: The Independent mode of a disk is
established by specifying it as "independent".

The Independent mode is only used in the VMware
environment.

When "RDM (physical)" is specified for the disk type ,
you cannot specify "independent."

*case of type=thick / thin

datastoretag: Specify the datastore tag of the
extended disk.

datastore: Specify the datastore name of the extended
disk.

Specify either "datastore" or "datastoretag".

Optional.

The extended disk is created in the same location as
where the system disk is created by default.

*case of type=rdm-p / rdm-v

lun: Specify the target LUN(LUN Name).

file: Specify the path of the disk file.

-delete
[cost | cpu | mem | vnet |
systemdisk | extdisk]

Deletes specified option values.

You can specify this option only when you intend to
delete other option values.

	Note: If you do not specify any option name, all option values are deleted. You can specify this option along with only [-host].
[-host <i>HostName</i>]	Specify the host name of the target. If you specify this option, specify the operation group for Path. Specify this option if there is a model with the same name as the target host.

[Note]

- If you specify the -cpu option, the -mem option, the -systemdisk option and the -extdisk option, be sure to specify all of their option settings.

[Syntax examples]

```
>ssc set profile Group1 middle
>ssc set profile Group1 -cost 100
>ssc set profile Group1 -cpu count=2 share=h
>ssc set profile Group1/model -cpu count=2 share=600 -mem size=1024
>ssc set profile Group1/model -vnet "VM Network"
>ssc set profile Group1/host1 -systemdisk type=thin Storage1
>ssc set profile Group1/host1 -extdisk size=2048
>ssc set profile Group1 -systemdisk type=thick independent tag1
>ssc set profile Group1 -extdisk size=100 ctrl=SCSI0 position=0
  type=rdm-p LUN1, size=100 ctrl=AutoDetect type=rdm-v independent LUN2
>ssc set profile Group1 -delete
>ssc set profile operations:/Group1/model -delete cpu
```

2.8.5. Setting Host Profile

Sets a host profile.

[Syntax]

```
ssc set hostprofile Path <ProfileName | [-os [osname=<name | code>]
[password=value] [SysprepFile=value] [owner=value] [orgname=value]
[timezone=value] [productkey=value] [ConnectedNumber=value] [DomainType=
<workgroup | domain>] [DomainName=value] [DomainAccount=value]
[DomainPassword=value] [License=value]] [-dns NICNo,
<Primary, Secondary, PrimaryWINS, SecondaryWINS | Primary, Secondary, Tertiary> ...]
[-extend Command=value] | -delete [os | dns | extend] [-dns4 NICNo, <Primary |
Primary, Secondary | Primary, Secondary, Tertiary> ...] [-dns6 NICNo, <Primary |
Primary, Secondary | Primary, Secondary, Tertiary> ...] [-wins4 NICNo, <Primary |
Primary, Secondary> ...]> [-host HostName]
```

[Parameters and Options]

<i>Path</i> (Required)	Specify the path to the target operation group, model or host. View Type ("operations:/") is optional. Categories cannot be specified. E.g.) When specifying a group name: Category/Group When specifying a host name: Category/Group/Host When specifying a host name (full path): operations:/Category/Group/Host
---------------------------	--

<p><i>ProfileName</i> (Required)</p>	<p>Specify the name of the named host profile. You can specify this option along with only [-host].</p>
<p>[-os [osname= <name code>] [password= value] [SysprepFile= value] [owner= value] [orgname= value] [timezone= value] [productkey= value] [ConnectedNumber= value] [DomainType= <workgroup domain>] [DomainName= value] [DomainAccount= value] [DomainPassword= value] [License= "value"]]</p>	<p>Specify the OS information. You cannot specify leading or trailing spaces in the equal ("="). You cannot specify this option along with <i>ProfileName</i> and -delete.</p> <p>osname: OS name Specify the OS name's code or the strings displayed on the Web UI. Refer to Reference materials in 3.2.6, Creating Template in this document. When releasing, specify 0 to this option.</p> <p>password: Password</p> <p>SysprepFile: Sysprep file to be imported You can specify it only when the OS type is Windows.</p> <p>owner: Owner name You can specify it only when the OS type is Windows.</p> <p>orgname: The name of an organization You can specify it only when the OS type is Windows.</p> <p>timezone: Time zone You can specify it only when the OS type is Windows. Specify the time zone's code or the strings displayed on the Web UI. Refer to Reference materials in 3.2.6, Creating Template in this document. The default value is the same as the value of "Microsoft Time Zone Index Values."</p> <p>productkey: Product key You can specify it only when the OS type is Windows. Enter it in the xxxxx-xxxxx-xxxxx-xxxxx-xxxxx format.</p> <p>ConnectedNumber: The number of connected servers You can specify it only when the OS type is Windows Server. When omitted, license mode is "Connected Client".</p> <p>DomainType: Workgroup setting Specify "workgroup" for WorkGroup, "domain" for Domain. You can specify it only when the OS type is Windows.</p>

	<p>DomainName: The name of Domain(WorkGroup)</p> <p>DomainAccount: Domain account You can specify it only when the OS type is Windows.</p> <p>DomainPassword: Domain password You can specify it only when the OS type is Windows.</p> <p>License: license You can specify it when an OS type is Linux and the Model type of the Group is VMServer. Enter it in the xxxxx-xxxxx-xxxxx-xxxxx-xxxxx format.</p>
<p>[-dns <i>NICNo</i>, <<i>Primary,Secondary,PrimaryWINS,SecondaryWINS</i> <i>Primary,Secondary,Tertiary</i>> ...]</p>	<p>Specify the DNS information. You cannot specify this option along with <i>ProfileName</i> and -delete.</p> <p><i>NICNo</i>: NIC Number <i>Primary</i>: Primary DNS <i>Secondary</i>: Secondary DNS</p> <p><i>Tertiary</i>: Tertiary DNS You can specify it only when the OS type is Linux.</p> <p><i>PrimaryWINS</i>: Primary DNS WINS You can specify it only when the OS type is Windows.</p> <p><i>SecondaryWINS</i>: Secondary DNS WINS You can specify it only when the OS type is Windows. You cannot specify this option along with [-dns4], [-dns6] and [-wins4].</p>
<p>[-extend Command= <i>value</i>]</p>	<p>Specify the extended information. You cannot specify leading or trailing spaces in the equal ("="). You cannot specify this option along with <i>ProfileName</i> and -delete.</p> <p>Command: Specify command names to be added separating them with ',' (comma).</p>
<p>-delete [os dns extend]</p>	<p>Specify this option if the setting information should be deleted. If you specify the option name, the setting information of that option is deleted. If not, all setting information will be deleted. You cannot delete only the OS information. You can specify this option along with only [-host].</p>
<p>[-dns4 <i>NICNo</i>, <<i>Primary,Secondary</i> <i>Primary,Secondary,Tertiary</i>> ...]</p>	<p>Specify the DNS (IPv4) information. You cannot specify this option along with <i>ProfileName</i> and -delete.</p>

	<p>NICNo: NIC Number Primary: Primary DNS Secondary: Secondary DNS Tertiary: Tertiary DNS You can specify it when the OS type is Linux. You cannot specify this option along with [-dns].</p>
<p>[-dns6 <i>NICNo</i>, <<i>Primary</i>, <i>Secondary</i> <i>Primary</i>, <i>Secondary</i>, <i>Tertiary</i>> ...]</p>	<p>Specify the DNS (IPv6) information. You cannot specify this option along with <i>ProfileName</i> and -delete.</p> <p>NICNo: NIC Number Primary: Primary DNS Secondary: Secondary DNS Tertiary: Tertiary DNS You can specify it when the OS type is Linux. You cannot specify this option along with [-dns].</p>
<p>[-wins4 <i>NICNo</i>, <<i>PrimaryWINS</i>, <i>SecondaryWINS</i> ...]</p>	<p>Specify the WINS (IPv4) information. You can specify it when the OS type is Windows. You cannot specify this option along with <i>ProfileName</i> and -delete.</p> <p>NICNo: NIC Number PrimaryWINS: Primary WINS SecondaryWINS: Secondary WINS You cannot specify this option along with [-dns].</p>
<p>[-host <i>HostName</i>]</p>	<p>Specify the host name of the target. If you specify this option, specify the operation group for Path. Specify this option if there is a model with the same name as the target host.</p>

[Note]

- If you specify the -os option, be sure to specify all of its settings.

[Syntax examples]

```
Public Profile
>ssc set hostprofile category1/wingroup1 PublicHostProfile
Windows OS
>ssc set hostprofile category1/wingroup1 -os osname=11
password="pass" owner="ABC Corporation" orgname="1st section"
timezone=235 productkey=12345-67890-ABCD1-EFG21-HI123
DomainType=workgroup DomainName="WorkGroup"
-dns 1, 192.168.1.1, 192.168.1.2 2, 10.108.110.1, 10.108.110.2, 10.108.110.3
>ssc set hostprofile category1/wingroup1 -os osname="Windows Server 2008
Enterprise (x64)" password="pass"
owner="ABC Corporation" orgname="1st section" timezone=235
productkey=12345-67890-ABCD1-EFG21-HI123 ConnectedNumber=10
DomainType=domain DomainName="Domain1" DomainAccount="admin"
DomainPassword=adminpass -dns 1, 192.168.1.1, 192.168.1.2
2, 10.108.110.1, 10.108.110.2, 10.108.110.3
>ssc set hostprofile category1/wingroup1 -os osname="Windows Server 2008
Enterprise (x64)" password="pass"
owner="ABC Corporation" orgname="1st section" timezone=235
```

```

productkey=12345-67890-ABCD1-EFG21-HI123 ConnectedNumber=10
DomainType=domain DomainName="Domain1" DomainAccount="admin"
DomainPassword=adminpass -dns4 1, 192. 168. 1. 100, 192. 168. 1. 101
-dns6 1, ::192. 168. 1. 150 3, ::192. 168. 1. 152 -wins4 1, 192. 168. 1. 200 2, 192. 168. 1. 201
Linux OS
>ssc set hostprofile category1/linuxgroup1 -os
osname="SUSE Linux Enterprise Server 9"
password="pass" DomainName="Domain1"
-dns 1, 192. 168. 1. 1, 192. 168. 1. 2, 192. 168. 1. 3
>ssc set hostprofile category1/linuxgroup1 -os
osname="SUSE Linux Enterprise Server 9"
password="pass" DomainName="Domain1"
-dns4 1, 192. 168. 1. 100, 192. 168. 1. 101, 192. 168. 1. 102
-dns6 1, ::192. 168. 1. 150, ::192. 168. 1. 151
-extend
>ssc set hostprofile category1/wingroup1 -extend Command=startcmd1,startcmd2
-delete
>ssc set hostprofile -delete os dns
>ssc set hostprofile -delete

```

2.8.6. Replacing Machine

Replaces a machine with a standby machine.

[Syntax]

```

ssc replace machine GroupName HostName [ -pool MachineName | -shared
MachineName ]

```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a group or model.
<i>HostName</i> (Required)	Specify the name of the host where a source machine is activated.
[-pool <i>MachineName</i>]	Specify a machine in a group pool as the destination machine. You cannot specify this option along with -shared.
[-shared <i>MachineName</i>]	Specify a machine in a shared pool as the destination machine. You cannot specify this option along with -pool.

[Note]

- If a unit name is set, specify the unit name for *MachineName*.

[Syntax examples]

```

When you do not specify a destination machine
>ssc replace machine Category1/Group1 Host01
>ssc replace machine Category1/Group1/Model1 Host01
When you specify a machine which belongs to a group pool
as a destination machine.
>ssc replace machine Category1/Group1 Host01 -pool PoolMachine1
>ssc replace machine Category1/Group1/Model1 Host01 -pool PoolMachine1
When you specify a machine which belongs to a shared pool
as a destination machine.
>ssc replace machine Category1/Group1 Host01 -shared SharedMachine1
>ssc replace machine Category1/Group1/Model1 Host01 -shared SharedMachine1

```

2.8.7. Executing ScaleIn

Executes ScaleIn.

[Syntax]

```
ssc scalein GroupName
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify the group to which you intend to scale in. Specify a path to the group. You cannot specify a tenant, category or model. (E.g.: Category/Group, Group)
--------------------------------	--

[Syntax examples]

```
>ssc scalein category1/wingroup1  
>ssc scalein tenant1/vmgroup1  
>ssc scalein vmsgroup1
```

2.8.8. Executing ScaleOut

Executes ScaleOut.

[Syntax]

```
ssc scaleout GroupName
```

[Parameters and Options]

<i>GroupName</i>	Specify the group to which you intend to scale out. Specify a path to the group. You cannot specify a tenant, category or model. (E.g.: Category/Group, Group)
------------------	---

[Syntax examples]

```
>ssc scaleout category1/wingroup1  
>ssc scaleout tenant1/vmgroup1  
>ssc scaleout vmsgroup1
```

2.8.9. Notifying a Tree of the Specified Group to DPM

Notifies a tree of the specified group to DPM.

[Syntax]

```
ssc dpm-location notify <Path | -all>
```

[Parameters and Options]

<i>Path</i>	Specify the path to the target operations tenant, category or group.
-all	Specify this option if you notify trees of all tenant, category and group.

[Note]

Either *Path* or -all (option) must be specified.

[Syntax examples]

```
>ssc dpm-location notify category1/group1  
>ssc dpm-location notify -all
```

2.9. Host

2.9.1. Creating Host

Creates a host in a group.

[Syntax]

```
ssc create host GroupName HostName [IPAddress <SubnetMask |
SubnetPrefixLength> [DefaultGateway] [-monitor]] [-hc HostCount] [-product
ProductKey] [-p Password] [-emergency <on | off>]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify the group in which you intend to create a host. Specify the path to the group. You cannot specify a tenant, category or model. (E.g. <i>Category/Group, Group</i>)
<i>HostName</i> (Required)	Specify a name of the host that you intend to create in a group. Up to 63 characters are available in this option. Up to nine digits are available for the host name that consists only of numbers or can be added to the end of the host name.
[<i>IPAddress</i>]	Specify an IP address for the host to be created. This value is for NIC #1. If you specify a number equal to or greater than two in <i>HostCount</i> , an IP address is incremented from the specified IP address a specified number of times by <i>HostCount</i> . You cannot omit this option if you specify <i>SubNetMask</i> , <i>DefaultGateway</i> , or <i>-monitor</i> .
<i>SubNetMask</i>	Specify a subnet mask of an IP address of a host to be created. You need to specify <i>IPAddress</i> . If you specify <i>IPAddress(IPv4)</i> , you cannot omit this option.
[<i>SubnetPrefixLength</i>]	Specify a subnet prefix length. If you do not specify this option, the subnet prefix length is set to 64. You cannot specify this option along with [<i>SubNetMask</i>].
[<i>DefaultGateway</i>]	Specify the default gateway. You need to specify <i>IPAddress</i> .
[-monitor]	If you specify this option, <i>IPAddress</i> is configured as an IP address for management. You need to specify <i>IPAddress</i> .
[-hc <i>HostCount</i>]	Specify the number of hosts to be created in a group. If you specify 2 or a greater number, a serial number from 1 is added to <i>HostName</i> . If you specify <i>IPAddress</i> , specify a value in the range that the IP address can be assigned.
[-product <i>ProductKey</i>]	Specify the product key. If the OS type of a group is one of the following, you can specify this option. Windows Client / Windows Server for IPF / Windows Server
[-p <i>Password</i>]	Specify an Administrator password. Specify this option to use the administrator password configured to a host setting. If you do not specify this option, a password configured to a group is used.

[-emergency <on off>]	Configures the host as an Emergency Host. on: Enables the setting of an Emergency Host. off: Disables the setting of an Emergency Host.
-------------------------	---

[Syntax examples]

```
>ssc create host Category/group1 vmhost -hc 3 192.168.1.10
255.255.255.0 192.168.1.1 -monitor
<An example of network setting configured to a host and a host to create>
test1/group1
vmhost1 <-Host
192.168.1.10: IP address for management
255.255.255.0: Subnet mask
192.168.1.1: Default gateway
vmhost2
192.168.1.11: IP address for management
255.255.255.0: Subnet mask
192.168.1.1: Default gateway
vmhost3
192.168.1.12: IP address for management
255.255.255.0: Subnet mask
192.168.1.1: Default gateway
>ssc create host Category/group1 vmhost4 -hc 3 -product
xxxxx-xxxxx-xxxxx-xxxxx-xxxxx -p xyz
```

2.9.2. Updating Host

Edits or updates a host setting.

[Syntax]

```
ssc update host GroupName HostName [-name NewHostName] [-product ProductKey]
[-tag TagName] [-change group DestinationGroupName] [-p Password] [-emergency
<on | off>]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify the group in which the host to edit or update exists. Specify the path to the group. You cannot specify a tenant, category or model (E.g. <i>Category/Group</i>).
<i>HostName</i> (Required)	Specify the host name to edit or update.
[-name <i>NewHostName</i>]	Updates the contents of <i>HostName</i> setting to <i>NewHostName</i> .
[-product <i>ProductKey</i>]	Updates the product key. If the OS type of the group is one of the following, the product key can be updated. Windows Client / Windows Server
[-tag <i>TagName</i>]	Updates tag.
[-change group <i>DestinationGroupName</i>]	Moves a host between groups (virtual machine maintenance). You can specify this option only for virtual machines. Specify a destination group of <i>HostName</i> . This option updates the host settings to make a host of a virtual machine running in a group move to other group. Specify the path to a model. The host needs to be running (a machine is assigned). You cannot specify this option along with the other options (E.g. <i>Category/Group/Model</i> ,

	<i>Category/Group/Model</i>).
<code>[-p Password]</code>	Specify the password to use an administrator password that is set for a host.
<code>[-emergency <on off>]</code>	Configures the host as an Emergency Host. on: Enables the setting of an Emergency Host. off: Disables the setting of an Emergency Host.

- Specify at least one of the following options: `-name`, `-product`, `-tag`, `-p`, `-emergency`, or `-change group`.

[Note]

- To move a host between groups (`-change group`), your environment must meet all the following conditions. Check the destination group, source group, and settings of a model before running the command:
 - The model type of both the source group and the destination group is VM.
 - The OS types and virtual network settings of the source group and the destination group are the same.
 - No host with the same name as a target exists in the destination group.
 - No same virtual machine as a target virtual machine to be moved exists in the pool of the target destination model group.
- As moving hosts between groups is executed only by the database operation, actions of storage, load balancer, network, power control and moving groups on DPM are not executed for the target host.

[Syntax examples]

```
>ssc update host Category/group1 hostABC -name host001
>ssc update host Category/group1 host001 -tag Tag_host001 -p
>ssc update host Category/group1 host002 -p abc01
>ssc update host Category/group1 host002 -product xxxxx-xxxxx-xxxxx-xxxxx-xxxxx
>ssc update host Category/group1 host001 -change group Category/group2/model02
```

2.9.3. Displaying Host Definition

Displays a setting of host definition.

[Syntax]

```
ssc show host <GroupName [HostName...] | SmartGroupName> [-vertical]
```

[Parameters and Options]

<i>GroupName</i>	Specify a group of which Host Setting you want to display. Specify a path to the tenant, category or group. You cannot specify a model. (E.g. <i>Category, Category/Group, Group</i>)
<code>[HostName...]</code>	Specify a target host name.
<i>SmartGroupName</i>	Specify a smart group's path in the Operations view in order to display definitions of hosts correspond to the condition of the specified smart group. Note: * The group path must exist. Setting examples: [category1/group11/smartgroup101] Smartgroup101 below the group11 node of the category1 of the Operations view is specified. [smartgroup102] smartgroup102 below the operation node of the Operations view is

	specified.
[-vertical]	Specify format. If you do not specify this option, information is displayed in the csv format.

[Syntax examples]

```
>ssc show host Category1/Group01 HOST-01
>ssc show host Group-A001
>ssc show host Group-B001 -vertical
>ssc show host category1/group11/smartgroup101
```

2.9.4. Creating Dependency Setting for Hosts

Creates dependency setting for hosts.

[Syntax]

```
ssc dependency create-setting DependencyName
```

[Parameters and Options]

<i>DependencyName</i> (Required)	Specify the name of dependency setting (100 characters or less).
-------------------------------------	--

[Syntax examples]

```
>ssc dependency create-setting dependency1
```

2.9.5. Deleting Dependency Setting for Hosts

Deletes dependency setting for hosts.

[Syntax]

```
ssc dependency delete-setting DependencyName
```

[Parameters and Options]

<i>DependencyName</i> (Required)	Specify the name of dependency setting.
-------------------------------------	---

[Syntax examples]

```
>ssc dependency delete-setting dependency1
```

2.9.6. Updating Dependency Setting for Hosts

Changes dependency setting for hosts.

[Syntax]

```
ssc dependency update-setting DependencyName <[-name NewName] [-enabled expression] [-auto expression] [-weak expression]>
```

[Parameters and Options]

<i>DependencyName</i> (Required)	Specify the name of dependency setting.
-------------------------------------	---

<code>[-name <i>NewName</i>]</code>	Specify the new name of dependency setting (100 characters or less).
<code>[-enabled <i>expression</i>]</code>	Specify if dependency is enabled or not, following the format of <i>expression</i> described below.
<code>[-auto <i>expression</i>]</code>	Specify if dependee or dependent should be added or not as target automatically, following the format of <i>expression</i> described below.
<code>[-weak <i>expression</i>]</code>	Specify if operation should be executed or not regardless of the status of dependee or dependent, following the format of <i>expression</i> described below.

- *expression* : Specify in the flag format or operator format.
 - flag format : Specify each flag number (1:ON, 0:OFF) corresponding to Startup, Shutdown, Reboot, and VM Evacuation from left.
 - ex) Startup:ON, Shutdown:ON, Reboot:OFF, VM Evacuation:OFF -> 1100
 - operator format : Specify change request for each operation by using operator (+:ON, -:OFF).
 - Startup -> startup(u)
 - Shutdown -> shutdown(d)
 - Reboot -> reboot(r)
 - VM Evacuation -> evacuate(e)
- ex) Changes the value for Startup to ON and the value for Shutdown to OFF -> +startup -shutdown or +u -d

[Note]

- The -auto value for VM Evacuation depends on the -weak value (The -auto value is set to ON automatically if -weak value is OFF, and the -auto value is set to OFF automatically if -weak value is ON).

[Syntax examples]

```
>ssc dependency update-setting dependency1 -name dependency2 -enabled 1101
-auto +u -d -weak +d +e
```

2.9.7. Displaying Dependency Setting for Hosts

Shows dependency setting for hosts.

[Syntax]

```
ssc dependency show-setting
```

[Parameters and Options]

[Syntax examples]

```
>ssc dependency show-setting
```

[Display examples]

```
>ssc dependency show-setting
#Name, Enabled, Auto, Weak
"dependency1", "udre", "ud-e", "udr-"
"dependency2", "u--e", "u---", "----e"
```

- u, d, r, and e indicates that the flag is ON for Startup, Shutdown, Reboot, and VM Evacuation operation respectively.

2.9.8. Adding Dependency Between Hosts

Adds dependency between hosts.

[Syntax]

```
ssc dependency add DependencyName SourceName DestinationName
```

[Parameters and Options]

<i>DependencyName</i> (Required)	Specify the name of dependency setting.
<i>SourceName</i> (Required)	Specify the name of host which depends on another.
<i>DestinationName</i> (Required)	Specify the name of host which is depended on by another.

[Syntax examples]

```
>ssc dependency add dependency1 group/host1 group/host2
```

2.9.9. Deleting Dependency Between Hosts

Deletes dependency between hosts.

[Syntax]

```
ssc dependency delete DependencyName SourceName DestinationName
```

[Parameters and Options]

<i>DependencyName</i> (Required)	Specify the name of dependency setting.
<i>SourceName</i> (Required)	Specify the name of the host which depends on another.
<i>DestinationName</i> (Required)	Specify the name of the host which is depended on by another.

[Syntax examples]

```
>ssc dependency delete dependency1 group/host1 group/host2
```

2.9.10. Displaying Dependency Between Hosts

Shows dependencies between hosts.

[Syntax]

```
ssc dependency show DependencyName
```

[Parameters and Options]

<i>DependencyName</i> (Required)	Specify the name of dependency setting.
-------------------------------------	---

[Syntax examples]

```
>ssc dependency show dependency1
```

[Display examples]

```
>ssc dependency show dependency1  
#SourceHost, DestinationHost  
"group/host1", "group/host2"  
"group/host3", "group/host4"
```

2.10. IP Address

2.10.1. Adding IP Address Information

Adds an IP address (network) to a host in a group.

[Syntax]

```
ssc add ipaddress GroupName HostName NicNumber IPAddress <SubnetMask |  
[SubnetPrefixLength]> [DefaultGateway] [-monitor] [-hc HostCount]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify the group to which you intend to add the IP address information. Specify the path to the group. You cannot specify a tenant, category or model. (E.g. <i>Category/Group, Group</i>)
<i>HostName</i> (Required)	Specify the name of the host to which you intend to add an IP address. If you specify 2 or greater number in -hc, <i>HostName</i> must end with a number.
<i>NicNumber</i> (Required)	Specify the target NIC number.
<i>IPAddress</i> (Required)	Specify an IP address. You cannot omit this option if you specify <i>SubNetMask</i> , <i>DefaultGateway</i> , or -monitor.
<i>SubNetMask</i> (Required)	Specify a subnet mask. You cannot omit this option if you specify <i>IPAddress</i> (IPv4) and cannot specify along with <i>SubnetPrefixLength</i> .
[<i>SubnetPrefixLength</i>]	Specify a subnet prefix length. If you do not specify this option, the subnet prefix length is set to 64. You cannot specify this option along with [<i>SubNetMask</i>].
[<i>DefaultGateway</i>]	Specify the default gateway. You need to specify <i>IPAddress</i> .
[-monitor]	If you specify this option, <i>IPAddress</i> is configured as an IP address for management. You need to specify <i>IPAddress</i> .
[-hc <i>HostCount</i>]	Specify the number of hosts to create in a group, If you specify 2 or a greater number, a serial number from 1 is added to <i>HostName</i> . If you specify <i>IPAddress</i> , specify the value in the range that the IP address can be assigned.

[Syntax examples]

```
>ssc add ipaddress Category/group1 host001 2  
192.168.2.100 255.255.255.0  
>ssc add ipaddress Category/group1 host002 3  
192.168.3.100 255.255.255.0 192.168.3.1 -monitor  
>ssc add ipaddress Category/group1 host003 2  
192.168.2.200 255.255.255.0 -hc 3
```

2.11. Software

2.11.1. Adding Software

Adds software to a group (group or model), host or machine.
Software is added at a distribution point.

[Syntax]

```
ssc add software Path [-host HostName] -soft SoftwareName -point PointNumber
```

[Parameters and Options]

<p><i>Path</i> (Required)</p>	<p>Specify a path to group, model, or machine of Resource view to which you want to add software.</p> <p>(Setting Example) In the case of a group or a model (The view type is "operations:/") operations:/category1/group11/smartgroup101</p> <p>In the case of a resource group (The view type is "resource:/") resource:/rack/machineA</p> <p>You can omit View Type ("operations:/"). If you omit View Type, the specified path is treated as the path to the Operation view. If you specify -host, specify a path to a group name.</p>
<p>[-host <i>HostName</i>]</p>	<p>Specify a host name. Software is added to a specified host. You can specify this option when Path is specified a group path.</p>
<p>-soft <i>SoftwareName</i> (Required)</p>	<p>Specify software to be added.</p>
<p>-point <i>PointNumber</i> (Required)</p>	<p>Specify a distribution point of software to add.</p> <p>If you specify a group or a model, you can specify the following distribution point: <i>PointNumber</i>: A distribution point "1": Distributed when a machine is activated "2": Distributed when a machine is set to the standby state "3": Standby / after shutdown "4": Replacing a machine "5": Assigning a machine on group "6": Back up of the image "7": Restore of the image "8": Applying configuration of the logical machine "9": Release configuration of the logical machine</p> <p>If you specify a host, you can specify the following distribution point: <i>PointNumber</i>: A distribution point "1" : Operating / before group distribution "2" : Operating / distribution "3" : Operating / after group distribution "4" : Standby / before group distribution "5" : Standby / distribution "6" : Standby / after group distribution "7" : Standby / after shutdown</p>

- "8" : Replacing a machine
- "9" : Assigning a machine on group
- "10": Back up of the image
- "11": Restore of the image
- "12": Applying configuration of the logical machine
- "13": Release configuration of the logical machine

If you specify a machine, you can specify the following distribution point:

PointNumber: A distribution point

- "1": Operating / before group distribution
- "2": Operating / after group distribution
- "3": Standby / before group distribution
- "4": Standby / after group distribution
- "5": Standby / after shutdown
- "6": Create replica VM
- "7": Backup of the image
- "8": Restore of the image

[Syntax examples]

```
>ssc add software operations:/Category1/Group01 -soft Soft-001 -point 1
>ssc add software operations:/Category1/Group01/Model001 -soft Soft-002 -point 2
>ssc add software operations:/Group-A001 -host Host01 -soft Soft-001 -point 1
>ssc add software resource:/SmartGroup01/Machine-A -soft Soft-001 -point 5
```

2.11.2. Deploying Software

Deploys software to the specified machines.

[Syntax]

```
ssc deploy software < GroupName [HostName[...]] | < -name MachineName[...] |
-path path[...] | -uuid UUID[...] | -mac MAC[...] > > [-s SoftwareName[...]]
[-package [SoftwareName/][PackageName=]Option] [-packageresult] [-force] [-seq]
```

[Parameters and Options]

<i>GroupName</i>	Specify the target group name. Specify the path of the group or the model. You cannot specify a tenant or category. If <i>HostName</i> is specified, a group name must be specified for this option. (E.g. Category/Group/Model)
[<i>HostName</i>]	Specify the name of the activated host. Multiple hosts can be specified only when they are in the specified group (in <i>GroupName</i>). If you do not specify this option, all the hosts activated in the specified group are the targets.
-name <i>MachineName</i> -path <i>Path</i> -uuid <i>UUID</i> -mac <i>MAC</i>	Specify the target to distribute software. At least one of the following options must be specified: -name, -path, -uuid, -mac. Multiple parameters can be specified. -name : Specify the name of the machine. -path : Specify the path of the target. E.g. When specifying a machine, specify as follows: Operations view: operations:/Category/Group/Machine

	<p>Resource view: resource: /Group/Machine Group/Machine</p> <p>Virtual view: virtual: /VC/DC/VMS/VM</p> <p>When specifying group or rack, specify as follows: Resource view: resource: /Group/Rack Group/Rack</p> <p>Operations view: operations: /Category/Group</p> <p>-uuid : Specify the UUID of the machine. -mac : Specify the primary MAC address of the machine. When a view is not specified in -path, the specified path is treated as the path to the Resource view.</p>
<code>[-s SoftwareName]</code>	<p>Specify the software to be distributed. The specified software doesn't have to be registered in the group or host.</p> <p>Specify the software name displayed in the Resource view on the Web Console. (The value must be enclosed in double quotation marks.)</p> <p>Several pieces of software can be specified by separating the data with spaces.</p> <p>Regardless of the distribution status of the software registered to the group, only the specified software is distributed.</p> <p>If -name, -path, -uuid and -mac are specified, this option must be specified.</p>
<code>[-package [SoftwareName/] [PackageName=]Option]</code>	<p>Specify the options for each package. The software name must be specified for the -s option if you specify the options.</p> <p>SoftwareName/ : Specify the software to set options. Enter the value enclosing it in double quotation marks, and add a slash at the end of the software name to separate it from the package name. The value may be omitted if you specify only one software name in the -s option.</p> <p>PackageName= : Specify the package name to set options. Enter the value enclosing it in double quotation marks, and add an equal sign at the end of the package name to separate it from the option. The value may be omitted if specified software has one package.</p> <p>Option: Specify the option for the package in the software. The value must be enclosed in double quotation marks.</p>
<code>[-packageresult]</code>	Specify if you want to reflect the package execution result to the job execution result.
<code>[-force]</code>	Forcibly redistributes the software registered to the group (including already distributed software). This option is enabled if <i>SoftwareName</i> is not specified.
<code>[-seq]</code>	Distributes software sequentially (one by one in order). When you do not specify this option, the software is distributed all at once.

[Syntax examples]

```
Software is deployed to the whole group of operations view.
>ssc deploy software Category1/Group1
>ssc deploy software Category1/Group1 -s "Software [1]" "Patch-1"
>ssc deploy software Category1/Group1 -force
```

```
Software is deployed to the specified host of operations view.
>ssc deploy software Category1/Group1 Host01
>ssc deploy software Category1/Group1 Host01 Host02 Host03
>ssc deploy software Category1/Group1 Host01 Host02 Host03
-s "Software [1]" "Patch-1"
Software is deployed to the whole group of resource view.
>ssc deploy software -path resource:/VMGroup -s "Software [1]" "Patch-1" -seq
Software is deployed to the specified machine (specified name).
>ssc deploy software -name machine1 machine2 -s "Software [1]" "Patch-1"
Software is deployed to the specified machine (specified uuid).
>ssc deploy software -uuid 00B9771D-29BB-DB11-8001-003013B8F50D
-s "Software [1]" "Patch-1"
Software is deployed to the specified machine (specified MAC address).
>ssc deploy software -mac 00:31:13:B8:F6:1D -s "Software [1]" "Patch-1"
Software with option is deployed to the specified machine (specified name).
>ssc deploy software -name machine1 -s "Software [1]"
-package "Software [1]"/"Package1"="Option" -packageresult
```

2.12. Storage

2.12.1. Adding Storage

Adds storage to a group, model, or host in a group.
A disk volume of a disk array is added to a group, model or host.

[Syntax]

```
ssc add storage GroupName [HostName] DiskArrayName DiskVolumeName [-hbanum
HBANumber] [-lun LUNNumber] [-after] [<-hostip ExportIPAddress | -nicno
NicNumber>]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a group or model to which you want to add the storage, or specify a group including the host to which you want to add the storage. Specify a path to the group or model. You cannot specify a tenant or category. You cannot specify a model when you specify <i>HostName</i> (E.g. Category/Group, Group, Category/Group/Model).
[<i>HostName</i>]	Specify a name of the host to which you want to add storage.
<i>DiskArrayName</i> (Required)	Specify a disk array name.
<i>DiskVolumeName</i> (Required)	Specify a disk volume name. For NetApp storage and SMI-S services, the disk volume name is case-sensitive.
[-hbanum <i>HBANumber</i>]	Specify the HBA number to be connected. You can specify the range of the number from 1 to 9999. If you do not specify this option, the system connects to all HBA numbers. For NetApp storage, this option is invalid.
[-lun <i>LUNNumber</i>]	Specify a LUN number. You can specify zero or larger. If you specify a disk volume of EMC Symmetrix, you cannot specify this option. For NetApp storage and SMI-S services, this option is invalid.
[-after]	If specified, the system connects to storage after distribution. If you do not specify this option, the system connects to storage before distribution.
[-hostip <i>ExportIPAddress</i>]	Specify the IP address to be connected. You can specify the IP address set to host definitions. If you use DHCP, omit this option. In this case, the hostname is used. You can specify this option only when you add NetApp storage to host.
[-nicno <i>NicNumber</i>]	Specify the NIC number that has IP address to be connected. By entering the numerical values separated by "/" like "1/2", you can specify the second or later IP address you have assigned to the NIC. If you use DHCP, omit this option. In this case, the name of the host which is running on the specified group or model will be used. You can specify this option only when you add NetApp storage to group or model.

[Note]

- In the case of SigmaSystemCenter 3.0 update 1, the connection setting for NetApp storage was only after software distribution. In SigmaSystemCenter 3.1 or later, you can also specify before software distribution as with other storage devices. It is possible to specify whether storage connection is made before or after software distribution by the [-after] option.
- An unshared disk volume cannot be added to a host if the disk volume is already added to another host.
- Unshared disk volume cannot be added to the group or model.

[How to specify the setting target]

This command will add the storage settings to the group, model, or host. Setting target is specified as follows in how to specify the GroupName and HostName.

Setting target	Value of GroupName	Value of HostName
group	group name	-(omit)
model	model name	-(omit)
host	the name of the group to where the host belongs	host name

[Syntax examples]

```
>ssc add storage Category/group1 host001 DiskArray002 DiskVolume0102
  -hbanum 1 -lun 5 -after
>ssc add storage Category/group1 host001 DiskArray002 DiskVolume0103
>ssc add storage Category1/ESX esx200 DiskArray-002 Volume-001
  -hostip 10.34.11.4
```

2.12.2. Displaying Disk Array Path

Displays the disk array path.

[Syntax]

```
ssc show diskarraypath < DiskArrayName | < -machine [MachineName | -all |
  -unused] | -array [DiskArrayName] > [-vertical] > [-serialno SerialNumber]
```

[Parameters and Options]

<i>DiskArrayName</i>	Specify a disk array name.
-machine <i>[MachineName]</i>	Specify a machine name. If you do not specify the machine name, display the machine information of all.
[-all]	Display the path information of all. If you specify the -machine option, this option is valid. If you specify this option, also displays the path information not associated with machine.
[-unused]	Display the path information not associated with machine. If you specify the -machine option, this option is valid.
-array <i>[DiskArrayName]</i>	Specify a disk array name. If you do not specify the disk array name, display the disk array information of all.
[-vertical]	Specify a format. If you do not specify this option, the information is displayed in the csv format. If you specify -machine or -array option, this option is valid.

[-serialno
SerialNumber]

Specify a serial number of the disk array.
If there are multiple disk arrays with the same name,
specify a serial number.

[Syntax examples]

```
>ssc show diskarraypath CK200062700187
SG01 (CK200062700187/SP_A/0)
SG01 (CK200062700187/SP_A/1)
>ssc show diskarraypath -machine -all -vertical
[1]
MachineName      : w2k8r2-san1
Location         : 1
Address          : 2003-0030-130f-47e2
ControllerName   : WN:ldset_02
DiskArrayName    : s1400
Location         : 2
Address          : 2004-0030-130f-47e2
ControllerName   : WN:ldset_02
DiskArrayName    : s1400
[2]
MachineName      : rh6-san1
Location         : 1
Address          : 00:16:97:a7:fc:40
ControllerName   : 192.168.0.130
DiskArrayName    : Ontap81
Location         : 1
Address          : 2013-0030-130f-47fb/2003-0030-130f-47fb
ControllerName   : LX:ldset_01
DiskArrayName    : s1400
Location         : 1
Address          : 2013-0030-130f-47fb/2003-0030-130f-47fb
ControllerName   : SG01 (CK200062700187/SP_A/0)
DiskArrayName    : CK200062700187
Location         : 1
Address          : 2013-0030-130f-47fb/2003-0030-130f-47fb
ControllerName   : SG01 (CK200062700187/SP_A/1)
DiskArrayName    : CK200062700187
Location         : 2
Address          : 2014-0030-130f-47fb/2004-0030-130f-47fb
ControllerName   : LX:ldset_01
DiskArrayName    : s1400
[3]
MachineName      : w2012-san1
Location         : 1
Address          : 2000-0000-c956-5140
ControllerName   :
DiskArrayName    :
[4]
MachineName      : w2010-san1
[-]
MachineName      :
Location         :
Address          : 1000-0000-c956-c164
ControllerName   : DF:ldset_10
DiskArrayName    : s1400
[-]
MachineName      :
Location         :
Address          : 1000-0000-c956-c165
ControllerName   : DF:ldset_10
DiskArrayName    : s1400
>ssc show diskarraypath -machine -all
#MachineName,Location,Address,ControllerName,DiskArrayName
#w2k8r2-san1,"1","2003-0030-130f-47e2","WN:ldset_02","s1400"
#w2k8r2-san1,"2","2004-0030-130f-47e2","WN:ldset_02","s1400"
```

```

"rh6-san1", "1", "00:16:97:a7:fc:40", "192.168.0.130", "Ontap81"
"rh6-san1", "1", "2013-0030-130f-47fb/2003-0030-130f-47fb", "LX:ldset_01", "s1400"
"rh6-san1", "1", "2013-0030-130f-47fb/2003-0030-130f-47fb", "SG01 (CK200062700187/SP_A/"
"rh6-san1", "1", "2013-0030-130f-47fb/2003-0030-130f-47fb", "SG01 (CK200062700187/SP_A/"
"rh6-san1", "2", "2014-0030-130f-47fb/2004-0030-130f-47fb", "LX:ldset_01", "s1400"
"w2012-san1", "1", "2000-0000-c956-5140", "", ""
"w2010-san1", "", "", "", ""
"" "" "1000-0000-c956-c164", "DF:ldset_10", "s1400"
"" "" "1000-0000-c956-c165", "DF:ldset_10", "s1400"
>ssc show diskarraypath -array -vertical
[1]
DiskArrayName      : s1400
  ControllerName   : LX:ldset_01
  Location         : 1
  Address          : 2013-0030-130f-47fb/2003-0030-130f-47fb
  MachineName     : rh6-san1
  ControllerName   : WN:ldset_02
  Location         : 1
  Address          : 2003-0030-130f-47e2
  MachineName     : w2k8r2-san1
  ControllerName   : WN:ldset_02
  Location         : 2
  Address          : 2004-0030-130f-47e2
  MachineName     : w2k8r2-san1
  ControllerName   : DF:ldset_10
  Location         :
  Address          : 1000-0000-c956-c164
  MachineName     :
  ControllerName   : DF:ldset_10
  Location         :
  Address          : 1000-0000-c956-c165
  MachineName     :
  ControllerName   : WN:ldset_05
  Location         :
  Address          :
  MachineName     :
[2]
DiskArrayName      : CK200062700187
  ControllerName   : SG01 (CK200062700187/SP_A/0)
  Location         : 1
  Address          : 2013-0030-130f-47fb/2003-0030-130f-47fb
  MachineName     : rh6-san1
  ControllerName   : SG01 (CK200062700187/SP_A/1)
  Location         : 1
  Address          : 2013-0030-130f-47fb/2003-0030-130f-47fb
  MachineName     : rh6-san1
[3]
DiskArrayName      : Ontap81
  ControllerName   : 192.168.0.130
  Location         : 1
  Address          : 00:16:97:a7:fc:40
  MachineName     : rh6-san1
>ssc show diskarraypath -array
#DiskArrayName, ControllerName, Location, Address, MachineName
"s1400", "LX:ldset_01", "1", "2013-0030-130f-47fb/2003-0030-130f-47fb", "rh6-san1"
"s1400", "WN:ldset_02", "1", "2003-0030-130f-47e2", "w2k8r2-san1"
"s1400", "WN:ldset_02", "2", "2004-0030-130f-47e2", "w2k8r2-san1"
"s1400", "DF:ldset_10", "", "1000-0000-c956-c164", ""
"s1400", "DF:ldset_10", "", "1000-0000-c956-c165", ""
"s1400", "WN:ldset_05", "", "", ""
"CK200062700187", "SG01 (CK200062700187/SP_A/0)", "1", "2013-0030-130f-47fb/2003-0030-1
"CK200062700187", "SG01 (CK200062700187/SP_A/1)", "1", "2013-0030-130f-47fb/2003-0030-1
"Ontap81", "192.168.0.130", "1", "00:16:97:a7:fc:40", "rh6-san1"

```

2.12.3. Setting HBA

Sets an HBA to a disk array.

[Syntax]

```
ssc set hba DiskArrayName DiskArrayPath WWPN [-wwnn WWNN] [-serialno SerialNumber]
```

[Parameters and Options]

<i>DiskArrayName</i> (Required)	Specify the disk array name.
<i>DiskArrayPath</i> (Required)	Specify the disk array path.
<i>WWPN</i> (Required)	Specify the WWPN address.
[-wwnn <i>WWNN</i>]	Specify the WWNN address. It is required if the disk array type is "CLARiiON."
[-serialno <i>SerialNumber</i>]	Specify a serial number of a disk array. If there are multiple disk arrays with the same name, specify a serial number.

[Syntax examples]

```
>ssc set hba ck1000 "SG20(SP A/10.15.22.176/0)" 1000-0000-C96F-E240  
>ssc set hba CLARiiON+CK1000 SG20 1000-0000-C96F-E240 -wwnn 2000-0000-C96F-E240
```

[Note]

- This command can be used when the disk array type is CLARiiON, Symmetrix or SMI-S.
- Specify alphabets that are included in the *WWPN* and *WWNN* in uppercase.

2.12.4. Releasing HBA

Releases an HBA from a disk array.

[Syntax]

```
ssc release hba DiskArrayName DiskArrayPath WWPN [-wwnn WWNN] [-serialno SerialNumber]
```

[Parameters and Options]

<i>DiskArrayName</i> (Required)	Specify the disk array name.
<i>DiskArrayPath</i> (Required)	Specify the disk array path.
<i>WWPN</i> (Required)	Specify the WWPN address.
[-wwnn <i>WWNN</i>]	Specify the WWNN address. It is required if the disk array type is "CLARiiON."
[-serialno <i>SerialNumber</i>]	Specify the serial number of the disk array. If there are multiple disk arrays with the same name, specify a serial number.

[Syntax examples]

```
>ssc release hba CK100000 "SG20(SP A/10.15.22.176/0)" 1000-0000-C96F-E240  
>ssc release hba CLARiiON+CK100000 SG20 1000-0000-C96F-E240
```

[Note]

- This command can be used when the disk array type is CLARiION, Symmetrix or SMI-S.

2.12.5. Creating Disk Volume

Creates a disk volume.

[Syntax]

```
ssc create diskvolume DiskArrayName PoolId [-num DiskVolumeNumber] -capacity
Capacity [-name DiskVolumeName] [-type Type] [-serialno SerialNumber]
[-snapshot SnapshotReserve] [-thin | -thick] [-shared | -unshared]
```

[Parameters and Options]

<i>DiskArrayName</i> (Required)	Specify a disk array name.
<i>PoolId</i> (Required)	Specify a pool ID. For NetApp storage, specify a UUID.
[-num <i>DiskVolumeNumber</i>]	Specify a disk volume number. If you omit this option, the disk volume is automatically numbered. For NetApp storage and SMI-S services, this option is invalid.
-capacity <i>Capacity</i> (Required)	Specify a capacity in gigabytes (GB). The system area is not included in a capacity.
[-name <i>DiskVolumeName</i>]	Specify a disk volume name. If you specify the -type option, you cannot omit this option. If you omit this option, the disk volume is automatically named. For NetApp storage, you cannot omit this option. For NetApp storage and SMI-S services, the disk volume name is case-sensitive.
[-type <i>Type</i>]	Specify a disk volume type. Specify an operating system for host from the following Types: "WN" : Specify in the case of Windows (MBR). "WG" : Specify in the case of Windows (GPT). "LX" : Specify in the case of Linux. You can specify only a disk volume of NEC Storage. If you omit the -name option, you cannot specify this option.
[-serialno <i>SerialNumber</i>]	Specify a serial number of disk array. If there are multiple disk arrays with the same name, specify a serial number.
[-snapshot <i>SnapshotReserve</i>]	Specify a disk space for the volume snapshot. You can specify from 0 percent to 100 percent. If omitted, a disk space for the volume snapshot depends on the default value of the storage device. This option is valid for NetApp storage only.
[-thin -thick]	For CLARiION / VNX Specify when you create a LUN(Thin / Non-thin) for StoragePool. -thin: Create a Thin LUN. -thick: Create a Non Thin LUN. It is effective only in CLARiION / VNX with FLARE30 or later. If you omit this option, the LUN is created to RaidGroup. If you specify these options for RaidGroup, an error occurs. If you specify the option, the LUN is created to StoragePool.

	<p>If you omit this option for StoragePool, an error occurs.</p> <p>For SMI-S Services</p> <p>-thin: Create a Thin Provisioning volume.</p> <p>-thick: Create a normal(Non-thin Provisioning) volume.</p> <p>If you omit this option, you can create a normal volume.</p> <p>The behavior of creating a disk volume for a pool that does not support Thin Provisioning volume depends on the device.</p> <p>For other storage devices, these options will be ignored.</p>
[-shared -unshared]	<p>Specify a shared status of the disk volume.</p> <p>-shared: shared status</p> <p>-unshared: unshared status</p> <p>If omitted, the status is shared.</p>

[Note]

- For Symmetrix, this command is not supported.
- Creating disk volumes by Pool of Thin Provisioning is supported in FLARE30 or later (CLARiiON and VNX).
- Control volume (CV) is not supported (NEC Storage).
- Creating disk volumes by RANK is not supported (NEC Storage).
- When this command is executed with the name of disk volume specified but it fails, the disk volume may be created with the default name.
Update diskvolume name if needed.
- If *DiskVolumeName* is specified, check the specification of each storage for the available character strings.
- If you omit the *-type* option, the result will be following (NEC Storage).
 - In the case of S/D series, disk volume type is "LX".
 - In the case of M series, disk volume type is not specified.
- Creating disk volumes from Multi Tiered Pool is not supported (NEC Storage).
- For SMI-S services, the pool ID is case-sensitive.

[Syntax examples]

```
>ssc create diskvolume DiskArray-001 1 -capacity 200
>ssc create diskvolume DiskArray-001 1 -capacity 200 -name Volume-001
>ssc create diskvolume DiskArray-001 1 -capacity 200 -name Volume-001 -type lx
>ssc create diskvolume DiskArray-001 1 -capacity 200 -num 1
>ssc create diskvolume DiskArray-002 5e0a90ca-d9c6-11e0-8c89-005056b50006
  -capacity 5 -name Volume-001 -snapshot 0
>ssc create diskvolume DiskArray-001 1 -capacity 200 -name Volume-001 -thin
>ssc create diskvolume DiskArray-001 1 -capacity 200 -name Volume-001 -thick
>ssc create diskvolume DiskArray-001 1 -capacity 200 -unshared
```

2.12.6. Updating Disk Volume

Updates a disk volume.

[Syntax]

```
ssc update diskvolume DiskArrayName
<-num DiskVolumeNumber | -name DiskVolumeName>
[-serialno SerialNumber] <[-newname NewDiskVolumeName] [-type Type] [-tag
Tag...] [-shared | -unshared] [-managed | -unmanaged]>
```

[Parameters and Options]

<i>DiskArrayName</i> (Required)	Specify the disk array name, which exists the target disk volume.
-num <i>DiskVolumeNumber</i>	Specify a target disk volume number. For NetApp storage and SMI-S services, you cannot specify this option.

<code>-name <i>DiskVolumeName</i></code>	Specify a target disk volume name. For NetApp storage and SMI-S services, the disk volume name is case-sensitive.
<code>[-serialno <i>SerialNumber</i>]</code>	Specify a serial number of the target disk array. If there are multiple disk arrays with the same name, specify a serial number.
<code>[-newname <i>NewDiskVolumeName</i>]</code>	Specify the updated disk-volume name.
<code>[-type <i>Type</i>]</code>	Specify the updated disk-volume type. Specify an operating system for host from the following Types: "WN" : Specify in the case of Windows (MBR). "WG" : Specify in the case of Windows (GPT). "LX" : Specify in the case of Linux. If omitted, the disk volume type is not changed. However, there are some models that the disk volume type of them might be set to "LX". You can specify only a disk volume of NEC Storage.
<code>[-tag <i>Tag...</i>]</code>	Specify the tag to be updated. You can specify multiple tags.
<code>[-shared -unshared]</code>	Specify a shared status of the disk volume. -shared: shared status -unshared: unshared status
<code>[-managed -unmanaged]</code>	Specify a management status of the disk volume. -managed: managed status -unmanaged: unmanaged status

- All of `-newname`, `-type`, `-tag`, `-shared`, `-unshared`, `-managed` and `-unmanaged` option cannot be omitted.

[Note]

- In the case of Symmetrix and NetApp storage, volume name change (`-newname` specification) with this command is not supported.
- If you omit a `-type` option, the result will be following (NEC Storage).
 - If the type of target disk volume has already been specified
 - Not changed.
 - If the type of target disk volume has not been specified
 - In the case of S/D series, disk volume type is "LX".
 - In the case of M series, disk volume type is not specified and not changed.
- A blank cannot be included in a tag character string. A tag including spaces is not registered even though the tag character string, which is enclosed in double quotation marks and includes spaces, is set to the `-tag` option.

[Syntax examples]

```
>ssc update diskvolume DiskArray-001 -name Volume-001 -newname Volume-001-newname
>ssc update diskvolume DiskArray-001 -name Volume-001 -newname Volume-001-newname
>ssc update diskvolume DiskArray-001 -num 1 -newname Volume-001-newname -type lx
>ssc update diskvolume DiskArray-001 -name Volume-001 -newname Volume-001-newname
>ssc update diskvolume DiskArray-001 -name Volume-001 -shared -managed
```

2.12.7. Deleting Disk Volume

Deletes the disk volume.

[Syntax]

```
ssc delete diskvolume DiskArrayName < -num DiskVolumeNumber | -name DiskVolumeName > [-serialno SerialNumber]
```

[Parameters and Options]

<i>DiskArrayName</i> (Required)	Specify a disk array name.
-num <i>DiskVolumeNumber</i>	Specify a disk volume number. For NetApp storage and SMI-S services, you cannot specify this option.
-name <i>DiskVolumeName</i>	Specify a disk volume name. For NetApp storage and SMI-S services, the disk volume name is case-sensitive.
[-serialno <i>SerialNumber</i>]	Specify a serial number of the disk array. If there are multiple disk arrays with the same name, specify a serial number.

[Note]

- In the case of Symmetrix, this command is not supported.
- If the registry (HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\NEC\PVM\base\StrictMode\Storage) is not 0 (default value is 0)
 - The specified disk volume cannot be deleted if the disk volume is already assigned to a machine.
 - The specified disk volume cannot be deleted if the disk volume is already added to a group, model, or host in a group.

[Syntax examples]

```
>ssc delete diskvolume DiskArray-001 -name Volume-001
>ssc delete diskvolume DiskArray-001 -num 1
```

2.12.8. Assigning Disk Volume

Assigns a disk volume to the machine.

[Syntax]

```
ssc assign diskvolume <GroupName | MachineName> DiskArrayName <-num
DiskVolumeNumber... | -name DiskVolumeName...> [-ostype OperatingSystemType]
[-lun LUN] [-hbanumber HBANumber...] [-serialno SerialNumber] [-hostip
ExportIPAddress] [-host HostName] [-force]
```

[Parameters and Options]

<i>GroupName</i>	Specify the group to be assigned. Or specify the path to the group. You cannot specify a tenant, category or model. E.g.) Category/Group, Group
<i>MachineName</i>	Specify the path to the machine to be assigned. E.g.) Operations view: operations:/category/group/host Resource view: resource:/group/machine
<i>DiskArrayName</i> (Required)	Specify a disk array name.
-num <i>DiskVolumeNumber</i>	Specify a disk volume number to be assigned. You can specify multiple numbers. For NetApp storage and SMI-S services, you cannot specify this option.
-name <i>DiskVolumeName</i>	Specify a disk volume name to be assigned. You can specify multiple names. For NetApp storage and SMI-S services, the disk volume name is case-sensitive.

<p><code>[-ostype <i>OperatingSystemType</i>]</code></p>	<p>Specify the operating system of the host by the following Types: "WN": Specify in the case of Windows. "LX": Specify in the case of Linux. For NEC storage and SMI-S services, this option is valid. If you specify the machine that is running in an operation group, you do not need to specify this item.</p>
<p><code>[-lun <i>LUN</i>]</code></p>	<p>Specify an LUN number. If you do not specify this option, an LUN is automatically numbered. The value more than or equal to 0 can be specified for this option. If you want to specify multiple disk volumes, specify the start number for this option. For NetApp storage and SMI-S services, this option is invalid.</p>
<p><code>[-hbanumber <i>HBA Number</i>]</code></p>	<p>Specify an HBA number to be assigned. Specify a value in the range of 0-9999. If you do not specify this option, the system connects to all HBAs. For NetApp storage, this option is invalid.</p>
<p><code>[-serialno <i>SerialNumber</i>]</code></p>	<p>Specify a serial number of disk array. If there are multiple disk arrays with the same name, specify a serial number.</p>
<p><code>[-hostip <i>ExportIP Address</i>]</code></p>	<p>Specify an IP address to be assigned. You can specify the IP address set to host definition. If you use DHCP, do not specify this option. In this case, the host name is used. Only NetApp storage you can specify this option. If you specify a group name, do not use this option.</p>
<p><code>[-host <i>Host Name</i>]</code></p>	<p>Specify the host name of the target. If you specify this option, specify the operation group for MachineName. Specify this option if there is a model with the same name as the target host.</p>
<p><code>[-force]</code></p>	<p>Assign an unshared disk volume mandatorily to a specified machine even though the disk volume is already assigned to another machine.</p>

[Note]

- For Symmetrix, this command is not supported.
- For CLARiiON and NetApp storage, this command can be executed only to the running machine.
- If you specify the group with NetApp storage, the host name in the group is used. If you specify the group with the `-hostip` option, the disk volume is only assigned to the machine with the specified IP address.

[Syntax examples]

```

>ssc assign diskvolume machine001 DiskArray-001 -name Volume-001
>ssc assign diskvolume machine002 DiskArray-001 -name Volume-001 -force
>ssc assign diskvolume machine001 DiskArray-001 -num 1
>ssc assign diskvolume machine001 DiskArray-001
  -name Volume-001 Volume-002 Volume-003 -lun 0 -hbaNumber 1
>ssc assign diskvolume machine001 DiskArray-001 -name Volume-001 -ostype lx
>ssc assign diskvolume VmServer-g/esx/esx10 DiskArray-002 -name Volume-001
  -hostip 10.34.11.4
>ssc assign diskvolume VmServer-g/esx DiskArray-002 -name Volume-002

```

2.12.9. Releasing Disk Volume

Releases a disk volume from the machine.

[Syntax]

```
ssc release diskvolume <GroupName | MachineName> DiskArrayName <-num
DiskVolumeNumber... | -name DiskVolumeName...> [-hbanumber HbaNumber...]
[-serialno SerialNumber] [-host HostName] [-force] [-nondetach]
```

[Parameters and Options]

<i>GroupName</i>	Specify the group to be released. Or specify the path to the group. You cannot specify a tenant, category or model. E.g.) Category/Group, Group
<i>MachineName</i>	Specify the path to the machine. E.g.) In the Operations view: operations:/category/group/host In the Resource view: resource:/group/machine
<i>DiskArrayName</i> (Required)	Specify the disk array name.
-num <i>DiskVolumeNumber</i>	Specify the disk volume number. You can specify multiple numbers. For NetApp storage and SMI-S services, you cannot specify this option.
-name <i>DiskVolumeName</i>	Specify the disk volume name. You can specify multiple names. For NetApp storage and SMI-S services, the disk volume name is case-sensitive.
[-hbanumber <i>HbaNumber</i>]	Specify the HBA number. Specify the value in the range of 0-9999. If you do not specify this option, the system disconnects all HBAs from the machine. For NetApp storage, this option is invalid.
[-serialno <i>SerialNumber</i>]	Specify the serial number of the disk array. If there are multiple disk arrays with the same name, specify a serial number.
[-host <i>HostName</i>]	Specify the host name of the target. If you specify this option, specify the operation group for <i>GroupName</i> . Specify this option if there is a model with the same name as the target host.
[-force]	Release a disk volume mandatorily from a running machine.
[-nondetach]	Detachment from the disk managed by the virtualization infrastructure is not executed.

[Note]

- For Symmetrix, this command is not supported.
- For CLARiiON, this command can be executed only to the running machine.
- The allocation release of the disk volume is executed even when failing in the separation (detach) to the disk volume managed by the virtualization infrastructure.
- If the following registry is not 0 (default value is 0), the disk volume cannot be released from the running machine. If you want to release the disk volume, you have to specify `-force` option.

```
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\NEC\PVM\base\StrictMode\Storage
```

[Syntax examples]

```
>ssc release diskvolume machine001 DiskArray-001 -name Volume-001
>ssc release diskvolume machine001 DiskArray-001 -num 1
>ssc release diskvolume machine001 DiskArray-001
  -name Volume-001 Volume-002 Volume-003 -hbaNumber 1
>ssc release diskvolume machine001 DiskArray-001 -name Volume-001 -force
>ssc release diskvolume VmServer-g/esx DiskArray-002 -name Volume-002
```

2.12.10. Displaying Disk Volume

Displays the disk volume information.

[Syntax]

```
ssc show diskvolume DiskArrayName [-num DiskVolumeNumber | -name
DiskVolumeName] [-serialno SerialNumber] [-vertical]
```

[Parameters and Options]

<i>DiskArrayName</i> (Required)	Specify the disk array name.
[-num <i>DiskVolumeNumber</i>]	Specify the disk volume number to display the disk volume information. If you do not specify this option, all disk volumes are displayed. For NetApp storage and SMI-S services, this option is invalid.
[-name <i>DiskVolumeName</i>]	Specify the disk volume name to display the disk volume information. If you do not specify this option, all disk volume is displayed. For NetApp storage and SMI-S services, disk volume names are case-sensitive.
[-serialno <i>SerialNumber</i>]	Specify the serial number of the disk array. If there are multiple disk arrays with the same name, specify a serial number.
[-vertical]	Specify a format. If you do not specify this option, the information is displayed in the csv format.

[Syntax examples]

```
>ssc show diskvolume DiskArray-001
>ssc show diskvolume DiskArray-001 -vertical
>ssc show diskvolume DiskArray-001 -name Volume-001
>ssc show diskvolume DiskArray-001 -name Volume-001 -vertical
>ssc show diskvolume DiskArray-001 -num 1
```

[Display examples]

```
>ssc show diskvolume DiskArray-001 -vertical
[DiskVolume-01]
DiskVolumeName      : Volume-001
DiskVolumeNumber    : 1
UniqueId            : 20000030138400540000
DiskVolumeSize (GB) : 250.0
Type                : LX
Format              : -
ConsumedCapacity (GB) : 12.8
Tag                 : Gold
```

```
[DiskVolume-02]
DiskVolumeName      : Volume-002
DiskVolumeNumber    : 2
UniqueId            : 20000030138400540001
DiskVolumeSize (GB) : 250.0
Type                : LX
Format              : 20%
Tag                 : Silver
```

```
>ssc show diskvolume DiskArray-001
#DiskVolumeName, DiskVolumeNumber, UniqueId, DiskVolumeSize (GB), Type, Format, ConsumedC
"Volume-001", "1", "20000030138400540000", "250.0", "LX", "-", "12.8", "Gold"
"Volume-002", "2", "20000030138400540001", "250.0", "LX", "-", "", "Silver"
```

```
>ssc show diskvolume DiskArray-001 -name Volume-001 -vertical
[DiskVolume-01]
DiskVolumeName      : Volume-001
DiskVolumeNumber    : 1
UniqueId            : 20000030138400540000
DiskVolumeSize (GB) : 250.0
Type                : LX
Format              : -
ConsumedCapacity (GB) : 12.8
Tag                 : Gold
```

```
>ssc show diskvolume DiskArray-001 -name Volume-001
#DiskVolumeName, DiskVolumeNumber, UniqueId, DiskVolumeSize (GB), Type, Format, ConsumedC
"Volume-001", "1", "20000030138400540000", "250.0", "LX", "-", "12.8", "Gold"
```

```
>ssc show diskvolume DataONTAP -name vol1 -vertical
[DiskVolume-01]
DiskVolumeName      : vol1
DiskVolumeNumber    : 0
UniqueId            : 07c0cfc2-e187-11e0-8682-000c2989b168
DiskVolumeSize (GB) : 0.0
Type                : -
Format              : -
Tag                 : Bronze
```

[Note]

- For Symmetrix, this command is not supported.
- "Type" shows WN, WG, LX or "-" (NEC Storage). "Type" shows Thin, Thick or "-" (other storage devices).
- "Format" shows the rate of the format progression of disk volume (NEC Storage).
 - In CLARiiON, NetApp storage and SMI-S services, this always shows "-".
- Only Virtual volume displays ConsumedCapacity.

2.12.11. Displaying Storage Pool

Displays the storage pool information.

[Syntax]

```
ssc show storagepool DiskArrayName [-num PoolId] [-serialno SerialNumber]
[-vertical]
```

[Parameters and Options]

<i>DiskArrayName</i> (Required)	Specify the disk array name.
------------------------------------	------------------------------

[-num <i>PoolId</i>]	Specify the pool ID. Displays the storage pool information of the specified pool ID and the information of the disk volume located under the storage pool. If you do not specify this option, all storage pools are displayed. For NetApp storage, specify a UUID.
[-serialno <i>SerialNumber</i>]	Specify the serial number of the disk array. If there are multiple disk arrays with the same name, specify a serial number.
[-vertical]	Specify a format. If you do not specify this option, the information is displayed in the csv format.

- Value of PoolType

Basic	Basic Pool (NEC Storage), RaidGroup (CLARiiON and VNX), Aggregate (NetApp)
Dynamic	Dynamic Pool (NEC Storage)
Thin	Thin Pool (NEC Storage), StoragePool (CLARiiON and VNX), Thin Pool (SMI-S services)
Hybrid	Multi Tiered Pool (NEC Storage)
-	except Thin Pool (SMI-S services)

[Note]

- For Symmetrix, this command is not supported.
- RANK is not supported. (NEC Storage)

[Syntax examples]

```
>ssc show storagepool DiskArray-001
>ssc show storagepool DiskArray-001 -vertical
>ssc show storagepool DiskArray-001 -num 1
>ssc show storagepool DiskArray-001 -num 1 -vertical
```

[Display examples]

```
>ssc show storagepool DiskArray-001 -vertical
[StoragePool-01]
StoragePoolName      : Pool-001
StoragePoolId        : 1
Capacity (GB)        : 20480.0
FreeCapacity (GB)    : 20255.5
PhysicalCapacity (GB) : 1066.8
ConsumedCapacity (GB) : 21.5
PoolType              : Thin
Tag                   : Gold
[StoragePool-02]
StoragePoolName      : Pool-002
StoragePoolId        : 2
Capacity (GB)        : 130.5
FreeCapacity (GB)    : 130.5
PoolType              : Dynamic
Tag                   : Silver
[StoragePool-03]
StoragePoolName      : Pool-003
StoragePoolId        : 3
Capacity (GB)        : 4096.0
FreeCapacity (GB)    : 1024.0
PoolType              : Hybrid
Tag                   :
```

```
>ssc show storagepool DiskArray-001
```



```
#StoragePoolName,StoragePoolId,Capacity (GB),FreeCapacity (GB),PhysicalCapacity (GB)
"Pool-001","1","20480.0","20255.5","1066.8","21.5","Thin","Gold"
"Pool-002","2","130.5","130.5","","","Dynamic","Silver"
"Pool-003","3","4096.0","1024.0","","","Hybrid", ""
```

```
>ssc show storagepool DiskArray-001 -num 1 -vertical
[StoragePool-01]
StoragePoolName      : Pool-001
StoragePoolId        : 1
Capacity (GB)        : 20480.0
FreeCapacity (GB)    : 20255.5
PhysicalCapacity (GB) : 1066.8
ConsumedCapacity (GB) : 21.5
PoolType              : Thin
Tag                   : Gold
[DiskVolume-01]
DiskVolumeName       : Volume-001
DiskVolumeNumber     : 1
Tag                   : Gold
[DiskVolume-02]
DiskVolumeName       : Volume-002
DiskVolumeNumber     : 2
Tag                   : Gold
```

```
>ssc show storagepool DiskArray-001 -num 1
[StoragePool]
#StoragePoolName,StoragePoolId,Capacity (GB),FreeCapacity (GB),PhysicalCapacity (GB)
"Pool-001","1","20480.0","20255.5","1066.8","21.5","Thin","Gold"
[Diskvolume]
#DiskVolumeName,DiskVolumeNumber,Tag
"Volume-001","1","Gold"
"Volume-002","2","Gold"
```

```
>ssc show storagepool dataontap -vertical
[StoragePool-01]
StoragePoolName      : aggr0
StoragePoolId        : 786e2870-c3ee-11e0-a56c-005056b50006
Capacity (GB)        : 0.8
FreeCapacity (GB)    : 0.0
PoolType              : Basic
Tag                   : Gold
[StoragePool-02]
StoragePoolName      : aggr1
StoragePoolId        : 8f5700ca-c641-11e0-8ca2-005056b50006
Capacity (GB)        : 0.8
FreeCapacity (GB)    : 0.3
PoolType              : Basic
Tag                   : Silver
[StoragePool-03]
StoragePoolName      : aggr2
StoragePoolId        : 5e0a90ca-d9c6-11e0-8c89-005056b50006
Capacity (GB)        : 2.5
FreeCapacity (GB)    : 2.5
PoolType              : Basic
Tag                   : Bronze
```

[Note]

- Only Virtual Provisioning Pool displays PhysicalCapacity and ConsumedCapacity.

2.12.12. Displaying Information of Disk for RDM

Displays information of disk for RDM

[Syntax]

```
ssc rdmstorage show -vms VmsName [-vertical]
```

[Parameters and Options]

-vms <i>VmsName</i> (Required)	Specify a target virtual machine server name in a full path.
[-vertical]	The output form is changed. (item : value) When omitting, it outputs by a CSV format.

[Syntax examples]

```
>ssc rdmstorage show -vms vc1/datacenter1/esx1  
>ssc rdmstorage show -vms vc1/datacenter1/esx1 -vertical
```

2.12.13. Updating the Use or the Status of the RDM Disk

Updates the use or the status of the RDM Disk.

[Syntax]

```
ssc rdmstorage update <[rdm | none | clean] | [-tag Tag... [-overwrite]]>  
-vms VmsName [-size Size | -id UniqueId | -name LunName]
```

[Parameters and Options]

[rdm none clean]	Specify the operation from the following: rdm : Sets the ordinary disk to the disk for RDM. none : Removes the 'unused' or 'used' disk from the RDM usage. clean : Changes the status of 'used' disk to 'unused'.
[-tag <i>Tag...</i>]	Specify tags for the target disk. You can specify multiple tags. If you do not specify the -overwrite option, LUNs that have tags already are not selected. If you specify "-tag" only without specifying "Tag", the tag information already set to the tag will be deleted.
[-overwrite]	Specified tags is overwritten. This option is enabled if you specify the -tag option.
-vms <i>VmsName</i> (Required)	Specify the full path of the target virtual machine server.
[-size <i>Size</i>]	Specify the allocation size of the target disk.
[-id <i>UniqueId</i>]	Specify the unique Id of the target disk.
[-name <i>LunName</i>]	Specify the LUN name of the target disk.

[Note]

- Specifying a virtual machine server only:
All LUNs (except datastore) connected to the virtual machine server will become the target.
- Virtual machine server + size specifying:
The disk with the specified allocation size connected to the virtual machine server will become the target.
- Virtual machine server + UniqueId specifying:
The disk with the specified UniqueId connected to the virtual machine server will become the target.
- Virtual machine server + LUN name specifying:
If the -id / -name option is specified at the same time when the -tag option is specified,
the disks to which the Tag is already specified are also overwritten whether the -overwrite option is specified or not.

- Tags is overwritten whether `-overwrite` option is specified or not, if you specify `-tag`, `-id` and `-name` option dynamically.

[Syntax examples]

```
>ssc rdmstorage update rdm -vms vc1/datacenter1/esx1
>ssc rdmstorage update rdm -vms vc1/datacenter1/esx1 -size 50
>ssc rdmstorage update rdm -vms vc1/datacenter1/esx1 -id 20000030138400540000
>ssc rdmstorage update rdm -vms vc1/datacenter1/esx1
  -name "NEC Fibre Channel Disk (eui.003013840e640021)"
>ssc rdmstorage update none -vms vc1/datacenter1/esx1
>ssc rdmstorage update clean -vms vc1/datacenter1/esx1
>ssc rdmstorage update -vms 192.168.1.10/DC/192.168.1.20 -tag bronze
>ssc rdmstorage update -vms 192.168.1.10/DC/192.168.1.20 -tag gold -size 20 -over
>ssc rdmstorage update -vms 192.168.1.10/DC/192.168.1.20 -tag gold -id 003013840e
```

2.12.14. Displaying Storage Topology

Displays the storage topology information.

[Syntax]

```
ssc show storagetopology DiskArrayName

  [-poolid PoolId | -num DiskVolumeNumber | -name DiskVolumeName]
  [-serialno SerialNumber]
  [-all]
```

[Parameters and Options]

<i>DiskArrayName</i> (Required)	Specify a disk array name.
[-poolid PoolId]	Specify a pool ID to display the storage topology information for it. For NetApp storage, specify a UUID.
[-num DiskVolumeNumber]	Specify a disk volume number to display the storage topology information for it. For NetApp storage and SMI-S services, this option is invalid.
[-name DiskVolumeName]	Specify a disk volume name to display the storage topology information for it. For NetApp storage and SMI-S services, disk volume name is case-sensitive.
[-serialno SerialNumber]	Specify the serial number of a disk array. If there are multiple disk arrays with the same name, specify a serial number.
[-all]	All the storage topology information is displayed. If you do not specify this option, only the storage topology information on the managed resource is displayed.

[Environment which storage topology supports]

The environments which this command supports are as follows.

	VMWare	Hyper-V	KVM	Xen
NEC Storage	o	o	x	x
CLARiiON	o	o	x	x
Symmetrix	x	x	x	x
NetApp	o	x	o	x

[Syntax examples]

```
To display the storage topology information on the managed resource only:  
>ssc show storagetopology M100  
To display the storage topology information on all resources:  
>ssc show storagetopology M100 -all
```

[Display examples]

```
>ssc show storagetopology m100  
#DiskArrayName, StoragePoolId, StoragePoolName, DiskVolumeName, DiskVolumeNumber, DiskV  
"M100", "1", "Pool0001", "st_LD02", "10", "LD", "Managed", "-", " ", " ", " ", " ", " ", " ", " ", " ", " ", " "  
"M100", "1", "Pool0001", "TopoLD04", "22", "Datastore", "Managed", "-", "[HVC]cluster", "C:¥C  
"M100", "1", "Pool0001", "TopoLD04", "22", "Datastore", "Managed", "-", "[HVC]cluster", "C:¥C  
"M100", "2", "Pool0002", "st_LD00", "23", "LD", "Managed", "-", " ", " ", " ", " ", " ", " ", " ", " ", " ", " "  
"M100", "2", "Pool0002", "st_LD01", "8", "LD", "Managed", "-", " ", " ", " ", " ", " ", " ", " ", " ", " ", " "  
"M100", "0", "SystemPool", "Yamato2DataStore", "7", "LD", "Managed", "-", " ", " ", " ", " ", " ", " ", " ", " ", " ", " "
```

[Note]

- When “-all” is omitted, only the managed resource is displayed.
 - When the disk volume is not a managed resource, it is not outputted to a command execution result.
 - When the virtual machine server is not a managed resource, the information from the disk array to the disk volume is outputted.
 - When the virtual machine is not a managed resource, the information from the disk array to the virtual machine server is outputted.
 - When the physical machine is not a managed resource, the information from the disk array to the disk volume is outputted.

2.12.15. Updating Storage Pool

Updates a storage pool.

[Syntax]

```
ssc update storagepool DiskArrayName PoolId  
-tag Tag... [-pooltype StoragePoolType] [-serialno SerialNumber]
```

[Parameters and Options]

<i>DiskArrayName</i> (Required)	Specify a disk array name.
<i>PoolId</i> (Required)	Specify a pool ID. For NetApp storage, specify a UUID.
-tag <i>Tag...</i> (Required)	Specify the tag to be updated. You can specify multiple tags.
[-pooltype <i>StoragePoolType</i>]	Specify a pool type of a storage pool. Specify this option when a storage pool cannot be identified uniquely with PoolId.
[-serialno <i>SerialNumber</i>]	Specify a serial number of disk array. If there are multiple disk arrays with the same name, specify a serial number.

[Note]

- A blank cannot be included in a tag character string. A tag including spaces is not registered even though the tag character string, which is enclosed in double quotation marks and includes spaces, is set to the -tag option.
- Pool ID is case-sensitive.

[Syntax examples]

```
>ssc update storagepool DiskArray-001 1 -tag tag1 tag2 tag3
```

2.12.16. Displaying Disk Array

Displays the disk array information.
The list is output in the csv format (in one line divided with commas).

[Syntax]

```
ssc show diskarray [-vertical]
```

[Parameters and Options]

[-vertical]	Specify the display format. (Format = Item name : Value) If you do not specify this option, information is displayed in the csv format.
-------------	--

[Syntax examples]

```
>ssc show diskarray  
>ssc show diskarray -vertical
```

2.13. Network

2.13.1. Adding VLAN

Adds a network setting to a group.

[Syntax]

```
ssc group set-network GroupName NicNumber <SwitchName VlanName | -network Networkname> [-tag <on | off>]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a path to the group or model. You cannot specify the vm group and vm model. (E.g. <i>Category/Group, Group/Model</i>)
<i>NicNumber</i> (Required)	Specify a NIC number in the range of 1 to 10.
<i>SwitchName</i>	Specify a switch name.
<i>VlanName</i>	Specify a VLAN name.
-network <i>Network</i>	Specify network name.
[-tag <on off>]	Configures the tag information. "on": A VLAN is tagged "off": A VLAN is untagged If you do not specify this option, "off" is set to the tag setting.

[Syntax examples]

```
>ssc group set-network Category/group1 2 SW003 VLAN0102  
>ssc group set-network Category/group1 3 SW003 VLAN0103 -tag on  
>ssc group set-network -network Network1
```

2.13.2. Creating Network

Creates a network.

[Syntax]

```
ssc network create NetworkName [-scope < public | private >] [-tenant TenantName] [-tag value] [-description value]
```

[Parameters and Options]

<i>NetworkName</i> (Required)	Specify a network name.
[-scope < public private >]	Set the open range. By default, public is set.
[-tenant <i>TenantName</i>]	Specify the tenant to be published. If public is set for -scope, this option cannot be specified.
[-tag <i>value</i>]	Specify a tag.
[-description <i>value</i>]	Enter a description.

[Syntax examples]

```
>ssc network create VMNetwork1
```

```

>ssc network create VMNetwork1 -scope public
>ssc network create VMNetwork1 -scope private
>ssc network create VMNetwork1 -tenant Tenant1
>ssc network create VMNetwork1 -scope private -tenant Tenant1
>ssc network create VMNetwork1 -scope public -tag resource -description cloud

```

2.13.3. Adding VLAN (Port Group) Definition

Adds a VLAN (a port group) definition to the network.

[Syntax]

```

ssc network add-vlan NetworkName SwitchType [SwitchName] -vlanname VlanName
[-vlantype <vlan | private>] [-vlanid VlanId [secondaryId]]

```

[Parameters and Options]

<i>NetworkName</i> (Required)	Specify a network name.
<i>SwitchType</i> (Required)	Specify the type of switch. Physicals : All physical switches Physical : Physical Switch Virtual : Virtual Switch Distributed : Distributed Switch
[<i>SwitchName</i>]	Specify a switch name. If SwitchType is Physicals, this option cannot be specified. If SwitchType is Physical or Distributed, this option must be specified.
-vlanname <i>VlanName</i>	Specify the name of vlan.
[-vlantype <vlan private>]	Specify a vlan type. If SwitchType is Physicals or Physical, this option must be specified. vlan : VLAN private : private VLAN If VlanName already exists in the specified switch, this option can be omitted.
[-vlanid <i>VlanId</i> [<i>secondaryId</i>]]	Specify a vlan id. SecondaryId can be specified if the VLAN is a private VLAN. If SwitchType is Physicals or Physical, this option must be specified. If VlanName already exists in the specified switch, this option can be omitted.

[Syntax examples]

```

>ssc network add-vlan VMNetwork1 Virtual dvSwitch -vlanname vPortGroup
-vlantype vlan -vlanid 1
>ssc network add-vlan VMNetwork1 Physical Switch1 -vlanname PortGroup
-vlantype private -vlanid 100 101
>ssc network add-vlan VMNetwork1 Virtual -vlanname vPortGroup
-vlantype vlan -vlanid 1

```

2.13.4. Adding Address Pool

Adds an address pool to the network.

[Syntax]

```

ssc network add-addresspool NetworkName RangeName StartIP [EndIP] [Division]
[-manage <off | on>] [-public StartIP EndIP] [-subnetmask SubnetMask |

```

`-prefixlength PrefixLength` [`-gateway Gateway`]

[Parameters and Options]

<i>NetworkName</i> (Required)	Specify the network name.
<i>RangeName</i> (Required)	Specify the IP address range name.
<i>StartIP</i> [<i>EndIP</i>]	Specify the range of IP addresses. When you specify a specific address, you can specify <i>StartIP</i> only. (Enabled if <i>Division</i> is set to "exclude")
[<i>Division</i>]	Specify the division. assign: assigning exclude: excluding If omitted, <i>Division</i> is set to "assign".
[<code>-manage <off on></code>]	Specify whether the IP address is for management or not. If omitted, the value is set to "off." (When the IPv4 address is registered, it is effective.)
[<code>-public <i>StartIP EndIP</i></code>]	Specify the range of public IP addresses. If this option is specified, the NAT conversion address range corresponding to the range of public IP addresses can be set. (When the IPv4 address is registered, it is effective.)
[<code>-subnetmask <i>SubnetMask</i></code>]	Specify the subnet mask. If omitted, the subnet mask is set to "255.255.255.0". (When the IPv4 address is registered, it is effective.)
[<code>-prefixlength <i>PrefixLength</i></code>]	Specify the prefix length. If omitted, the prefix length is set to "64". (When the IPv6 address is registered, it is effective.)
[<code>-gateway <i>Gateway</i></code>]	Specify the default gateway.

[Syntax examples]

```
>ssc network add-addresspool VMNet privateRange 192.168.1.1 192.168.1.255 assign
  -manage off -public 192.168.1.1 192.168.1.10 -subnetmask 255.255.127.0
  -gateway 192.168.1.0
>ssc network add-addresspool VMNet privateRange 2001:dbf8::100 2001:dbf8::ffff
  -prefixlength 64
>ssc network add-addresspool VMNet privateRange 192.168.1.1 exclude
```

2.13.5. Creating Port Group

Creates a port group on the specifying switch (*NetworkDevice*).

[Syntax]

```
ssc portgroup create PortGroupName NetworkDeviceName Path VlanType [primary]
  [secondary]
```

[Parameters and Options]

<i>PortGroupName</i> (Required)	Specify the name of the port group to create.
<i>NetworkDeviceName</i> (Required)	Specify the switch name on which the port group is created.
<i>Path</i> (Required)	Specify the virtual or resource path of the virtual machine server or the datacenter in which the switch exists. When operating the virtual switch, a virtual machine server is

	<p>specified. Virtual view : virtual:/VC1/DataCenter1/VMServer1 Resource view : resource:/Group1/VMServer1 When operating the distributed virtual switch, a datacenter is specified. Virtual view : virtual:/VC1/DataCenter1/ (You can omit View Type ("virtual:/"). If you omit View Type, the specified path is treated as the path to the Virtual view.)</p>
<i>VlanType</i> (Required)	<p>Specify VLAN Type. VLAN type includes the following 3 types. none vlan private</p>
[<i>primary</i>]	<p>Specify VLANID(PrimaryID). When VLAN type is "vlan", it's possible to specify 2-4094. When VLAN type is "private", it's possible to specify 1-4094.</p>
[<i>secondary</i>]	<p>Specify SecondaryId. It's possible to specify 1-4094.</p>

When "none" is specified as the VLAN type, both *primary* and *secondary* are not required to be specified.
When "vlan" is specified as the VLAN type, specify *primary*.
When "private" is specified as the VLAN type, both *primary* and *secondary* must be specified.
Specify *PortGroupName* with up to 100 characters. If 101 or more characters are used, the command ends abnormally.
When symbols ¥ / : . ; * ? < > | are specified as the prohibition characters, the command ends abnormally.

[Syntax examples]

```
>ssc portgroup create vPortGroup1 vSwitch1
VC1/DataCenter1/VMServer1 none
>ssc portgroup create vPortGroup2 vSwitch1
virtual:/VC1/DataCenter1/VMServer1 vlan 2
>ssc portgroup create vPortGroup3 vSwitch1
resource:/Group1/VMServer1 private 1 2
>ssc portgroup create dvPortGroup1 dvSwitch1
virtual:/VC1/DataCenter1 vlan 2
```

2.13.6. Deleting Port Group

Deletes a port group on the specifying switch (NetworkDevice).

[Syntax]

```
ssc portgroup delete PortGroupName NetworkDeviceName Path
```

[Parameters and Options]

<i>PortGroupName</i> (Required)	Specify the deleting port group name.
<i>NetworkDeviceName</i> (Required)	Specify the switch name which the port group is deleted from.
<i>Path</i> (Required)	<p>Specify virtual or resource path of the virtual machine server or the datacenter which the switch exists. When operating the virtual switch, a virtual machine server is specified. Virtual view : virtual:/VC1/DataCenter1/VMServer1 Resource view : resource:/Group1/VMServer1 When operating the distributed virtual switch, a datacenter is specified.</p>

Virtual view : virtual:/VC1/DataCenter1/
 (You can omit View Type ("virtual:/").
 If you omit View Type, the specified path is treated as the path to the Virtual view.)

[Syntax examples]

```
>ssc portgroup delete vPortGroup1 vSwitch1 VC1/DataCenter1/VMServer1
>ssc portgroup delete vPortGroup2 vSwitch1 virtual:/VC1/DataCenter1/VMServer1
>ssc portgroup delete vPortGroup3 vSwitch1 resource:/Group1/VMServer1
>ssc portgroup delete dvPortGroup1 dvSwitch1 virtual:/VC1/DataCenter1
```

2.13.7. Displaying Port Group

Displays a port group list.

[Syntax]

```
ssc portgroup show Path [-private] [-bandcontrol] [-vertical]
```

[Parameters and Options]

<i>Path</i> (Required)	When you want to display a port group list of the virtual switch, specify the virtual or resource path of the virtual machine server. Virtual view : virtual:/VC1/DataCenter1/VMServer1 Resource view : resource:/Group1/VMServer1 When you want to display a port group list of the distributed virtual switch, specify the datacenter in which the switch exists. Virtual view : virtual:/VC1/DataCenter1/ (You can omit View Type ("virtual:/"). If you omit View Type, the specified path is treated as the path to the Virtual view.)
[-private]	Displays the private VLAN list when this option is specified.
[-bandcontrol]	Displays the Network Band Control information when specify this option.
[-vertical]	Specify format. If you do not specify this option, information is displayed in the csv format.

[Note]

- The network bandwidth control is supported only in the VMware environment. The network bandwidth control (traffic shaping) information on the portgroup can be displayed.

[Syntax examples]

```
>ssc portgroup show virtual:/VC1/DataCenter1/VMServer1
>ssc portgroup show resource:/Group1/VMServer1 -private
>ssc portgroup show virtual:/VC1/DataCenter1/VMServer1 -bandcontrol
>ssc portgroup show VC1/DataCenter1 -vertical
```

[Display examples]

```
* PortGroup list
#NetworkDeviceName,PortGroupName,NetworkType,VlanType,VlanId(PrimaryId),SecondaryId
"vSwitch0","Service Console","ServiceConsole","None","-","-"
"vSwitch0","VM Network","VirtualMachine","None","-","-"
"vSwitch1","VLAN10","VirtualMachine","Vlan","10","-"
"vSwitch1","VLAN20","VirtualMachine","Vlan","20","-"
* PrivateVlan list
#NetworkDeviceName,PrimaryId,SecondaryId,PrivateType
"dvSwitch","10","10","Promiscuous"
"dvSwitch","10","11","Community"
"dvSwitch","10","12","Isolated"
```

```

"dvSwitch", "10", "13", "Community"
"dvSwitch", "10", "14", "Community"
* Network bandwidth control information
#NetworkDeviceName, PortGroupName, Type, AverageBandWidth (Kbits/s), PeakBandWidth (Kbits
"vSwitch0", "VirtualVLAN", "in/out", "1000", "2100", "100"
"vSwitch1", "VirtualVLAN", "in", "1500", "2000", "200"

```

2.13.8. Updating Port Group

Updates a port group on the specifying switch (NetworkDevice).

[Syntax]

```

ssc portgroup update PortGroupName NetworkDeviceName Path [-vlan VlanType [primary]
[secondary]] [-bandcontrol <on | off> [ave=value peak=value burstsize=value] [type=<in |
out>]]

```

[Parameters and Options]

<i>PortGroupName</i> (Required)	Specify the updating port group name.
<i>NetworkDeviceName</i> (Required)	Specify the switch name which the port group exists.
<i>Path</i> (Required)	Specify virtual or resource path of the virtual machine server or the datacenter which the switch exists. When operating the virtual switch, a virtual machine server is specified. Virtual view : virtual:/VC1/DataCenter1/VMServer1 Resource view : resource:/Group1/VMServer1 When operating the distributed virtual switch, a datacenter is specified. Virtual view : virtual:/VC1/DataCenter1/ (You can omit View Type ("virtual:/"). If you omit View Type, the specified path is treated as the path to the Virtual view.)
[-vlan <i>VlanType</i> [<i>primary</i>] [<i>secondary</i>]]	<i>VlanType</i> Specify VLAN Type. VLAN type is the following 3 types. none vlan private [<i>primary</i>] Specify VLANID(PrimaryID). When VLAN type is "vlan", it's possible to specify 2-4094. When VLAN type is "private", it's possible to specify 1-4094. [<i>secondary</i>] Specify SecondaryId. It's possible to specify 1-4094. When VLAN type is none specifying, specifying is unnecessary for <i>primary</i> and <i>secondary</i> . When VLAN type is vlan specifying, <i>primary</i> is specified. When VLAN type is private specifying, <i>primary</i> and <i>secondary</i> is specified.
[-bandcontrol <on off> [ave= <i>value</i> peak= <i>value</i> burstsize= <i>value</i>] [type=<in out>]]	<on off> Specify the presence of Network Band Control. on : effective off : invalid

ave Specify average[kbits/s] of Band Width.
 peak Specify peak[kbits/s] of Band Width.
 burstsize Specify burst size[kbytes].
 type Specify control type for the distributed virtual switch.
 in : input
 out : output

[Note]

- Each value of the network bandwidth control can be specified in the following range.
 - ave
0 < ave < 9,000,000,000,000,000
 - peak
0 < peak < 9,000,000,000,000,000
 - burstsize
0 < burstsize < 9,007,199,254,740,991
- The network bandwidth control is supported only in the VMware environment.
 The network bandwidth control (traffic shaping) can be set to the portgroup.

[Syntax examples]

```
>ssc portgroup update dvPortGroup1 dvSwitch1 virtual:/VC1/DataCenter1 -vlan none
>ssc portgroup update VLAN1 vSwitch1 resource:/Group1/VMServer1 -vlan vlan 2
>ssc portgroup update VLAN2 vSwitch1 VC1/DataCenter1/VMServer1 -vlan private 1 2
>ssc portgroup update VLAN1 vSwitch1 VC1/DataCenter1/VMServer1
-bandcontrol on ave=1024 peak=2048 burstsize=100
>ssc portgroup update dvPortGroup1 dvSwitch1 virtual:/VC1/DataCenter1
-bandcontrol on ave=1024 peak=2048 burstsize=100 type=in
>ssc portgroup update dvPortGroup1 dvSwitch1 virtual:/VC1/DataCenter1
-bandcontrol off type=out
```

2.13.9. Creating Private VLAN

Creates a private VLAN in the target distributed virtual switch.

[Syntax]

ssc privatevlan create *NetworkDeviceName Path PrimaryId SecondaryId PrivateVlanType*

[Parameters and Options]

<i>NetworkDeviceName</i> (Required)	Specify the distributed virtual switch name which creates a private VLAN.
<i>Path</i> (Required)	Specify virtual path of the datacenter which the switch exists. When operating the distributed virtual switch, a datacenter is specified. virtual:/VC1/DataCenter1/ (It's possible to omit "virtual:/".)
<i>PrimaryId</i> (Required)	Specify PrimaryID of the private VLAN. It's possible to specify 1-4094.
<i>SecondaryId</i> (Required)	Specify SecondaryId of the private VLAN. It's possible to specify 1-4094.
<i>PrivateVlanType</i> (Required)	Specify Private VLAN Type. Private VLAN type is the following 3 types. community isolated promiscuous

[Syntax examples]

```
ssc privatevlan create dvSwitch1 VC1/DataCenter1 1 2 community
```

```

ssc privatevlan create dvSwitch1 VC1/DataCenter1 2 3 solated
ssc privatevlan create dvSwitch1 virtual:/VC1/DataCenter1 3 4 promiscuous

```

2.13.10. Deleting Private VLAN

Deletes a private VLAN of the distributed virtual switch.

[Syntax]

```

ssc privatevlan delete NetworkDeviceName Path PrimaryId SecondaryId

```

[Parameters and Options]

<i>NetworkDeviceName</i> (Required)	Specify the distributed virtual switch name which deletes a private VLAN.
<i>Path</i> (Required)	Specify virtual path of the datacenter which the switch exists. When operating the distributed virtual switch, a datacenter is specified. virtual:/VC1/DataCenter1/ (It's possible to omit "virtual:/".)
<i>PrimaryId</i> (Required)	Specify the primary ID for private VLAN.
<i>SecondaryId</i> (Required)	Specify the secondary ID for private VLAN.

[Syntax examples]

```

>ssc privatevlan delete dvSwitch1 VC1/DataCenter1/ 1 2
>ssc privatevlan delete dvSwitch1 virtual:/VC1/DataCenter1/ 2 3

```

2.13.11. Updating Private VLAN

Updates a private VLAN in the target distributed virtual switch.
Private VLAN whose primary ID and secondary ID are identical will be edited.
It can't be changed to Promiscuous.
Private Vlan in Promiscuous can't be changed.

[Syntax]

```

ssc privatevlan update NetworkDeviceName Path PrimaryId SecondaryId PrivateVlanType

```

[Parameters and Options]

<i>NetworkDeviceName</i> (Required)	Specify the distributed virtual switch name which updates a private VLAN.
<i>Path</i> (Required)	Specify virtual path of the datacenter which the switch exists. virtual:/VC1/DataCenter1/ (It's possible to omit "virtual:/".)
<i>PrimaryId</i> (Required)	Specify PrimaryID of the private VLAN. It's possible to specify 1-4094.
<i>SecondaryId</i> (Required)	Specify SecondaryId of the private VLAN. It's possible to specify 1-4094.
<i>PrivateVlanType</i> (Required)	Specify Private VLAN Type. community isolated

[Syntax examples]

```

>ssc privatevlan update dvSwitch1 VC1/DataCenter1 1 2 isolated
>ssc privatevlan update dvSwitch1 virtual:/VC1/DataCenter1 2 3 community

```

2.13.12. Creating VLAN

Creates a VLAN in the switch.

[Syntax]

```
ssc vlan create VlanName VlanId [-manager HostName]
```

[Parameters and Options]

<i>VlanName</i> (Required)	Specify a name of VLAN that you create.
<i>VlanId</i> (Required)	Specify a VLANID of VLAN that you create. You can configure the number of "2"- "4094".
[-manager <i>HostName</i>]	Specify a manager by the host name or IP address.

[Syntax examples]

```
>ssc vlan create VLAN_008 8  
>ssc vlan create vlan_014 14 -manager Switch-A  
>ssc vlan create vlan_118 18 -manager 192.168.10.1
```

2.13.13. Deleting VLAN

Deletes a VLAN in the switch.

[Syntax]

```
ssc vlan delete VlanName [-manager HostName]
```

[Parameters and Options]

<i>VlanName</i> (Required)	Specify a name of VLAN that you delete.
[-manager <i>HostName</i>]	You can Specify a manager by the host name or IP address.

[Syntax examples]

```
>ssc vlan delete VLAN_008  
>ssc vlan delete vlan_014 -manager Switch-A  
>ssc vlan delete vlan_118 -manager 192.168.10.1
```

2.13.14. Adding a Virtual Bridge Definition to the Network

Adds a virtual bridge definition to the network.

[Syntax]

```
ssc network add-virtualbridge NetworkName BridgeName VlanId [-controller  
ControllerName] [-othername VirtualNetworkName]
```

[Parameters and Options]

<i>NetworkName</i> (Required)	Specify the network name.
<i>BridgeName</i> (Required)	Specify the virtual bridge name.
<i>VlanId</i> (Required)	Specify the VLAN ID.

<code>[-controller <i>ControllerName</i>]</code>	Specify the controller name. When only one controller is managed, this option can be omitted.
<code>[-othername <i>VirtualNetworkName</i>]</code>	Specified the network name for P-Flow.

[Syntax examples]

```
>ssc network add-virtualbrige Network VBR1 10
>ssc network add-virtualbrige Network VBR1 10 -controller PFC
>ssc network add-virtualbrige Network VBR1 10 -othername VTN1
```

2.13.15. Applying Network Setting

Applies the setting of the network.

[Syntax]

```
ssc network apply NetworkName Type
```

[Parameters and Options]

<i>NetworkName</i> (Required)	Specify the network name.
<i>Type</i> (Required)	Specify the type of a setting to be applied. firewall: Firewall setting pflow: P-Flow setting all: All settings

[Syntax examples]

```
>ssc network apply Network firewall
>ssc network apply Network pflow
>ssc network apply Network all
```

2.13.16. Deleting a Network

Deletes a network.

[Syntax]

```
ssc network delete NetworkName
```

[Parameters and Options]

<i>NetworkName</i> (Required)	Specify the network name.
----------------------------------	---------------------------

[Syntax examples]

```
>ssc network delete Network
```

2.13.17. Deleting an Address Pool from the Network

Deletes an address pool from the network.

[Syntax]

```
ssc network delete-addresspool NetworkName RangeName [-ipversion IpVersion]
```

[Parameters and Options]

<i>NetworkName</i> (Required)	Specify the network name.
<i>RangeName</i> (Required)	Specify the IP address range name.
<i>[-ipversion IpVersion]</i>	Specify the protocol. Specify this option to distinguish the IP range name between IPv4 and IPv6 if the same IP range name is used in both IPv4 and IPv6. (E.g.: ipv4, ipv6) If omitted, all ranges with a matching name are deleted.

[Syntax examples]

```
>ssc network delete-addresspool Network Range1  
>ssc network delete-addresspool Network Range1 -ipversion IPv6
```

2.13.18. Deleting a Virtual Bridge Definition from the Network

Deletes a virtual bridge definition from the network.

[Syntax]

```
ssc network delete-virtualbridge NetworkName BridgeName
```

[Parameters and Options]

<i>NetworkName</i> (Required)	Specify the network name.
<i>BridgeName</i> (Required)	Specify the virtual bridge name.

[Syntax examples]

```
>ssc network delete-virtualbridge Network VBR1
```

2.13.19. Deleting a VLAN (Port Group) Definition from the Network

Deletes a VLAN (a port group) definition from the network.

[Syntax]

```
ssc network delete-vlan NetworkName SwitchType [SwitchName] -vlanname VlanName
```

[Parameters and Options]

<i>NetworkName</i> (Required)	Specify the network name.
<i>SwitchType</i> (Required)	Specify the type of the switch. Physicals :All switches (physical) Physical :Physical switch Virtual :Virtual switch Distributed:Distributed switch
<i>[SwitchName]</i>	Specify the name of switch. Cannot specify <i>SwitchType</i> in the case of "Physicals". Cannot omit <i>SwitchType</i> in the case of "Physical" or "Distributed".

-vlanname <i>VlanName</i> (Required)	Specify the name of VLAN.
--	---------------------------

[Syntax examples]

```
>ssc network delete-vlan Network Physicals -vlanname VLAN10
>ssc network delete-vlan Network Physical Switch01 -vlanname VLAN10
>ssc network delete-vlan Network Virtual -vlanname "VM Network 1"
>ssc network delete-vlan Network Distributed dvSwitch -vlanname "VM Network 1"
```

2.13.20. Displaying Network Information

Displays the network information.

[Syntax]

```
ssc network show [NetworkName] [-vertical]
```

[Parameters and Options]

[<i>NetworkName</i>]	Specify the network name. If you do not specify this parameter, the list of networks is displayed.
[-vertical]	Specify the format. If you do not specify this option, the information is displayed in the csv format.

[Syntax examples]

```
>ssc network show
>ssc network show Network
>ssc network show -vertical
```

2.13.21. Creating Firewall Profile

Creates a firewall profile.

[Syntax]

```
ssc firewallprofile create ProfileName [-description Description]
```

[Parameters and Options]

<i>ProfileName</i> (Required)	Specify a firewall profile name.
[-description <i>Description</i>]	Enter the description of the firewall profile.

[Syntax examples]

```
>ssc firewallprofile create WebProfile
>ssc firewallprofile create WebProfile -description "Web-Server Profile"
```

2.13.22. Deleting Firewall Profile

Deletes the firewall profile.

[Syntax]

```
ssc firewallprofile delete ProfileName
```

[Parameters and Options]

<i>ProfileName</i> (Required)	Specify the firewall profile name.
----------------------------------	------------------------------------

[Syntax examples]

```
>ssc firewallprofile delete WebProfile
```

2.13.23. Adding Filtering Rule

Adds a filtering rule to the firewall profile.

[Syntax]

```
ssc firewallprofile add ProfileName Protocol Handling [-sip SourceIP] [-sport  
SourcePort] [-dip DestinationIP] [-dport DestinationPort] [-order OrderNumber]
```

[Parameters and Options]

<i>ProfileName</i> (Required)	Specify the firewall profile name.
<i>Protocol</i> (Required)	Specify the protocol. TCP: Tcp UDP: Udp ICMP: Icmp ALL: all
<i>Handling</i> (Required)	Specify the packet handling. Accept: accept Drop: drop Reject: reject
[-sip <i>SourceIP</i>]	Specify the source IP address.
[-sport <i>SourcePort</i>]	Specify the source port number. When <i>Protocol</i> is "ICMP" or "ALL", you cannot specify this option.
[-dip <i>DestinationIP</i>]	Specify the destination IP address.
[-dport <i>DestinationPort</i>]	Specify the destination port number. When <i>Protocol</i> is "ICMP" or "ALL", you cannot specify this option.
[-order <i>OrderNumber</i>]	Specify the order of the rule. If omitted, the rule is added at the end of the order.

[Syntax examples]

```
>ssc firewallprofile add WebProfile Tcp Accept -sip 192.168.1.10  
>ssc firewallprofile add WebProfile Udp Drop -sport 22  
-dip 192.168.1.100-192.168.1.120  
>ssc firewallprofile add WebProfile All Reject -dip 192.168.1.0/24  
-dport 23 -order 1
```

2.13.24. Displaying Firewall Profile

Displays the list or the detail of the firewall profile.

[Syntax]

```
ssc firewallprofile show [ProfileName] [-vertical]
```

[Parameters and Options]

[<i>ProfileName</i>]	Specify the firewall profile name. If omitted, the list of firewall profiles is displayed.
[-vertical]	Specify the format. If you do not specify this option, the information is displayed in the csv format.

[Syntax examples]

```
>ssc firewallprofile show
>ssc firewallprofile show WebProfile
>ssc firewallprofile show -vertical
```

2.13.25. Adding Firewall Setting

Adds the firewall setting to the network.

[Syntax]

```
ssc network add-firewallsetting NetworkName [ProfileName] [-firewall FirewallName] [-nat] [-order OrderNumber]
```

[Parameters and Options]

<i>NetworkName</i> (Required)	Specify the network name.
[<i>ProfileName</i>]	Specify the firewall profile name.
[-firewall <i>FirewallName</i>]	Specify the firewall. You can omit this option when there is only one registered firewall or when the firewall has already been set.
[-nat]	Enable the network address translation function.
[-order <i>OrderNumber</i>]	Specify the order of the rule. It is ignored when <i>ProfileName</i> is omitted.

Note) You cannot change the registered firewall and the network address translation setting. Delete the firewall setting and then add it again when changes are necessary.

[Syntax examples]

```
>ssc network add-firewallsetting LocalNetwork WebProfile -firewall vFW30
>ssc network add-firewallsetting LocalNetwork SSHProfile -order 2
>ssc network add-firewallsetting LocalNetwork -nat
```

2.13.26. Deleting Firewall Setting

Deletes the firewall setting from the network.

[Syntax]

```
ssc network delete-firewallsetting NetworkName [ProfileName | -order OrderNumber]
```

[Parameters and Options]

<i>NetworkName</i> (Required)	Specify the network name.
[<i>ProfileName</i> -order <i>OrderNumber</i>]	Specify the firewall profile name or the order of the rule. If omitted, all firewall settings will be deleted.

Note) The rules are ordered again immediately after you deleted the firewall setting with *ProfileName* and `-order` specified. If you continue to issue the command with `-order`, specify the number within the new order for `-order`.

[Syntax examples]

```
>ssc network delete-firewallsetting LogicalNetwork  
>ssc network delete-firewallsetting LogicalNetwork WebProfile  
>ssc network delete-firewallsetting LogicalNetwork -order 1
```

2.14. Load Balancer

2.14.1. Adding Load Balancer

Adds a load balancer to a group.

[Syntax]

```
ssc add lb GroupName LbGroupName
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a group to which you intend to add a load balancer. Specify a path to the group. You cannot specify a tenant, category or model. (E.g. <i>Category/Group</i> , <i>Group</i>)
<i>LbGroupName</i> (Required)	Specify a load balancer group.

[Syntax examples]

```
>ssc add lb Category1/Group01 LbGroup-001  
>ssc add lb Group-A001 LbGroup-A001
```

2.15. Logical Machine

2.15.1. Making Logical Machine

Makes the specified machine logical and creates an association with the specified physical machine.

[Syntax]

```
ssc logicalmachine assign < -luuid UUID | -lname MachineName > < -puuid UUID |  
-pname MachineName > -profile ProfileName [-force]
```

[Parameters and Options]

< -luuid <i>UUID</i> -lname <i>MachineName</i> > (Required)	Logical machine UUID, or the name of the machine.
< -puuid <i>UUID</i> -pname <i>MachineName</i> > (Required)	Physical machine UUID, or the name of the machine.
-profile <i>ProfileName</i> (Required)	A Service Profile or a Boot Config name which is applied to the machine.
[-force]	Unassociate an existing association between a logical machine and physical machine forcibly and create a new association. If you do not specify this option and there is an existing association which differs from one you want to create, this command returns an error.

[Syntax examples]

```
>ssc logicalmachine assign -lname esx01 -pname blade1 -profile  
org-root/org-SSC-org/lis-ssc-slot01  
>ssc logicalmachine assign -luuid 30381C00-D797-11DD-0000-001697A70000 -puuid  
1C4D8E80-24F0-11DF-8001-001697E72265 -profile org-root/org-SSC-org/lis-ssc-slot01  
>ssc logicalmachine assign -lname esx01 -pname blade2 -profile  
org-root/org-SSC-org/lis-ssc-slot01 -force
```

2.15.2. Dissociating Logical Machine

Dissociates a logical machine from a physical machine and makes a logical machine physical.

Also you can delete a logical machine.

[Syntax]

```
ssc logicalmachine release < -luuid UUID | -lname MachineName > [-force]
```

[Parameters and Options]

< -luuid <i>UUID</i> -lname <i>MachineName</i> > (Required)	Specify the logical machine UUID, or the name of the machine.
[-force]	The specified logical machine is deleted from SigmaSystemCenter and the DPM server. If you do not specify this option, you cannot delete logical machine instance.

[Syntax examples]

```
>ssc logicalmachine release -lname esx01
>ssc logicalmachine release -luuid 30381C00-D797-11DD-0000-001697A70000
>ssc logicalmachine release -lname esx01 -force
```

2.15.3. Displaying Logical Machine Information

Displays logical machines information.

[Syntax]

```
ssc logicalmachine show [-luuid UUID | -lname MachineName] [-vertical]
```

[Parameters and Options]

<code>[-luuid <i>UUID</i> -lname <i>MachineName</i>]</code>	Specify the logical machine UUID or the name of the machine. If you do not specify UUID or MachineName, all registered logical machines become targets.
<code>[-vertical]</code>	Specify format. If you do not specify this option, information is displayed in the csv format.

[Syntax examples]

```
>ssc logicalmachine show
>ssc logicalmachine show -vertical
>ssc logicalmachine show -lname esx01
>ssc logicalmachine show -lname esx01 -vertical
>ssc logicalmachine show -luuid 30381C00-D797-11DD-0000-001697A70000
>ssc logicalmachine show -luuid 30381C00-D797-11DD-0000-001697A70000 -vertical
```

[Display examples]

```
>ssc logicalmachine show -vertical
[1]
MachineName      : esx01
UUID             : 30381C00-D797-11DD-0000-001697A70000
MACAddress       : 00:16:97:A7:00:00
ProductName      : Express5800/B120a [N8400-082]
MachineType     : LogicalMachine, VMware, VM Server
ProfileName     : #11_config
SlotNumber      : 11
Location        : 192.168.1.40/11
Tag             :
UnitName        :
Description     :
Physical MachineName : Blade11
Physical UUID     : 1C4D8E80-24F0-11DF-8001-001697E72265
Physical MACAddress : 00:16:97:E7:22:66
Physical ProductName : Express5800/B120a [N8400-082]
Physical MachineType : Unitary
Physical ProfileName :
Physical SlotNumber : 11
Physical Location  : 192.168.1.40/11
Physical Tag      :
Physical UnitName  :
Physical Description :
[2]
MachineName      : esx02
UUID             : 30381C00-D797-11DD-0100-001697A70400
MACAddress       : 00:16:97:A7:04:00
```

```

ProductName       : Express5800/B120a [N8400-082]
MachineType      : LogicalMachine, VMware, VM Server
ProfileName      : #12_config
SlotNumber       : 12
Location         : 192.168.1.40/12
Tag              :
UnitName         :
Description      :
Physical MachineName : Blade12
Physical UUID    : 0A211F80-24F4-11DF-8001-001697E72264
Physical MACAddress : 00:16:97:E7:22:62
Physical ProductName : Express5800/B120a [N8400-082]
Physical MachineType : Unitary
Physical ProfileName :
Physical SlotNumber : 12
Physical Location  : 192.168.1.40/12
Physical Tag       :
Physical UnitName  :
Physical Description :

```

```

>ssc logicalmachine show
#MachineName, UUID, MACAddress, ProductName, MachineType, ProfileName, SlotNumber, Location
"esx01", "30381C00-D797-11DD-0000-001697A70000", "00:16:97:A7:00:00", "Express5800/B120a", "LogicalMachine, VMware, VM Server", "#12_config", 12, "192.168.1.40/12"
"esx02", "30381C00-D797-11DD-0100-001697A70400", "00:16:97:A7:04:00", "Express5800/B120a", "LogicalMachine, VMware, VM Server", "#11_config", 11, "192.168.1.40/11"

```

```

>ssc logicalmachine show -lname esx01 -vertical
[1]
MachineName       : esx01
UUID              : 30381C00-D797-11DD-0000-001697A70000
MACAddress        : 00:16:97:A7:00:00
ProductName       : Express5800/B120a [N8400-082]
MachineType      : LogicalMachine, VMware, VM Server
ProfileName      : #11_config
SlotNumber       : 11
Location         : 192.168.1.40/11
Tag              :
UnitName         :
Description      :
Physical MachineName : Blade11
Physical UUID    : 1C4D8E80-24F0-11DF-8001-001697E72265
Physical MACAddress : 00:16:97:E7:22:66
Physical ProductName : Express5800/B120a [N8400-082]
Physical MachineType : Unitary
Physical ProfileName :
Physical SlotNumber : 11
Physical Location  : 192.168.1.40/11
Physical Tag       :
Physical UnitName  :
Physical Description :

```

```

>ssc logicalmachine show -luuid 30381C00-D797-11DD-0000-001697A70000 -vertical
[1]
MachineName       : esx01
UUID              : 30381C00-D797-11DD-0000-001697A70000
MACAddress        : 00:16:97:A7:00:00
ProductName       : Express5800/B120a [N8400-082]
MachineType      : LogicalMachine, VMware, VM Server
ProfileName      : #11_config
SlotNumber       : 11
Location         : 192.168.1.40/11
Tag              :
UnitName         :
Description      :
Physical MachineName : Blade11
Physical UUID    : 1C4D8E80-24F0-11DF-8001-001697E72265

```


Physical	MACAddress	: 00:16:97:E7:22:66
Physical	ProductName	: Express5800/B120a [N8400-082]
Physical	MachineType	: Unitary
Physical	ProfileName	:
Physical	SlotNumber	: 11
Physical	Location	: 192.168.1.40/11
Physical	Tag	:
Physical	UnitName	:
Physical	Description	:

```
>ssc logicalmachine show -luuid 30381C00-D797-11DD-0000-001697A70000
#MachineName, UUID, MACAddress, ProductName, MachineType, ProfileName, SlotNumber, Location
"esx01", "30381C00-D797-11DD-0000-001697A70000", "00:16:97:A7:00:00", "Express5800/B120a"
```

2.15.4. Creating Logical Machine Account

Creates logical machine account for a host.

[Syntax]

```
ssc logicalmachine create-account GroupName HostName -type ConnectionType -ip IPAddress -u UserName [-p Password] [-overwrite]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a path to the group to which a host where you want to create the machine account belongs. Only a path to the group can be specified. You cannot specify a tenant or category. E.g.) Category/Group
<i>HostName</i> (Required)	Specify a target host name.
-type <i>ConnectionType</i> (Required)	Specify a connection type. Only "oob" can be specified. Note: OOB is used for Out-of-Band-Management.
-ip <i>IPAddress</i> (Required)	Specify an IP address.
-u <i>UserName</i> (Required)	Specify a user name. Depending on the destination login system, this value is case-sensitive.
[-p <i>Password</i>]	Specify a password. If you do not specify this option or enter a null character ("") for this option, password is not specified.
[-overwrite]	If a machine account is already registered, overwrites the account. If you do not specify this option and an account is already registered, this command returns an error.

[Syntax examples]

```
>ssc logicalmachine create-account Category1/Group-01 Host-001 -type oob -ip 192.168.1.103 -u admin
>ssc logicalmachine create-account Category1/Group-01 Host-001 -type oob -ip 192.168.1.103 -u admin -p ""
>ssc logicalmachine create-account Category1/Group-01 Host-001 -type oob -ip 192.168.1.103 -u admin -p admin
>ssc logicalmachine create-account Category1/Group-01 Host-001 -type oob -ip 192.168.1.103 -u admin -p admin -overwrite
```

2.15.5. Updating Logical Machine Account

Updates logical machine account for a host.

[Syntax]

```
ssc logicalmachine update-account GroupName HostName -type ConnectionType <[-ip IPAddress] [-u UserName] [-p Password]>
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a path to the group to which a host where you want to update the machine account belongs. Only a path to the group can be specified. You cannot specify a tenant, category or model. E.g.) Category/Group
<i>HostName</i> (Required)	Specify a target host name.
-type <i>ConnectionType</i> (Required)	Specify a connection type. Only "oob" can be specified. Note: OOB is used for Out-of-Band-Management.
[-ip <i>IPAddress</i>]	Specify an IP address to update.
[-u <i>UserName</i>]	Specify a user name to update. Depending on the destination login system, this value is case-sensitive.
[-p <i>Password</i>]	Specify a password to update. If you specify a null character (""), the password is deleted.

- Specify at least one of the -ip, -u, and -p options.

[Syntax examples]

```
>ssc logicalmachine update-account Category1/Group-01 Host-001 -type oob -ip 192.168.1.3
>ssc logicalmachine update-account Category1/Group-01 Host-001 -type oob -p admin
>ssc logicalmachine update-account Category1/Group-01 Host-001 -type oob -u root
>ssc logicalmachine update-account Category1/Group-01 Host-001 -type oob -u root -p root
>ssc logicalmachine update-account Category1/Group-01 Host-001 -type oob -ip 192.168.1.4 -p ""
>ssc logicalmachine update-account Category1/Group-01 Host-001 -type oob -ip 192.168.1.105 -u administrator -p admin
```

2.15.6. Deleting Logical Machine Account

Deletes logical machine account from a host.

[Syntax]

```
ssc logicalmachine delete-account GroupName HostName -type ConnectionType
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a path to the group to which a host where you want to delete the machine account belongs. Only a path to the group can be specified. You cannot specify a tenant, category or model. E.g.) Category/Group
<i>HostName</i> (Required)	Specify a target host name.
-type <i>ConnectionType</i> (Required)	Specify a connection type. Only "oob" can be specified. Note: OOB is used for Out-of-Band-Management.

[Syntax examples]

```
>ssc logicalmachine delete-account Category1/Group-01 Host-001 -type oob
```

2.15.7. Displaying Logical Machine Account Information

Displays logical machine account information.

[Syntax]

```
ssc logicalmachine show-account [GroupName [HostName]] [-vertical]
```

[Parameters and Options]

<i>[GroupName]</i> <i>[HostName]</i>	Specify a host name or a path to the group to which a host where you want to display the machine account belongs. Only a path to the group can be specified. You cannot specify a tenant, category or model. E.g.) Category/Group If you do not specify this option, all hosts information are displayed. If you do not specify <i>HostName</i> , the information of all hosts which are belong to the specified group are displayed.
<i>[-vertical]</i>	Specify format. If you do not specify this option, information is displayed in the csv format.

[Syntax examples]

```
>ssc logicalmachine show-account -vertical  
>ssc logicalmachine show-account Category1/Group-01 -vertical  
>ssc logicalmachine show-account Category1/Group-01 Host-001 -vertical  
>ssc logicalmachine show-account Category1/Group-01 Host-001
```

[Display examples]

```
>ssc logicalmachine show-account -vertical  
[1]  
GroupName      : Category1/Group-01  
HostName       : Host-001  
AccountUserName : admin  
AccountHostName : 192.168.1.103  
[2]  
GroupName      : Category1/Group-02  
HostName       : Host-002  
AccountUserName : admin  
AccountHostName : 192.168.1.10
```

```
>ssc logicalmachine show-account Category1/Group-01 Host-001 -vertical  
[1]  
GroupName      : Category1/Group-01  
HostName       : Host-001  
AccountUserName : admin  
AccountHostName : 192.168.1.103
```

```
>ssc logicalmachine show-account Category1/Group-01 Host-001  
#GroupName,HostName,AccountUserName,AccountHostName  
"Category1/Group-01","Host-001","admin","192.168.1.103"
```

2.15.8. Creating Logical Machine Profile

Creates logical machine profile for a host.

[Syntax]

```
ssc logicalmachine create-profile GroupName HostName ProfileName -m
ManagerAddress -uuid vUUID [-force]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a path to the group to which a host where you want to create the logical machine profile belongs. Only a path to the group can be specified. You cannot specify a tenant, category or model. E.g.) Category/Group
<i>HostName</i> (Required)	Specify a target host name.
<i>ProfileName</i> (Required)	Specify a profile name.
-m <i>ManagerAddress</i> (Required)	Specify an address of the manager with an effective profile (UCS Manager IP/EM IP).
-uuid <i>vUUID</i> (Required)	Specify a Virtual UUID.
[-force]	When the host already has the machine profile, the machine profile is made again. If you do not specify this option and the host already has the machine profile, this command returns error.

[Syntax examples]

```
>ssc logicalmachine create-profile Category1/Group-01 Host-001 #11_config -m
192.168.1.40 -uuid 30381C00-D797-11DD-0000-001697A70000
>ssc logicalmachine create-profile Category1/Group-02 Host-001
org-root/org-SSC-org/ls-ssc-slot01 -m 192.168.1.100 -uuid
30381C00-D797-11DD-0000-001697A70000 -force
```

2.15.9. Updating Logical Machine Profile

Updates logical machine profile for a host.

[Syntax]

```
ssc logicalmachine update-profile GroupName HostName <[ProfileName] [-m
ManagerAddress] [-uuid vUUID] [-mac [NICNo], MAC] [-wwn [HBANo], WWPN, [WWNN]]>
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a path to the group to which a host where you want to update the logical machine profile belongs. Only a path to the group can be specified. You cannot specify a tenant, category or model. E.g.) Category/Group
<i>HostName</i> (Required)	Specify a target host name.
[<i>ProfileName</i>]	Specify a profile name.
[-m <i>ManagerAddress</i>]	Specify an address of the manager with an effective profile (UCS Manager IP/EM IP).

<code>[-uuid <i>vUUID</i>]</code>	Specify a Virtual UUID.
<code>[-mac [<i>NICNo</i>],<i>MAC</i>]</code>	Specify the MAC information. Input the NIC number and MAC address separating with "," (comma). Specify the number from 1 to 10 for the NIC number.
<code>[-wwn [<i>HBANo</i>],<i>WWPN</i>, [<i>WWNN</i>]]</code>	Specify the WWN information. Input the HBA number, WWPN and WWNN separating with "," (comma). Specify the number in the range of 0-9999 for the HBA number.

[Syntax examples]

```
>ssc logicalmachine update-profile Category1/Group-01 Host-001 -m 192.168.1.101
>ssc logicalmachine update-profile Category1/Group-01 Host-001
-mac 1,00:16:97:E7:22:66
>ssc logicalmachine update-profile Category1/Group-01 Host-001
-wwn ,2003-0030-130F-4000,
>ssc logicalmachine update-profile Category1/Group-02 Host-002
org-root/org-SSC-org/ls-ssc-slot05
>ssc logicalmachine update-profile Category1/Group-02 Host-002
-uuid 30381C00-D797-11DD-0000-001697A70000 -mac ,00:16:97:E7:22:60
-wwn ,2003-0030-130F-4000,2004-0030-130F-4000
```

2.15.10. Deleting Logical Machine Profile

Deletes logical machine profile from a host.

[Syntax]

```
ssc logicalmachine delete-profile GroupName HostName
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a path to the group to which a host where you want to delete the logical machine profile belongs. Only a path to the group can be specified. You cannot specify a tenant, category or model. E.g.) Category/Group
<i>HostName</i> (Required)	Specify a target host name.

[Syntax examples]

```
>ssc logicalmachine delete-profile Category1/Group-01 Host-001
```

2.16. Smart Group

2.16.1. Creating Smart Group

Creates or modifies a smart group.

[Syntax]

```
ssc create smartgroup SmartGroupPath -target Target -formula Formula [-value Value[...]] [-join Join]
```

[Parameters and Options]

<i>SmartGroupPath</i> (Required)	<p>Specify the path of the group to which a smart group is to be registered and the name of the smart group.</p> <p>Note:</p> <ul style="list-style-type: none"> * The group path must exist. * You can create a smart group on the Operations view or Resource view. If you want to create it in the Operations view, add "operations:" to the beginning of the path. Or if you want to create it in the Resource view, add "resource:" to the beginning of the path. <p>Setting examples: [operations:/category1/group11/smartgroup101] Smartgroup101 is made directly below the group11 node of the category1 of the Operations view. [resource:/smartgroup102] Smartgroup102 is made directly below the machine node of the Resource view.</p> <ul style="list-style-type: none"> * When a smart group doesn't exist in the specified path, a smart group is newly created. * When a smart group exists in the specified path, the specified condition is added to the existing smart group.
-target <i>Target</i> (Required)	<p>Specify the target property to which you want to apply a condition.</p> <p>Note: The kind of target you can specify depends on the view.</p>
-formula <i>Formula</i> (Required)	<p>Specify the condition of the formula. E.g.) Equal, NotEqual</p> <p>Note: The kind of formula you can specify depends on the Target.</p>
[-value <i>Value[...]</i>]	<p>Specify the condition of the value.</p> <p>If the Target is "MachineName" and Formula is "Equal", the smart group can list Machines whose name matches what you specify in this option.</p> <p>Only when "Any" or "NotAny" is specified for <i>Formula</i>, multiple values can be specified for this option (Separate each value with a space). This option cannot be used when "Empty" or "NotEmpty" is specified for <i>Formula</i>.</p>
[-join <i>Join</i>]	<p>If you want to combine multiple conditions when you create a new smart group, you can specify this option.</p> <p>This option is enabled for a new smart group and disabled for an existing smart group.</p> <p>[and] (default): Combine all conditions by AND [or]: Combine all conditions by OR</p>

[Note]

- If you want to create a smart group under an operation group of the Operation view, you cannot specify the same name as the operation group.

Condition that can be specified with [operations:]

When specified target view is [operations:], the conditions of a smart group that can be specified are as follows.

Condition	can be specified with [-target]	can be specified with [-formula]	can be specified with [-value]	Note
Host name Defined ip address	HostName DefinedIpAddress	BeginsWith / EndsWith / Equal / NotEqual / Match / NotMatch BeginsWith : The target starts from specified value. EndsWith : The target ends with specified value. Equal : The target is the same as the specified value. NotEqual : The target differs from specified value. Match : The target contains specified value. NotMatch : The target doesn't contain specified value.	Arbitrary character string	
Host tag	HostTag	BeginsWith / EndsWith / Match / NotMatch / Equal / NotEqual / Empty / NotEmpty BeginsWith : The target starts from specified value.	Arbitrary character string	

		<p>EndsWith : The target ends with specified value.</p> <p>Match : The target contains specified value.</p> <p>NotMatch : The target doesn't contain specified value.</p> <p>Equal : The target is the same as the specified value.</p> <p>NotEqual : The target differs from specified value.</p> <p>Empty : The target is unset.</p> <p>NotEmpty : The target has been set.</p>		
Power status	PowerStatus	<p>Any / NotAny</p> <p>Any : The target is the same as any of the specified values.</p> <p>NotAny : The target is different from all the specified values.</p>	<p>Unknown / Off / On / Suspend</p> <p>Unknown : Unknown Off : Off On : On Suspend : Suspend</p> <p>You can specify multiple values.</p>	
Running status	RunningStatus	<p>Any / NotAny</p> <p>Any : The target is the same as any specified value.</p> <p>NotAny : The target is different from all the specified</p>	<p>Off / On</p> <p>Off : Inactive/unassigned On : Active in a Operations Group</p> <p>You can specify multiple values.</p>	

		value.		
OS status	OperatingSystemStatus	<p>Any / NotAny</p> <p>Any : The target is the same as any of the specified values.</p> <p>NotAny : The target is different from all the specified values.</p>	<p>Unknown / Off / On</p> <p>Unknown : Unknown</p> <p>Off : Off</p> <p>On : On</p> <p>You can specify multiple values.</p>	
Hardware status	HardwareStatus	<p>Any / NotAny</p> <p>Any : The target is the same as any of the specified values.</p> <p>NotAny : The target is different from all the specified values.</p>	<p>Unknown / Ready / Faulted / Degraded</p> <p>Unknown : Unknown</p> <p>Ready : Normal</p> <p>Faulted : Faulted</p> <p>Degraded : Degraded</p> <p>You can specify multiple values.</p>	
Executing status	ExecuteStatus	<p>Any / NotAny</p> <p>Any : The target is the same as any of the specified values.</p> <p>NotAny : The target is different from all the specified values.</p>	<p>Wait / InProcess / Abort</p> <p>Wait : Wait</p> <p>InProcess : In process</p> <p>Abort : Abort</p> <p>You can specify multiple values.</p>	
Maintenance status	MaintenanceStatus	<p>Any / NotAny</p> <p>Any : The target is the same as any of the specified values.</p> <p>NotAny : The target is different from all the specified</p>	<p>Off / On</p> <p>Off : Off</p> <p>On : On</p> <p>You can specify multiple values.</p>	

		values.		
Days to service start	DaysToServiceStart	<p>LessEqual / GreaterEqual</p> <p>LessEqual : The target is equal to or less than the specified value.</p> <p>GreaterEqual : The target is equal to or more than the specified value.</p>	Arbitrary number (0-999)	When the host which has already started service (allocated machine) is not the target, the combination of RunningStatus condition and this condition should be used.
Days to service end Days from service end	DaysToServiceEnd DaysFromServiceEnd	<p>LessEqual / GreaterEqual</p> <p>LessEqual : The target is equal to or less than the specified value.</p> <p>GreaterEqual : The target is equal to or more than the specified value.</p>	Arbitrary number (0-999)	When the host which has already ended service (released machine) is not the target, the combination of RunningStatus condition and this condition should be used.
Service start date Service end date	ServiceStartDate ServiceEndDate	<p>Equal / NotEqual / LessEqual / GreaterEqual</p>	date (mm/dd/yyyy)	
		<p>Equal : The target is the same as the specified value.</p> <p>NotEqual : The target differs from specified value.</p> <p>LessEqual : The target is equal to or less than the specified value.</p> <p>GreaterEqual : The target is equal to or more than the specified value.</p>		

Condition that can be specified with [resource:]

When specified target view is [resource:], the conditions of a smart group that can be specified are as follows.

Condition	can be specified with [-target]	can be specified with [-formula]	can be specified with [-value]	Note
Machine name Model name Machine tag Location Host tag OS name	MachineName ModelName MachineTag Location HostTag OsName	<p>BeginsWith / EndsWith / Match / NotMatch / Equal / NotEqual / Empty / NotEmpty</p> <p>BeginsWith : The target starts from specified value. EndsWith : The target ends with specified value. Match : The target contains specified value. NotMatch : The target doesn't contain specified value. Equal : The target is the same as the specified value. NotEqual : The target differs from specified value. Empty : The target is unset. NotEmpty : The target has been set.</p>	Arbitrary character string	
CPU type	CpuName	<p>BeginsWith / EndsWith / Equal / NotEqual / Match / NotMatch</p> <p>BeginsWith : The target starts from specified value. EndsWith : The target ends with specified value. Equal : The target is the same as the specified value. NotEqual : The target differs</p>	Arbitrary character string	

		<p>from specified value.</p> <p>Match : The target contains specified value.</p> <p>NotMatch : The target doesn't contain specified value.</p>	
Machine type	MachineType	<p>Any / NotAny</p> <p>Any : The target is the same as any of the specified values.</p> <p>NotAny : The target is different from all the specified values.</p>	<p>Unitary / Blade / VirtualMachine / LostVirtualMachine / VMServer / Vmware / Xen / HyperV / Kvm</p> <p>Unitary : Unitary Blade : Blade VirtualMachine : Virtual Machine LostVirtualMachine : Lost Virtual Machine VMServer : VM Server Vmware : VMware Xen : Xen HyperV : Hyper-V Kvm : KVM</p> <p>You can specify multiple values.</p>
Power status	PowerStatus	<p>Any / NotAny</p> <p>Any : The target is the same as any of the specified values.</p> <p>NotAny : The target is different from all the specified values.</p>	<p>Unknown / Off / On / Suspend</p> <p>Unknown : Unknown Off : Off On : On Suspend : Suspend</p> <p>You can specify multiple values.</p>
Running status	RunningStatus	<p>Any / NotAny</p> <p>Any : The target is the same as any specified value.</p> <p>NotAny : The target is different from all the specified value.</p>	<p>Off / On</p> <p>Off : Inactive/unassigned On : Active in a Operations Group</p> <p>You can specify multiple values.</p>
OS status	OperatingSystemStatus	<p>Any / NotAny</p> <p>Any : The target is the same as any of the specified values.</p> <p>NotAny : The target is</p>	<p>Unknown / Off / On</p> <p>Unknown : Unknown Off : Off On : On</p> <p>You can specify multiple values.</p>

		different from all the specified values.		
Hardware status	HardwareStatus	Any / NotAny Any : The target is the same as any of the specified values. NotAny : The target is different from all the specified values.	Unknown / Ready / Faulted / Degraded Unknown : Unknown Ready : Normal Faulted : Faulted Degraded : Degraded You can specify multiple values.	
Executing status	ExecuteStatus	Any / NotAny Any : The target is the same as any of the specified values. NotAny : The target is different from all the specified values.	Wait / InProcess / Abort Wait : Wait InProcess : In process Abort : Abort You can specify multiple values.	
Policy status	PolicyStatus	Any / NotAny Any : The target is the same as any of the specified values. NotAny : The target is different from all the specified values.	Unknown / Off / Partial / On Unknown : Unknown Off : All disabled Partial : Partially enabled On : All enabled You can specify multiple values.	
Maintenance status	MaintenanceStatus	Any / NotAny Any : The target is the same as any of the specified values. NotAny : The target is different from all the specified values.	Off / On Off : Off On : On You can specify multiple values.	
Sensor status	SensorCurrentStatus	Any Any : The target is the same as any of the specified values.	WarningOrCritical / Critical WarningOrCritical : Warning or Critical Critical : Critical You can specify the value of either.	
Connection status of IPMI	IpmiStatus	Any / NotAny Any : The target is the same as	Unknown / Connected / NotResponding / NotAuthenticate / Invalid	

		any of the specified values. NotAny : The target is different from all the specified values.	Unknown : Unknown Connected : Connected NotResponding : Not Responding NotAuthenticate : Not Authenticate Invalid : Invalid You can specify multiple values.	
Disk type	VmDiskType	Any / NotAny Any : The target is the same as any of the specified values. NotAny : The target is different from all the specified values.	Thin / Thick / Differencing Thin : Thin Disk Thick : Thick Disk Differencing : Differencing Disk You can specify multiple values.	
Create method of VM	VmCreatingMethod	Any / NotAny Any : The target is the same as any of the specified values. NotAny : The target is different from all the specified values.	FullClone / HWProfileClone / DiffClone / DiskClone FullClone : Full Clone HWProfileClone : HW Profile Clone DiffClone : Differential Clone DiskClone : Disk Clone You can specify multiple values.	
Disk usage	VmDiskUsage	Any / NotAny Any : The target is the same as any of the specified values. NotAny : The target is different from all the specified values.	SystemDisk / DataStore / ExtendedDisk SystemDisk : System Disk DataStore : Datastore ExtendedDisk : Extended Disk You can specify multiple values.	
Memory size	MemorySize	Equal / LessEqual / GreaterEqual Equal : The target is the same as the specified value. LessEqual : The target is equal to or less than the specified value.	Arbitrary number(GByte) (0-99999)	

		GreaterEqual : The target is equal to or more than the specified value.		
System disk's used amount Difference disk's used amount Datastore's used amount Extended disk's used amount	VmSystemDiskUsed VmDifferencingDiskUsed VmDataStoreUsed VmExtendedDiskUsed	LessEqual / GreaterEqual LessEqual : The target is equal to or less than the specified value. GreaterEqual : The target is equal to or more than the specified value.	Arbitrary number(GByte) (0-2097152) The first decimal place.	
CPU sockets CPU threads	CpuSocket CpuThread	Equal / NotEqual / LessEqual / GreaterEqual Equal : The target is the same as the specified value. NotEqual : The target differs from specified value. LessEqual : The target is equal to or less than the specified value. GreaterEqual : The target is equal to or more than the specified value.	Arbitrary number(GByte) (0-99999)	
CPU clock speed	CpuClock	Equal / NotEqual / LessEqual / GreaterEqual Equal : The target is the same as the specified value. NotEqual : The target differs from specified value. LessEqual : The target is equal to or less than the specified value. GreaterEqual : The target is equal to or more than the specified value.	Arbitrary number(GHz) (0-2097152) The first decimal place.	

Group pool settings	GroupPoolSetting	Empty / NotEmpty Empty : The target is unset. NotEmpty : The target has been set.	You cannot specify value.	
Vendor	Vendor	Any / NotAny Any : The target is the same as any of the specified values. NotAny : The target is different from all the specified values.	Unknown / IBM / HP / NEC / DELL / Cisco Unknown : Unknown IBM : IBM HP : HP NEC : NEC DELL : DELL Cisco : Cisco You can specify multiple values.	
Vendor ID	VendorID	Equal / NotEqual	Arbitrary number (0~2147483647)	
		Equal : The target is the same as the specified value. NotEqual : The target differs from specified value.		

[Syntax examples]

Smartgroup101 is created right under subgroup11 of the group1 subordinate with the machine node of the Resource view. The condition is "The power supply is off or suspended".

```
>ssc create smartgroup resource:/group1/subgroup11/smartgroup101 -target PowerStatus -formula Any -value Off Suspend
```

Smartgroup102 is created right under group1 with the machine node of the Resource view. The condition is "The power supply is off or suspended" or "The hardware state is not normal".

```
>ssc create smartgroup resource:/group1/smartgroup102 -target PowerStatus -formula Any -value Off Suspend -join or
```

```
>ssc create smartgroup resource:/group1/smartgroup102 -target HardwareStatus -formula NotAny -value Ready -join or
```

Smartgroup103 is created right under the machine node of the Resource view. The condition is "The machine type is VMServer" and "The machine name is including Express" and "The execution status is in waiting or in processing".

```
>ssc create smartgroup resource:/smartgroup103 -target MachineType -formula Any -value VmServer -join and
```

```
>ssc create smartgroup resource:/smartgroup103 -target MachineName -formula Match -value Express -join and
```

```
>ssc create smartgroup resource:/smartgroup103 -target ExecuteStatus -formula Any -value Wait InProcess -join and
```

2.16.2. Deleting Smart Group

Deletes a smart group.

[Syntax]

```
ssc delete smartgroup GroupPath [-lump]
```

[Parameters and Options]

<i>GroupPath</i> (Required)	<p>Specify the path of the group to which the smart group to delete is registered or the path of the smart group.</p> <p>Note:</p> <ul style="list-style-type: none">* The group path must exist.* If you want to delete Operations view smart group, please specify "operations:" to the root of path, and If you want to delete Resource view smart group, please specify "resource:" to the root of path. <p>Setting examples:</p> <pre>[operations:/category1/group11/smartgroup101]</pre> <p>Smartgroup101 is delete below the group11 node of the category1 of the Operations view.</p> <pre>[resource:/smartgroup102]</pre> <p>Smartgroup102 is delete below the machine node of the Resource view.</p>
[-lump]	<p>Delete all smart groups directly below the specified path.</p> <p>This option is enabled only when a group path is specified for <i>GroupPath</i>.</p>

[Syntax examples]

```
Smartgroup101 is deleted from right under subgroup11 of the group1 subordinate to the machine node of the Resource view.
```

```
>ssc delete smartgroup resource:/group1/subgroup11/smartgroup101
```

```
All smart groups right under subgroup11 of the group1 subordinate to the Resource view are deleted.
```

```
>ssc delete smartgroup resource:/group1/subgroup11 -lump
```

2.16.3. Displaying Smart Group Properties

Displays a smart group properties.

[Syntax]

```
ssc show smartgroup GroupPath [-detail]
```

[Parameters and Options]

<i>GroupPath</i> (Required)	<p>Specify a path of smart group or group that you want to display.</p> <p>If you specify group path, all smart group properties which are under the specified group (include subgroups) are displayed.</p> <p>Note:</p> <ul style="list-style-type: none">* The path must exist.* If you want to display the smart group properties in the Operations view, please specify "operations:" to the root of path, and If you want to display the smart group properties it in the Resource view, please specify "resource:" to the root of path. <p>Setting examples:</p> <pre>[operations:/category1/group11/smartgroup101]</pre> <p>The smart group properties of smartgroup101 below the group11 node of the category1 of the Operations view is displayed.</p> <pre>[operations:/category1/group11]</pre> <p>The properties of all the smart groups below the group11 node of the</p>
--------------------------------	---

	category1 of the Operations view is displayed. [resource:/smartgroup102] The smart group properties of smartgroup102 below the machine node of the Resource view is displayed. [resource:/] The properties of all the smart groups below the machine node of the Resource view is displayed.
[-detail]	Display detail information.

[Syntax examples]

```
The properties of smartgroup101 right under group11 of the category1 subordinate to the Operations view is displayed.
>ssc show smartgroup operations:/category1/group11/smartgroup101
All the smart group properties of the group11 subordinate to the category1 subordinate to the Operations view are displayed in detail.
>ssc show smartgroup operations:/category1/group11 -detail
The properties of smartgroup102 right under the machine node of the Resource view is displayed in detail.
>ssc show smartgroup resource:/smartgroup102 -detail
The properties of all smart groups of the Resource view is displayed.
>ssc show smartgroup resource:/
```

2.16.4. Exporting Smart Group Settings

Exports smart group settings to the XML file.

[Syntax]

```
ssc export smartgroup FileName GroupPath
```

[Parameters and Options]

<i>FileName</i> (Required)	Specify the output XML file name. To include a space in the file name path, surround the file name path with double quotation(""). If just a file name is specified, the current folder when executing this command is the file path. When the specified file does not exist, a new folder is created. When the specified file exists, overwrite it.
<i>GroupPath</i> (Required)	Specify a path of smart group or group that you want to export. Note: * The group path must exist. * If you want to export the smart group settings in the Operations view, please specify "operations:" to the root of path, and If you want to export the smart group settings it in the Resource view, please specify "resource:" to the root of path. Setting examples: [operations:/category1/group11] The settings of all the smart groups below the group11 node of the category1 of the Operations view is exported to XML file. [resource:/group2/group12/smartgroup102] The smart group settings of smartgroup102 below the group12 node of the group2 of the Resource view is exported to XML file. [resource:/] The settings of all the smart groups below the machine node of the Resource view is exported to XML file.

[Syntax examples]

```
All smart groups right under group11 of the category1 subordinate of the
Operations view are exported to "C:\%ssc%\smartgroup.xml".
>ssc export smartgroup c:\%ssc%\smartgroup.xml operations:/category1/group11
smartgroup102 right under group12 of the group2 subordinate of the Resource
view is exported to "C:\%ssc%\smartgroup.xml".
>ssc export smartgroup c:\%ssc%\smartgroup.xml
resource:/group2/group12/smartgroup102
All smart groups right under the machine node of the Resource view are
exported to "C:\%ssc%\smartgroup.xml".
>ssc export smartgroup c:\%ssc%\smartgroup.xml resource:/
smartgroup201 right under the operation node of the Operations view is
exported to "C:\%ssc%\smartgroup.xml".
>ssc export smartgroup c:\%ssc%\smartgroup.xml operations:/smartgroup201
```

2.16.5. Importing Smart Group Settings

Imports smart group settings from a XML file.

[Syntax]

```
ssc import smartgroup FileName GroupPath
```

[Parameters and Options]

<i>FileName</i> (Required)	Specify a XML file which you want to import. To include a space in the file name path, surround the file name path with double quotation (""). If just a file name is specified, the current folder when executing this command is the file path.
<i>GroupPath</i> (Required)	Specify a path of group where you import the settings. Note: * The group path must exist. * If you want to import the smart group settings in the Operations view, please specify "operations:" to the root of path, and If you want to import the smart group settings it in the Resource view, please specify "resource:" to the root of path. Setting examples: [operations:/category1/group11] Smart groups in the XML file are imported to the smart group settings below the group11 node of the category1 of the Operations view. [resource:/] Smart groups in the XML file are imported to the smart group settings below the machine node of the Resource view.

- If the importing process stops by any fault, all imports are rolled back.

[Syntax examples]

```
Smart groups of "C:\%ssc%\smartgroup.xml" are imported right under the group11
node of the category1 subordinate to the Operations view.
>ssc import smartgroup c:\%ssc%\smartgroup.xml operations:/category1/group11
Smart groups of "C:\%ssc%\smartgroup.xml" are imported right under the machine
node of the Resource view.
>ssc import smartgroup c:\%ssc%\smartgroup.xml resource:/
```

[Note]

- When the exported XML file is edited and imported, there is a possibility that the following problems happen. Please do not import the edited XML file.
 - This command fails.

- The condition is not correctly displayed on the smart group edit screen.
- The anticipated result when a smart group is specified cannot be acquired.

2.17. Profile

2.17.1. Creating a Performance Monitoring Profile

Creates a performance monitoring profile.

[Syntax]

```
ssc monitoringprofile create ProfileName [-scope < public | private >] [-tenant TenantName] [-description Description] [-source CopyProfileName] [-perfinfo <name=value | id=value> [interval=value] [, <name=value | id=value> [interval=value]. . . ]]
```

[Parameters and Options]

<i>ProfileName</i> (Required)	Specify a name of performance monitoring profile. Up to 63 characters are available in this option. Possible characters are alphanumeric, spaces and symbols ("(", ")", "-", "_").
[-scope < public private >]	Set the public scope. By default, public is set.
[-tenant <i>TenantName</i>]	Specify the tenant to be published. If public is set for -scope, this option cannot be specified.
[-description <i>Description</i>]	Specifies a description of the performance monitoring profile. Up to 255 characters are available in this option.
[-source <i>CopyProfileName</i>]	Specify the name of the performance monitoring profile with the list of performance information to be copied.
[-perfinfo <name= <i>value</i> id= <i>value</i> > [interval= <i>value</i>] [, <name= <i>value</i> id= <i>value</i> > [interval= <i>value</i>]. . .]]	Specify the performance information. (You can specify multiple items.) When you specify multiple items, separate the data with commas (","). name: Specify the name of the performance information. Up to 256 characters are available in this option. When specifying the custom performance information defined by System Monitor - Performance Monitoring Services, specify "id=0" as the id option as well as the name option. id: Specify the MetricId. For possible values, refer to the manual. interval: Specify the collection interval for the performance information. Specify the following collection intervals: 1 minute interval: "00:01" 5 minute interval: "00:05" 30 minute interval: "00:30" 1 hour interval: "01:00" 4 hour interval: "04:00" 1 day interval: "1" 1 week interval: "7" 1 month interval: "30" Default is "00:05" (5 minute interval).

[Syntax examples]

```
>ssc monitoringprofile create profile1 -description "This is profile1."
  -perfinfo name="CPU Usage (%)" interval="00:01"
>ssc monitoringprofile create profile2 -description "This is profile2."
  -perfinfo id=1 , name="Disk Space (MB)" interval="1"
```

```
>ssc monitoringprofile create profile2 -description "This is profile2."
-source "profile1" -perfinfo id=0 name=="CPU Usage (GHz)" ,
name="Disk Space (MB)" interval="1"
```

[Reference materials]

The list of possible values for the name option and the id option:

The name of the performance information(Name)	MetricId
CPU Usage (%)	1
CPU System Usage (%)	2
CPU User Usage (%)	3
CPU Usage (MHz)	4
Guest CPU Usage (%)	11
Guest CPU Usage (MHz)	12
Host CPU Usage (%)	13
Host CPU Usage (MHz)	14
Disk Transfer Rate (Bytes/sec)	21
Disk IO Count (IO/sec)	22
Disk Read Transfer Rate (Bytes/sec)	23
Disk Read Count (IO/sec)	24
Disk Write Transfer Rate (Bytes/sec)	25
Disk Write Count (IO/sec)	26
Disk Space (MB)	27
Disk Space Ratio (%)	28
Guest Disk Transfer Rate (Bytes/sec)	31
Guest Disk Usage (MB)	37
Guest Disk Usage (%)	38
Network Packet Transfer Rate (Bytes/sec)	41
Network Packet Reception Rate (Bytes/sec)	42
Network Packet Transmission Rate (Bytes/sec)	43
Guest Network Transfer Rate (Bytes/sec)	51
Physical Memory Space (MB)	61
Physical Memory Space Ratio (%)	62
Guest Memory Usage (%)	71
Guest Memory Usage (MB)	72
Host Memory Usage (%)	73
Host Memory Usage (MB)	74
Current Power (W)	101

2.17.2. Updating the Profile Settings for Performance Monitoring

Updates the profile settings for performance monitoring.

[Syntax]

```
ssc monitoringprofile update ProfileName [-scope < public | private >] [-tenant
TenantName] [-deleteid] [-description Description] [-perfinfo <name=value |
id=value> [interval=value] [, <name=value | id=value> [interval=value]....]
[-delperfinfo <name=value | id=value> [<name=value | id=value>]....]
```

[Parameters and Options]

<i>ProfileName</i> (Required)	Specify the name of the performance monitoring profile to be updated.
----------------------------------	---

<code>[-scope < public private >]</code>	Specify the public scope.
<code>[-tenant <i>TenantName</i>]</code>	Specify the tenant to be published. If the target scope is public, this option cannot be specified.
<code>[-deleteid]</code>	Delete the Resource Management ID. You cannot specify this option together with <code>[-tenant]</code> .
<code>[-description <i>Description</i>]</code>	Update the description of the performance monitoring profile. Up to 255 characters are available in this option.
<code>[-perfinfo <name=<i>value</i> id=<i>value</i>> [interval=<i>value</i>] [, <name=<i>value</i> id=<i>value</i>> [interval=<i>value</i>]....]</code>	Specify the performance information (You can specify multiple items). When you specify multiple items, separate the data with commas (","). name: Specify the name of the performance information. Up to 256 characters are available in this option. When specifying the custom performance information defined by System Monitor - Performance Monitoring Services, specify "id=0" as the id option as well as the name option. id: Specify the MetricId. For possible values, refer to the manual. interval: Specify the collection interval for the performance information. Specify the following collection intervals: 1 minute interval: "00:01" 5 minute interval: "00:05" 30 minute interval: "00:30" 1 hour interval: "01:00" 4 hour interval: "04:00" 1 day interval: "1" 1 week interval: "7" 1 month interval: "30" Default is "00:05" (5 minute interval). If the performance information is registered, update the collection interval. If the performance information is not registered, add the performance information.
<code>[-delperfinfo <name=<i>value</i> id=<i>value</i>> [<name=<i>value</i> id=<i>value</i>>]....]</code>	Specifies the performance information to be deleted. name: Specify the name of performance information. id: Specify the MetricId. For possible values, refer to Reference materials in "2.17.1. Creating a Performance Monitoring Profile".

[Syntax examples]

```
>ssc monitoringprofile update profile1 -description "This is the profile1."
>ssc monitoringprofile update profile1 -perfinfo name="CPU Usage (%)"
>ssc monitoringprofile update profile2 -description "This is the profile2."
-perfinfo id=1 interval="00:30" , name="Disk Space (MB)"
>ssc monitoringprofile update profile2 -description "This is the profile2."
-perfinfo id=0 name="CPU Usage (GHz)" interval="00:30" ,
name="Disk Space (MB)" -delperfinfo id=2 name="Current Power (W)"
```

2.17.3. Deleting a Performance Monitoring Profile

Deletes a performance monitoring profile.

[Syntax]

```
ssc monitoringprofile delete ProfileName [ProfileName...] [-i]
```

[Parameters and Options]

<i>ProfileName</i> [<i>ProfileName...</i>] (Required)	Specify the name of the performance monitoring profile. Any model is assigned to a group monitoring the profile of this performance can not be removed.
[-i]	Any confirmation message is displayed.

[Syntax examples]

```
>ssc monitoringprofile delete profile1  
>ssc monitoringprofile delete profile1 profile2 -i
```

2.17.4. Displaying the Performance Monitoring Profile Settings

Displays the performance monitoring profile settings.

[Syntax]

```
ssc monitoringprofile show [<-path Path [-host HostName] | -profile  
ProfileName>]
```

[Parameters and Options]

-path <i>Path</i>	Specify the full path of the operation group and the model to be set. You can omit View Type ("operations:/"). E.g.: When specifying a group name: Category/Group When specifying a model name: Category/Group/Model When specifying a model name (full path): operations:/Category/Group/Model
[-host <i>HostName</i>]	Specify the host name of the target. If you specify this option, specify the operation group for Path.
-profile <i>ProfileName</i>	Specify the name of the performance monitoring profile. The specified performance monitoring profile settings are displayed.

[Note]

If not specified -path and -profile, all of the performance monitoring profile settings are displayed.

[Display examples]

```
* Showing of all performance monitoring profiles.  
>ssc monitoringprofile show  
[MonitoringProfile][1] -----  
Profile Name       : Standard Monitoring Profile (1min)  
Public Scope       : Public  
Resource Management ID :  
Description        :
```



```

[PerformanceInformation][1]
  Performance Name : CPU Usage (%)
  Interval         : One minute
[PerformanceInformation][2]
  Performance Name : Disk Transfer Rate (Bytes/sec)
  Interval         : One minute
[PerformanceInformation][3]
  Performance Name : Disk Space (MB)
  Interval         : One minute
[PerformanceInformation][4]
  Performance Name : Physical Memory Space (MB)
  Interval         : One minute
[MonitoringProfile][2] -----
Profile Name       : Standard Monitoring Profile (5min)
Public Scope      : Public
Resource Management ID :
Description       :
[PerformanceInformation][1]
  Performance Name : CPU Usage (%)
  Interval         : Five minutes
[PerformanceInformation][2]
  Performance Name : Disk Transfer Rate (Bytes/sec)
  Interval         : Five minutes
[PerformanceInformation][3]
  Performance Name : Disk Space (MB)
  Interval         : Five minutes
[PerformanceInformation][4]
  Performance Name : Physical Memory Space (MB)
  Interval         : Five minutes
...
[MonitoringProfile][10] -----
Profile Name       : Physical Machine Monitoring Profile (30min)
Public Scope      : Public
Resource Management ID :
Description       :
[PerformanceInformation][1]
  Performance Name : CPU Usage (%)
  Interval         : 30 minutes
[PerformanceInformation][2]
  Performance Name : Disk Transfer Rate (Bytes/sec)
  Interval         : 30 minutes
[PerformanceInformation][3]
  Performance Name : Disk Space (MB)
  Interval         : 30 minutes
[PerformanceInformation][4]
  Performance Name : Physical Memory Space (MB)
  Interval         : 30 minutes
[PerformanceInformation][5]
  Performance Name : Current Power (W)
  Interval         : 30 minutes
* Showing of a performance monitoring profile of specified.
>ssc monitoringprofile show -profile "Standard Monitoring Profile (1min)"
[MonitoringProfile]
Profile Name       : Standard Monitoring Profile (1min)
Public Scope      : Public
Resource Management ID :
Description       :
[PerformanceInformation][1]
  Performance Name : CPU Usage (%)
  Interval         : One minute
[PerformanceInformation][2]
  Performance Name : Disk Transfer Rate (Bytes/sec)
  Interval         : One minute
[PerformanceInformation][3]
  Performance Name : Disk Space (MB)
  Interval         : One minute
[PerformanceInformation][4]

```

```

Performance Name : Physical Memory Space (MB)
Interval         : One minute
* Showing of the performance monitoring profile set as a group (There is setting fo
>ssc monitoringprofile show -path group1
[MonitoringProfile]
Profile Name     : Standard Monitoring Profile (1min)
Public Scope    : Public
Resource Management ID :
Description     :
[PerformanceInformation][1]
Performance Name : CPU Usage (%)
Interval        : One minute
[PerformanceInformation][2]
Performance Name : Disk Transfer Rate (Bytes/sec)
Interval        : One minute
[PerformanceInformation][3]
Performance Name : Disk Space (MB)
Interval        : One minute
[PerformanceInformation][4]
Performance Name : Physical Memory Space (MB)
Interval        : One minute
[SystemMonitor ManagementServer]
IP Address      : 127.0.0.1
Port Number    : 26200
[Host Access Account]
Account        : root
Password      : *****
* Showing of the performance monitoring profile set as a group (for a group, withou
>ssc monitoringprofile show -path group2
[MonitoringProfile]
Profile Name   :
Public Scope  :
Resource Management ID :
Description   :

```

2.17.5. Setting a Performance Monitoring Profile to a Group (Group/Model)

Sets a performance monitoring profile to a group (Group/Model) and host.

[Syntax]

```

ssc monitoringprofile set Path <ProfileName [-ip IPAddress] [-port PortNumber]
[-account Account] [-p Password] | -delete | -disable [-ip IPAddress] [-port
PortNumber] [-account Account] [-p Password]> [-host HostName]

```

[Parameters and Options]

<i>Path</i> (Required)	Specify the full path of a target operating group or a model. You can omit view type ("operations:/"). E.g.: When specifying a group name: Category/Group When specifying a model name: Category/Group/Model When specifying a model name (view type is specified): operations:/Category/Group/Model
<i>ProfileName</i>	Specify the name of the performance monitoring profile.
<i>[-ip IPAddress]</i>	Specify the IP address of SystemMonitor management server. If omitted, "127.0.0.1" is set to this option.
<i>[-port PortNumber]</i>	Specify the port number of the SystemMonitor management server. Specify it with a number from 1 to 65535. If omitted, "26200" is set to this option.

<code>[-account <i>Account</i>]</code>	Specify the account used for access to a target host. This account is used when direct access to a target host is necessary to obtain data from it. Up to 255 characters are available in this option.
<code>[-p <i>Password</i>]</code>	Specify the password used for access to a target host. This password is used when direct access to a target host is necessary to obtain data from it. Up to 256 characters are available in this option.
<code>-delete</code>	Specify this option if you want to delete the performance monitoring setting information on the specified path.
<code>-disable</code>	Specify this option if you want to disable the performance monitoring setting information on the specified path.
<code>[-host <i>HostName</i>]</code>	Specify the host name. Set a performance monitoring profile to a specified host. If you specify this option, specify the operation group for Path.

[Syntax examples]

```
>ssc monitoringprofile set Group1 profile1
>ssc monitoringprofile set Group1 profile1 -ip 127.0.0.1
>ssc monitoringprofile set Group1 profile1 -ip 127.0.0.1 -port 26200
>ssc monitoringprofile set Group1 profile1 -ip 127.0.0.1 -port 26200
-account root -p root123
>ssc monitoringprofile set Group1 -delete
>ssc monitoringprofile set Group1 -disable
```

2.17.6. Creating a Named Host Profile

Creates a named host profile.

[Syntax]

```
ssc hostprofile create ProfileName OsType <[-private [GroupName]] [-os
[osname=<name | code]] [password=value] [SysprepFile=value] [owner=value]
[orgname=value] [timezone=value] [productkey=value] [ConnectedNumber=value]
[DomainType=<workgroup | domain>] [DomainName=value] [DomainAccount=value]
[DomainPassword=value] [License=value]] [-dns NICNo,
<Primary, Secondary, PrimaryWINS, SecondaryWINS | Primary, Secondary, Tertiary> ...]
[-extend Command=value] | -delete [dns | extend]> [-dns4 NICNo, <Primary |
Primary, Secondary | Primary, Secondary, Tertiary> ...] [-dns6 NICNo, <Primary |
Primary, Secondary | Primary, Secondary, Tertiary> ...] [-wins4 NICNo, <Primary |
Primary, Secondary> ...]
```

[Parameters and Options]

<i>ProfileName</i> (Required)	Specify the name of a named host profile.
<i>OsType</i> (Required)	Specify the OS type. You can specify one of the following OperatingSystemTypes. <i>OsType</i> : OS type "Linux": Linux "Windows-client": Windows Client "Windows": Windows Server
<code>[-private [<i>GroupName</i>]]</code>	To create a dedicated host profile, specify this option. Assign the tenant to which you want to assign a host profile as <i>GroupName</i> . (Optional). If you do not specify this option, a shared

<pre> [-os [osname= <name code>] [password= value] [SysprepFile= value] [owner= value] [orgname= value] [timezone= value] [productkey= value] [ConnectedNumber= value] [DomainType= <workgroup domain>] [DomainName= value] [DomainAccount= value] [DomainPassword= value] [License= value]] </pre>	<p>host profile is created.</p> <p>Specify the OS information. You cannot specify leading or trailing spaces in the equal ("=").</p> <p>osname : OS Name Specify the os name's code or the strings displayed on Web UI. Refer to Reference materials in 3.2.6, Creating Template in this document.</p> <p>password : Password</p> <p>SysprepFile : Sysprep file to be imported You can specify it only when the OS type is Windows.</p> <p>owner : Owner name You can specify it only when the OS type is Windows.</p> <p>orgname : The name of a organization You can specify it only when the OS type is Windows.</p> <p>timezone : Time zone You can specify it only when the OS type is Windows. Specify the time zone's code or the strings displayed on Web UI. Refer to Reference materials in 3.2.6, Creating Template in this document. The default value is the same as the value of "Microsoft Time Zone Index Values."</p> <p>productkey : Product key Input it in the xxxxx-xxxxx-xxxxx-xxxxx-xxxxx format. You can specify it only when the OS type is Windows.</p> <p>ConnectedNumber : Number of connected servers You can specify it only when the OS type is Windows Server. When omitted, license mode is "Connected Client".</p> <p>DomainType : Workgroup setting Specify "workgroup" for WorkGroup, "domain" for Domain. You can specify it only when the OS type is Windows.</p> <p>DomainName : The name of Domain(WorkGroup)</p> <p>DomainAccount : Domain account You can specify it only when the OS type is Windows.</p>
---	--

	<p>DomainPassword : Domain password You can specify it only when the OS type is Windows.</p> <p>License : License You can specify it only when the OS type is Linux.</p>
<p>[-dns <i>NICNo</i>, <<i>Primary,Secondary,PrimaryWINS,SecondaryWINS Primary,Secondary,Tertiary</i>> ...]</p>	<p>Specify DNS information.</p> <p><i>NICNo</i> : NIC Number <i>Primary</i> : Primary DNS <i>Secondary</i> : Secondary DNS <i>Tertiary</i> : Tertiary DNS You can specify it only when the OS type is Linux.</p> <p><i>PrimaryWINS</i> : Primary DNS WINS You can specify it only when the OS type is Windows.</p> <p><i>SecondaryWINS</i> : Secondary DNS WINS You can specify it only when the OS type is Windows. You cannot specify this option along with [-dns4], [-dns6] and [-wins4].</p>
<p>[-extend Command= <i>value</i>]</p>	<p>Specify Extensive information. You cannot specify leading or trailing spaces in the equal ("=").</p> <p>Command : Specify command names to be added separating them with ',' (comma).</p>
<p>-delete [dns extend]</p>	<p>Specify this option if the setting information should be deleted. If you specify the option name, the setting information of that option is deleted. Execute this option separating from other options. If any option name is not specified, the host profile is deleted. You cannot delete only the OS information.</p>
<p>[-dns4 <i>NICNo</i>, <<i>Primary,Secondary Primary,Secondary,Tertiary</i>> ...]</p>	<p>Specify the DNS(IPv4) information.</p> <p><i>NICNo</i> : NIC Number <i>Primary</i> : Primary DNS <i>Secondary</i> : Secondary DNS <i>Tertiary</i> : Tertiary DNS You can specify it only when the OS type is Linux. You cannot specify this option along with [-dns].</p>
<p>[-dns6 <i>NICNo</i>, <<i>Primary,Secondary Primary,Secondary,Tertiary</i>> ...]</p>	<p>Specify the DNS(IPv6) information.</p> <p><i>NICNo</i> : NIC Number <i>Primary</i> : Primary DNS <i>Secondary</i> : Secondary DNS <i>Tertiary</i> : Tertiary DNS You can specify it only when the OS</p>

	type is Linux. You cannot specify this option along with [-dns].
[-wins4 <i>NICNo</i> , < <i>PrimaryWINS,SecondaryWINS</i> ...]	Specify the WINS(IPv4) information. PrimaryWINS : Primary WINS You can specify it only when the OS type is Windows. SecondaryWINS : Secondary WINS You can specify it only when the OS type is Windows. You cannot specify this option along with [-dns].

[Note]

- Be sure to specify all contents of setting of the -os option, if you specify the -os option.

[Syntax examples]

```
Windows OS
>ssc hostprofile create NamedHostProfile1 Windows
-os osname="Windows Server 2003 Enterprise (x64)" password="pass"
owner="ABC Corporation" orgname="1st section"
timezone=235 productkey=12345-67890-ABCD1-EFG21-HI123
DomainType=workgroup DomainName="WorkGroup"
-dns 1,192.168.1.1,192.168.1.2 2,10.108.110.1,10.108.110.2,10.108.110.3
>ssc hostprofile create NamedHostProfile1 Windows
-os osname="Windows Server 2003 Enterprise (x64)" password="pass"
owner="ABC Corporation" orgname="1st section"
timezone=235 productkey=12345-67890-ABCD1-EFG21-HI123
DomainType=workgroup DomainName="WorkGroup"
-dns4 1,192.168.1.100,192.168.1.101
-dns6 1,::192.168.1.150 3,::192.168.1.152 -wins4 1,192.168.1.200 2,192.168.1.201
Linux OS
>ssc hostprofile create NamedHostProfile2 Linux
-os osname="Red Hat Enterprise Linux AS 4" password="pass"
DomainName="Domain1" -dns 1,192.168.1.1,192.168.1.2,192.168.1.3
-extend Command=startcmd1,startcmd2
>ssc hostprofile create NamedHostProfile2 Linux
-os osname="Red Hat Enterprise Linux AS 4" password="pass"
DomainName="Domain1"
-dns4 1,192.168.1.100,192.168.1.101,192.168.1.102
-dns6 1,::192.168.1.150,::192.168.1.151
-extend Command=startcmd1,startcmd2
Windows-Client
>ssc hostprofile create NamedHostProfile3 Windows-client
-os osname="Windows Vista Business (x64)" password="pass"
owner="ABC Corporation" orgname="1st section"
timezone=235 productkey=12345-67890-ABCD1-EFG21-HI123 ConnectedNumber=10
DomainType=domain DomainName="Domain1" DomainAccount="admin"
DomainPassword=adminpass -dns 1,192.168.1.1,192.168.1.2
2,10.108.110.1,10.108.110.2,10.108.110.3
-delete
>ssc hostprofile create NamedHostProfile1 Windows -delete dns
>ssc hostprofile create NamedHostProfile2 Linux -delete
```

2.17.7. Creating a Named Machine Profile

Creates a named machine profile

[Syntax]

```
ssc profile create ProfileName <[-private [GroupName]] [-cost costValue] [-cpu
count=value [share=value] [reservation=value] [limit=value]] [-mem size=value
[share=value] [reservation=value] [limit=value]] [-vnet VirtualNetworkName...]
[-vnettype <vlan | network | edit>...] [-systemdisk size=value [type=<thin |
thick>]] [independent] [datastoretag=value | datastore]] [-extdisk size=value
[ctrl=value [position=value]] [type=<thin | thick | rdm-p | rdm-v>]
[independent] [datastoretag=value | datastore] [/lun], ...] | -delete [cost |
cpu | mem | vnet | systemdisk | extdisk]>
```

[Parameters and Options]

<p><i>ProfileName</i> (Required)</p>	<p>Specify a name of named machine profile.</p>
<p>[-private [GroupName]]</p>	<p>To create a dedicated machine profile, specify this option. Assign the tenant to which you want to assign a machine profile as GroupName (Optional). If you do not specify this option, a shared machine profile is created.</p>
<p>[-cost costValue]</p>	<p>Specify a cost value in the range of the number from 1 to 1000.</p>
<p>[-cpu count=value [share=value] [reservation=value] [limit=value]]</p>	<p>Specify the number of CPUs, shared value, reservation value and limit value. The number of CPUs must be specified. You cannot specify leading or trailing spaces in the equal ("=").</p> <p>count : Specify the number of CPUs. Specify a value in the range of the number from 1 to 9999 (E.g.: count=2).</p> <p>share : Specify a CPU shared value. CPU shared value settings for each virtualization infrastructure are as follows: VMware Setting * CPU count Hyper-V Setting/10 Xen Setting * 256/1000 KVM Setting * 1024 / 1000 Specify one of the following values. "he": Highest(4000) "h": High(2000) "n": Normal(1000) "l": Low(500) "le": Lowest(250) "1" - "99999": Manual (E.g.: share=h, share=30). Optional. The default value is "n."</p> <p>reservation : Specify a CPU allocation value(MHz). Specify a value in the range of the number from 0 to 99999 (E.g.: reservation=1000). Optional. The default value is 0.</p> <p>limit : Specify the upper limit of a CPU resource assignment(MHz). Specify a value in the range of the number from 0 to 99999 (E.g.: limit=1500). Optional. The default value is 0 (unlimited).</p>

<p>[-mem size= <i>value</i> [share= <i>value</i>] [reservation= <i>value</i>] [limit= <i>value</i>]]</p>	<p>Specify memory size, shared value, reservation value and limit value. You cannot specify leading or trailing spaces in the equal ("=").</p> <p>size : Specify memory size (MB) in the range of the number from 1 to 9999999 (MB) (E.g.: size=512).</p> <p>share : Specify a memory shared value. Memory shared value settings for each virtualization infrastructure are as follows: VMware Setting * the Memory size / 100 Hyper-V Setting * 5 Xen you cannot specify. KVM you cannot specify. Specify one of the following values. "h": High(2000) "n": Normal(1000) "l": Low(500) "0" - "10000": Manual (E.g.: share=h, share=100). Optional. The default value is "n."</p> <p>reservation : Specify a memory allocation value(MB). Specify a value in the range of the number from 0 to 99999 (E.g.: reservation=1024). Optional. The default value is 0.</p> <p>limit : Specify the upper limit of a memory size(MB). Specify a value in the range of the number from 0 to 99999 (E.g.: limit=2048). Optional. The default value is 0 (unlimited).</p>
<p>[-vnet <i>VirtualNetworkName</i>...]</p>	<p>Specify a virtual network name. You can specify up to ten names (from NIC #1 to NIC #10), dividing them with a space. NICs are assigned in the specified order from NIC #1. You can specify when creating a dedicated machine profile.</p> <p>When reflecting machine-specific information of DPM is used, the upper limit number of NICs you can set is: if Windows Vista or later, it's "8"; if Windows 2000, Windows Server 2003 and Windows XP, it's "4."</p>
<p>[-vnettype <vlan network edit>...]</p>	<p>Specify the network type. Specify the number of the networks you want to configure. NICs are assigned in the specified order from NIC #1. When you want to specify a VLAN name, set "vlan" When you want to specify a logical network name, set "network" When you want to specify an arbitrary network name, set "edit" When omitted, it'll be VLAN or optional port name.</p>

	<p>You can specify only when creating a dedicated machine profile.</p>
<pre>[-systemdisk size=<i>value</i> [type=<thin thick>] [independent] [datstoretag=<i>value</i> <i>datastore</i>]]</pre>	<p>Set the system disk information..</p> <p>size : Specify the size of a system disk in megabytes (MB).</p> <p>type : Specify the type of a system disk. Specify either thin or thick. Optional. The default type is thick.</p> <p>independent : The Independent mode of a disk is configured by specifying it as "independent." The Independent mode is only available in the VMware environment.</p> <p>datastore : Specify the datastore name of the system disk.</p> <p>datastoretag : Specify the datastore tag of the system disk. Specify either datastore or datastoretag. Optional.</p>
<pre>[-extdisk size=<i>value</i> [ctrl=<i>value</i> [position=<i>value</i>]] [type=<thin thick rdm-p rdm-v>] [independent] [datstoretag=<i>value</i> <i>datastore</i>] [<i>lun</i>, ...]</pre>	<p>Set the extended disk information (You can specify multiple items). When you specify multiple items, separate the data with commas (","). (Max 6)</p> <p>size : Specify disk size Specify a value in the range of the number from 10 to 99999999 (MB). When Disk Type is specified 'rdm-p' or 'rdm-v', specify a value in the range of the number from 1 to 10000000 (GB) and a multiple of the LUN size range (default value is 10).</p> <p>ctrl : Specify the controller on which an extended disk is connected. Specify the following value PCIx IDEX SCSIx AutoDetect (auto detection)</p> <p>x: Bus number</p> <p>position : Specify the position where an extended disk is connected. You can specify the following value PCI: 0 - 31 IDE: 0 - 1 SCSI: 0 - 63 When 'ctrl' is 'AutoDetect', it can't be specified.</p> <p>The value which can be specified to the controller and position differs depending on your virtualization infrastructures. To check available values, refer to the "3.2.1. Changing Configuration of Virtual Machines [The controller and the location prepared by each virtualization infrastructure]."</p> <p>type : Specify the type of an extended disk.</p>

	<p>Specify one of thin / thick / rdm-p / rdm-v. The default type is thick. rdm-p: RDM (physical) rdm-v: RDM (virtual)</p> <p>independent : The independent mode of a disk is configured by specifying it as "independent." The Independent mode is only available in the VMware environment. When you specify the disk type is RDM (physical), you cannot specify the mode of Independent.</p> <p>*If type = thick or thin datastoretag : Specify the datastore tag of the extended disk. datastore : Specify the datastore name of the extended disk. Specify either datastore or datastoretag. Optional. If omitted, the extended disk is created in the same location with the system disk by default.</p> <p>*If type = rdm-p / rdm-v lun : Specify the target LUN (LUN name).</p>
<pre>[-delete [cost cpu mem vnet systemdisk extdisk]]</pre>	<p>Deletes the setting information. If you specify the option name, the setting information of that option is deleted. Execute this option separating from other options. If any option name is not specified, the profile itself is deleted</p>

[Note]

- If you specify the `-cpu` option, the `-mem` option, the `-systemdisk` option and the `-extdisk` option, be sure to specify all contents of setting of those options.

[Syntax examples]

```
>ssc profile create Large -cost 100
>ssc profile create Middle -cpu count=2 share=h
>ssc profile create Small -cpu count=2 share=600 -mem size=1024
-vnet "VM Network"
>ssc profile create PrivateProfile1 -private -cpu count=1 share=n -mem size=2048
>ssc profile create GyomuProfile1 -private Gyomu -systemdisk type=thin Storage1
-extdisk size=10240 ctrl=IDE1 position=0 type=thin, size=100 ctrl=AutoDetect
type=rdm-v
>ssc profile create Large -delete
>ssc profile create Small -delete cpu
```

2.17.8. Displaying the Machine Profile

Displays the machine profile.

[Syntax]

```
ssc profile show Path [-host HostName] [-type <standard | network | storage |
all>] [-vertical]
```

[Parameters and Options]

<i>Path</i> (Required)	<p>Specify the full path of the group/model/host or of the the virtual machine. Displays the setting machine profile when you specify the path to the operation group, model or host. You can omit View Type ("operations:/"). If you omit View Type, the specified path is treated as the path to the Operation view.</p> <p>E.g.:</p> <p>When specifying a group name: Category/Group</p> <p>When specifying a model name: Category/Group/Model</p> <p>When specifying a host name: Category/Group/Host</p> <p>When specifying a host name (full path): operations:/Category/Group/Host</p> <p>When you specify the target virtual machine, its machine profile is displayed. You can omit View Type ("operations:/"). E.g.:</p> <p>virtual:/VC1/DataCenter1/Host1/VM1 resource:/Virtual/VM1 operations:/Category/Group/Model1/VM1</p>
<code>[-host <i>HostName</i>]</code>	<p>Specify the host name of the target. If you specify this option, specify the operation group for Path. Specify this option if there is a model with the same name as the target host.</p>
<code>[-type <standard network storage all>]</code>	<p>Specify the display type. standard: CPU and Memory information network: Network information storage: Storage information all: all of machine profile information (standard network storage) When you can omit, type is 'standard'</p>
<code>[-vertical]</code>	<p>Specify the format. If you do not specify this option, the information is displayed in the csv format.</p>

[Syntax examples]

```
>ssc profile show Category/Group
>ssc profile show Category/Group/Model -type standard
>ssc profile show Category/Group/Host -type network
>ssc profile show Category/Group -type storage
>ssc profile show Category/Group -type all
>ssc profile show operations:/Category/Group/Host -type all -vertical
```

2.18. API Key

2.18.1. Creating API Key

Creates a user account and API key.

[Syntax]

```
ssc apikey create UserName [-description Description]
```

[Parameters and Options]

<i>UserName</i> (Required)	Specify an API user name. You can enter up to 32 characters of any kind, except the following symbols: * + , / : ; < = > ? \ []
-description <i>Description</i>	Enter a description of the API user. You can enter up to 128 characters.

[Syntax examples]

```
>ssc apikey create MyApp  
>ssc apikey create MyApp2 -description "My Application2 API key"
```

[Note]

- An API user will be created as an administrator user.
- An API key is generated automatically.

2.18.2. Updating API Key

Updates a user account and API key.

[Syntax]

```
ssc apikey update UserName [-description Description]
```

[Parameters and Options]

<i>UserName</i> (Required)	Specify an API user name to update API key. If you update the API key, you cannot use the old API key.
-description <i>Description</i>	Enter a description of the API user. You can enter up to 128 characters.

[Syntax examples]

```
>ssc apikey update MyApp -description "My Application API key"  
>ssc apikey update MyApp2
```

2.18.3. Deleting API Key

Deletes a user account and API key.

[Syntax]

```
ssc apikey delete UserName
```

[Parameters and Options]

<i>UserName</i> (Required)	Specify an API user name of a target user account.
-------------------------------	--

[Syntax examples]

```
>ssc apikey delete MyApp
```

2.18.4. Displaying API Key

Displays User Account information and API key.

[Syntax]

```
ssc apikey show [UserName]
```

[Parameters and Options]

<i>UserName</i>	Specify an API user name to display. When omitted, all API users are displayed.
-----------------	--

[Syntax examples]

```
>ssc apikey show
#UserName, AccessKeyId, Description
"MyApp", "NVG8YIfiP3rKbgbjmK6/EqTAsh5bTqJXSaELekTjuo=", "My Application API user"
"MyApp2", "Ch2Np96lhjSH6spJz2R6nB6JE/eXw4sjS23ZI00TOVU=", "My Application2 API user"
>ssc apikey show MyApp
UserName      : MyApp
Description   : My Application API user
AccessKeyId   : NVG8YIfiP3rKbgbjmK6/EqTAsh5bTqJXSaELekTjuo=
SecretAccessKey : hMn7iZAM55p7TallUikrnyp1nX1VY0xVYEZX9JPHQ0k=
```

2.19. Custom Setting

2.19.1. Creating Custom Setting

Adds the custom setting.

[Syntax]

```
ssc customproperty add Type Target [-host HostName] [-vmserver VMServerPath]
<-property Name Value | -construction>
```

[Parameters and Options]

<p><i>Type</i> (Required)</p>	<p>Specify the type of the target. group: Operation Group host: Host machineprofile: Machine Profile of Operation Group, Model, or Host namedmachineprofile: Named Machine Profile template: Template machine: Machine</p>
<p><i>Target</i> (Required)</p>	<p>Specify the target path or UUID to add the custom setting. You can omit View Type when you specify the path. E.g. Operation Group Tenant/Category/Group Model Tenant/Category/Group/Model Host Tenant/Category/Group/Host Named Machine Profile MachineProfile Template Template Machine Group/Machine xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxxxx If you specify the path of the machine, specify the path of the Resource view.</p>
<p>[-host <i>HostName</i>]</p>	<p>Specify the host name of the target. If you specify this option, specify the operation group for <i>Target</i>. Specify this option if there is a model with the same name as the target host.</p>
<p>[-vmserver <i>VMServerPath</i>]</p>	<p>Specify the path of the virtual machine server of the Virtual view. E.g. virtual:/VC/DataCenter/VMServer VC/DataCenter/VMServer You can omit View Type(virtual:/.). Specify this option if multiple templates with the same name exist for the target template.</p>
<p>-property <i>Name Value</i></p>	<p>Specify the name and value. Name: Specify the name. Up to 256 characters are available. If Type is "group", "host", or "machine", available characters are as follows: alphabetic characters, numerals, and an underscore (_). But you cannot specify the character string beginning with "PVM_" or numerals.</p>

	<p>If Type is "machineProfile", "namedmachineprofile", or "template", available characters are as follows: alphabetic characters, numerals, and symbols. Value: Specify the value. Up to 256 characters are available. If Type is "machineProfile", "namedmachineprofile", or "template", available characters are as follows: alphabetic characters, numerals, and symbols.</p>
-construction	<p>Specify this option if Construction Parameter Setting is turned ON. You can specify this option when "machineProfile" is specified in Type.</p>

[Syntax examples]

```
>ssc customproperty add machine Group/Machine
  -property WWN 20:00:00:00:C9:56:C0:99:10:00:00:00:C9:56:C0:99
>ssc customproperty add host Category/Group -host Host
  -property WWN 20:00:00:00:C9:56:C0:99:10:00:00:00:C9:56:C0:99
>ssc customproperty add machineprofile Category/Group/Model
  -property vm.vcpu.core 2
>ssc customproperty add machineprofile Category/Group -host Host
  -construction
```

2.19.2. Deleting Custom Setting

Deletes the custom setting.

[Syntax]

```
ssc customproperty delete Type Target [-host HostName]
  [-vmserver VMServerPath] [<-property Name... | -all | -construction]
```

[Parameters and Options]

<i>Type</i> (Required)	<p>Specify the type of the target. group: Operation Group host: Host machineprofile: Machine Profile of Operation Group, Model, or Host namedmachineprofile: Named Machine Profile template: Template machine: Machine</p>
<i>Target</i> (Required)	<p>Specify the target path or UUID to delete the custom setting. You can omit View Type when you specify the path. E.g. Operation Group Tenant/Category/Group Model Tenant/Category/Group/Model Host Tenant/Category/Group/Host Named Machine Profile MachineProfile Template Template Machine Group/Machine xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx If you specify the path of the machine, specify the path of the Resource view.</p>

<code>[-host <i>HostName</i>]</code>	Specify the host name of the target. If you specify this option, specify the operation group for <i>Target</i> . Specify this option if there is a model with the same name as the target host.
<code>[-vmserver <i>VMServerPath</i>]</code>	Specify the path of the virtual machine server of the Virtual view. E.g. virtual:/VC/DataCenter/VMServer VC/DataCenter/VMServer You can omit View Type(virtual:/). Specify this option if multiple templates with the same name exist for the target template.
<code>-property <i>Name...</i></code>	Specify the name (You can specify multiple names).
<code>-all</code>	Specify this option if you delete all properties.
<code>-construction</code>	Specify this option if Constitutive Parameter Setting is turned OFF and you delete all properties. You can specify this option when "machineProfile" is specified in Type.

[Syntax examples]

```
>ssc customproperty delete group
Tenant/Category/Group -property tenant
>ssc customproperty delete host
Tenant/Category/Group -host host -all
>ssc customproperty delete machineprofile
Tenant/Category/Group/Model -construction
>ssc customproperty delete namedmachineprofile
MachineProfile -property vm.vcpu.core
>ssc customproperty delete template
Template -vmserver VC/DataCenter/VMServer -all
>ssc customproperty delete machine
Group/Machine -property WWN
```

2.19.3. Displaying Custom Setting

Shows the custom setting.

[Syntax]

```
ssc customproperty show Type Target [-host HostName] [-vmserver VMServerPath]
```

[Parameters and Options]

<i>Type</i> (Required)	Specify the type of the target. group: Operation Group host: Host machineprofile: Machine Profile of Operation Group, Model, or Host namedmachineprofile: Named Machine Profile template: Template machine: Machine
<i>Target</i> (Required)	Specify the target path or UUID to show the custom setting. You can omit View Type when you specify the path. E.g. Operation Group Tenant/Category/Group Model Tenant/Category/Group/Model

	Host Tenant/Category/Group/Host Named Machine Profile MachineProfile Template Template Machine Group/Machine xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx If you specify the path of the machine, specify the path of the Resource view.
<code>[-host <i>HostName</i>]</code>	Specify the host name of the target. If you specify this option, specify the operation group for <i>Target</i> . Specify this option if there is a model with the same name as the target host.
<code>[-vmserver <i>VMServerPath</i>]</code>	Specify the path of the virtual machine server of the Virtual view. E.g. virtual:/VC/DataCenter/VMServer VC/DataCenter/VMServer You can omit View Type(virtual:/.). Specify this option if multiple templates with the same name exist for the target template.

[Syntax examples]

```
>ssc customproperty show machine Group/Machine
```

[Display examples]

```
>ssc customproperty show machine Group/Machine
#PropertyName, Value
"WWN", "10:00:00:00:C9:56:C0:99"
```

3. Command for Controlling

This chapter explains commands regarding the configuration control of the virtual environment that can be managed in SigmaSystemCenter.

3.1. Operations for Virtual Machine Server

3.1.1. Adding Virtual Machine Server

Adds a virtual machine server in a datacenter.

[Syntax]

```
ssc add vmserver Datacenter [-name HostName] [-url URL] [-port PortNumber]  
[-account Account] [-p Password]
```

[Parameters and Options]

<i>Datacenter</i> (Required)	Specify a datacenter to which you intend to add a virtual machine server. Specify a full path to the datacenter.
[-name <i>HostName</i>]	Specify a host name or IP address.
[-url <i>URL</i>]	Specify a URL of the target. If you specify <i>HostName</i> , a URL is automatically generated, and you do not need to specify this item.
[-port <i>PortNumber</i>]	Specify a port number. You can specify from 1 to 65535. If you do not specify a port number, "443" is specified.
[-account <i>Account</i>]	Specify an account name.
[-p <i>Password</i>]	Specify a password.

[Note]

- If you specify a KVM in datacenter, -url option is enabled.

[Syntax examples]

```
>ssc add vmserver 192.168.10.1/Datacenter1 -name VMServer-01  
>ssc add vmserver 192.168.10.1/Datacenter1 -name 192.168.10.100  
>ssc add vmserver 192.168.10.1/Datacenter1 -name  
192.168.10.101 -port 443 -account user01 -p xxxxx  
>ssc add vmserver /KVM/DefaultDataCenter -url  
"qemu+tls://server.test.net:5000/system"
```

3.1.2. Deleting Virtual Machine Server

Deletes a virtual machine server from a datacenter.

[Syntax]

```
ssc delete vmserver Datacenter VMServerName [...]
```

[Parameters and Options]

<i>Datacenter</i> (Required)	Specify a datacenter from which you intend to delete a virtual machine server. Specify a full path to the datacenter.
<i>VMServerName</i> [...] (Required)	Specify a target virtual machine server name.

[Syntax examples]

```
>ssc delete vmserver 192.168.10.1/Datacenter1 VMServer-01
>ssc delete vmserver 192.168.10.1/Datacenter1
192.168.10.100 192.168.10.101
```

3.1.3. Changing Password of Virtual Machine Server

Changes a password of a user account or VM server.

[Syntax]

```
ssc change-passwd Type Name NewPassword [-l Account] [-p Password]
```

[Parameters and Options]

<i>Type</i> (Required)	Specify the target type to be changed its password: "manager": Specify in the case of changing a password of a VM server. "user": Specify in the case of changing a password of a user account.
<i>Name</i> (Required)	Specify the target name. Specify the host name or the full path of the target virtual machine server if "manager" is specified in <i>Type</i> . (E.g.: <i>VirtualCenter/DataCenter/ESX</i>) If the same host name exists, specify the host with its path. Specify a user name when "user" is specified in <i>Type</i> .
<i>NewPassword</i> (Required)	Specify a new password.
[-l <i>Account</i>]	Specify the account name. Specify the account name of the VM Server when "manager" is specified in <i>Type</i> . If you do not specify it, the account name is not changed. Specify an administrator user name when "user" is specified in <i>Type</i> . If you do not specify it, specify an old password in the -p option as authentication information.
[-p <i>Password</i>]	You can specify this option when "user" is specified in <i>Type</i> . Specify an administrator user password if the -l option is specified. Specify an old password of target user if the -l option is not specified.

[Syntax examples]

```
Changes a password of VM server.
>ssc change-passwd manager Host1 "*****" -l user1
>ssc change-passwd manager "VirtualCenter/New DataCenter/Esx1" "*****"
Change a password of a user.
1) Authentication is old password of user.
>ssc change-passwd user user1 "****" -p "****"
2) Authentication is administrator user account.
>ssc change-passwd user user2 "****" -l Administrator -p "****"
```

3.1.4. Post-Processing of Virtual Machine Server Recovery

Executes post-processing of recovery process (Failover) of virtual machine server. This command is available only for a standalone ESXi whose Connection Status is "Disconnected".

[Syntax]

```
ssc recover machine SourceName
```

[Parameters and Options]

<i>SourceName</i> (Required)	Specify a target virtual machine server name from its belonging view in a full path. You can specify either of the following items as a view: "operations:/" : Operations view "virtual:/" : Virtual view (E.g.: operations: /Category/Group/Model/Virtual Machine Server You cannot omit View Type ("operations:/"). Or virtual: /VirtualCenter/Datacenter/Virtual Machine Server VirtualCenter/Datacenter/Virtual Machine Server You can omit View Type ("virtual:/"). If you omit View Type, the specified path is treated as the path to the Virtual view.)
---------------------------------	--

[Syntax examples]

```
>ssc recover machine operation:/Category01/Group01/Model01/VMS001  
>ssc recover machine virtual:/192.168.1.100/DC/192.168.1.5  
>ssc recover machine 192.168.1.100/DC/192.168.1.5
```

3.1.5. Evacuating Machine

Evacuates virtual machines to other virtual machine servers.

[Syntax]

```
ssc evacuate machine SourceName [DestinationName] [-all] [-q] [-ignorerule]
```

[Parameters and Options]

<i>SourceName</i> (Required)	Specify the path to a source virtual machine server or a virtual machine to be moved. * Operations view : operation:/Category1/Group1/Model1/VMServer1 * Virtual view : virtual:/Manager1/DataCenter1/VMServer1 * If the view is not specified (Manager1/DataCenter1/VMServer1), the specified path is treated as the path to the Virtual view. If a virtual machine server is specified, powered-on virtual machines on the virtual machine server are moved. (If -all option is specified, all the virtual machines including powered-off ones are moved.) If a virtual machine is specified, Failover for the virtual machine is executed.
---------------------------------	--

[<i>DestinationName</i>]	Specify the path to a destination virtual machine server. * Operations view : operation:/Category1/Group1/Model1/VMServer1 * Virtual view : virtual:/Manager1/DataCenter1/VMServer1 * If the view is not specified (Manager1/DataCenter1/VMServer1), the specified path is treated as the path to the Virtual view. If omitted, destination virtual machine servers are selected automatically. (This cannot be omitted if a virtual machine is specified for <i>SourceName</i> .)
[-all]	If you want to move all the virtual machines (including powered-off ones) on the virtual machine server, specify this option. If omitted, only powered-on virtual machines are moved. (This option is available only if a virtual machine server is specified for <i>SourceName</i> .)
[-q]	If you want to suspend the virtual machine before it is moved (Quick Migration), specify this option. The virtual machine is resumed after it was moved. If omitted, Migration is executed. (This option is available only if a virtual machine server is specified for <i>SourceName</i> .)
[-ignorerule]	If you want to ignore the placement rules when you move the virtual machine, specify this option. If omitted, you cannot move the virtual machine against the rules. (This option is available only if a virtual machine is specified for <i>SourceName</i> .)

[Note]

- If a virtual machine server is specified for *SourceName*, powered-on virtual machines stored in local datastores are not moved. Powered-off virtual machines are moved even if they are stored in local datastores. (Their virtual disks are moved to other datastores.)
- If a virtual machine is specified with *SourceName*, Failover of the virtual machine stored in a local datastore cannot be executed.
- If a virtual machine server of XenServer Pool Master is specified for *SourceName* and it is down, the other virtual machine server which has the largest capacity in the pool becomes a new Pool Master.
- If a virtual machine server is specified for *SourceName*, virtual machines to be moved and their destination virtual machine servers are selected automatically by the VM Optimized Placement feature. (If *DestinationName* is specified, virtual machines are moved to the specified virtual machine server.) There are some cases that virtual machines cannot be moved according to the condition for the VM Optimized Placement feature or placement rules. Refer to SigmaSystemCenter Overview Reference Guide "2.12.3. Conditions for VM Optimized Placement" for details.

[Syntax examples]

```
>ssc evacuate machine operation:/Category1/Group1/Model1/VM001
  virtual:/VC1/DataCenter/VMServer1
>ssc evacuate machine VMServer1
  //VC1/DataCenter/VMServer2 -all
>ssc evacuate machine //VC1/DataCenter/VMServer3
>ssc evacuate machine //VC1/DataCenter/VMServer3 -q
```

3.2. Operations for Virtual Machine

3.2.1. Changing Configuration of Virtual Machines

Changes the configuration such as the number of CPUs and memory size of virtual machines. By specifying a resource group (or rack) or virtual machine server (or datacenter), you can change configuration of virtual machines exist in the group or on the virtual machine server collectively.

[Note]

Before editing virtual machines collectively, be sure to collect information and update the virtual machines to the latest status. If the virtual machines are not updated, the editing operation might not be reflected.

[Syntax]

```
ssc update vmproperty Path [-name vmName] [-cost costValue] [-cpu count=value
[share=value] [reservation=value] [limit=value]] [-mem size=value [share=value]
[reservation=value] [limit=value]] [-vnet nic=value operation=<modify | delete
| connect | disconnect> [network=value]...] [-extdisk <add | delete |
disconnect | modify | connect> [size=value] [type=<thin | thick | rdm-p |
rdm-v>] [lun=value] [location=value] [independent=<persistent | nonpersistent |
none>] [ctrl=value [position=value]] [file=value] , ...] [-systemdisk
[size=value] [type=<thin | thick>] [independent=<persistent | nonpersistent |
none>]] [-opticaldrive IsoFile ...]
```

[Parameters and Options]

<p><i>Path</i> (Required)</p>	<p>Specify the full path of the group where the target virtual machines belong. Or, specify the full path of the path to the target machines. You can specify the path of a virtual machine server, a Datacenter or a resource as a group When specifying a resource group(View Type is resource:) resource:/Rack01 When specifying a virtual group(View Type is virtual:) virtual:/VC1/DataCenter1/VMServer1</p> <p>You can omit View Type ("virtual:/"). If you omit View Type, the specified path is treated as the path to the Virtual view.</p> <p>Managed virtual machines exist under the specified group are the target of editing. If a virtual machine which is running and in the Maintenance Mode exists, an error will occur and editing process of all the virtual machines will not be executed.</p>
<p>[-name <i>vmName</i>]</p>	<p>Change the target virtual machine's name to the specified name. This option is enabled if one target virtual machine is specified. If omitted, no change.</p>
<p>[-cost <i>costValue</i>]</p>	<p>Change the cost value of the target virtual machine. Specify a value in the range of 0-1000. If omitted, no change.</p>
<p>[-cpu count=<i>value</i> [share=<i>value</i>] [reservation=<i>value</i>] [limit=<i>value</i>]]</p>	<p>Specify the number of CPUs, shared value, reservation value and limit value. If you do not specify value, the number of CPUs and shared value are not changed. You cannot specify leading or trailing spaces in the</p>

	<p>equal ("=").</p> <p>count: Specify the number of CPUs. Specify a value in the range of 1-9999. (E.g.: count=2)</p> <p>share: Specify a CPU shared value. CPU shared value settings for each virtualization infrastructure are as follows: VMware Setting * CPU count Hyper-V Setting / 10 Xen Setting * 256 / 1000 KVM Setting * 1024 / 1000 Specify one of the following values. "he": Highest (4000) "h": High (2000) "n": Normal (1000) "l": Low (500) "le": Lowest (250) "1" - "99999": Manual (E.g.: share=l, share=30)</p> <p>reservation : Specify a CPU allocation value(MHz). Specify a value in the range of 0-99999. (E.g.: reservation=1000)</p> <p>limit : Specify the upper limit of a CPU resource assignment(MHz). Specify a value in the range of 0-99999. (E.g.: limit=1500)</p>
<p>[-mem size=<i>value</i> [share=<i>value</i>] [reservation=<i>value</i>] [limit=<i>value</i>]]</p>	<p>Specify memory size, shared value, reservation value and limit value. If you do not specify value, memory size and a memory shared value are not changed. You cannot specify a space in front and behind the equal ("=").</p> <p>size: Specify memory size (MB). Specify a value in the range of 1-9999999 (MB). (E.g.: size=512)</p> <p>share: Specify a memory shared value. Memory shared value settings for each virtualization infrastructure are as follows: VMware Setting * the Memory size / 100 Hyper-V Setting * 5 Xen you cannot specify. KVM you cannot specify. Specify one of the following values. "h": High (2000) "n": Normal (1000) "l": Low (500) "0" - "10000": Manual (E.g.: share=l, share=50)</p> <p>reservation : Specify a memory allocation value(MB). Specify a value in the range of 0-99999. (E.g.: reservation=2048)</p> <p>limit : Specify the upper limit of a memory size(MB) Specify a value in the range of 0-99999.</p>

<pre>[-vnet nic=value operation= <modify delete connect disconnect> [network=value]...]</pre>	<p>(E.g.: limit=4096)</p> <p>Specify a virtual network name. You can specify names divided by a space. This is valid only for a single virtual machine. nic : Specify NIC No. network : Specify a network name. This option is effective if you specify "modify" for operation. operation : Specify operation to network. When modifying, specify "modify." (When there is no setting, it's added.) When deleting, specify "delete." (It's possible to specify it from something with the big NIC number.) When connecting, specify "connect." When disconnecting, specify "disconnect."</p>
<pre>[-extdisk <add delete disconnect modify connect> [size=value] [type=<thin thick rdm-p rdm-v>] [lun=value] [location=value] [independent=<persistent nonpersistent none>] [ctrl=value [position=value]] [file=value] , ...]</pre>	<p>Change the setting of the extended disk. This is valid only for a single virtual machine. (You can specify multiple items.) When you specify multiple items, separate the data with commas (",").</p> <p>When adding, specify "add". "size", and "type" must be specified. "location" is optional. When "type" is rdm-p, rdm-v, "lun" is specified as the other of "size", "location".</p> <p>When deleting, specify "delete". Please specify a target disk in "ctrl", "position". The first information will be the target at the time of "ctrl", "position" omitting.</p> <p>When disconnecting, specify "disconnect". Specify a target disk in "ctrl", "position". The first information will be the target at the time of "ctrl", "position" omitting.</p> <p>When updating, specify "modify". All except for "location" is made the target.</p> <p>When connecting, specify "connect". "location", and "file" must be specified. "ctrl", and "position" are optional.</p> <p>size : Specify disk size (MB) in the range of 10-99999999 (MB).</p> <p>type : Specify the type of extended disk. Specify either thin / thick / rdm-p / rdm-v. rdm-p:RDM(physical)[[BR]] rdm-v:RDM(virtual)[[BR]] [[BR]]lun : Specify the target LUN(LUN Name). It's effective when you specify rdm-p, rdm-v. Please specify unused LUN for RDM.</p> <p>location : Specify the location of the extended disk. Optional. It's effective when you specify thin, thick. The extended disk is created in the same location as the system disk by default.</p>

	<p>independent : Specify the mode of Independent. Specify either persistent / nonpersistent / none. The Independent mode is only used in the VMware environment. When you specify the disk type is RDM(physical), you cannot specify the mode of Independent.</p> <p>ctrl : Specify the controller on which an extended disk is connected. Specify the following value PCIx IDEx SCSIx AutoDetect (auto detection)</p> <p>x: Bus Number</p> <p>position : Specify the position where an extended disk is connected. You can specify the following value 0-31 (case of PCI) 0-1 (case of IDE) 0-63 (case of SCSI) When 'ctrl' is 'AutoDetect', it can't be specified.</p> <p>The value which can be specified is different in the controller and position depending on virtual foundations. For possible values, refer to the following "The controller and the location prepared by each virtual foundation".</p>
<pre>[-systemdisk [size= value] [type=<thin thick>] [independent=<persistent nonpersistent none>]]</pre>	<p>Change the setting of the system disk. Is only valid if a single virtual machine.</p> <p>size : Specify disk size (MB) in the range of 10-999999999 (MB).</p> <p>type : Specify the type of system disk. Specify either thin / thick.</p> <p>independent : Specify the mode of Independent. Specify either persistent / nonpersistent / none. The Independent mode is only used in VMware environment.</p>
<pre>[-opticaldrive IsoFile ...]</pre>	<p><i>IsoFile</i> : Specify the ISO file you want to mount. If you set an empty string to this, a drive that is not mounted is created. If you do not specify <i>IsoFile</i>, the drive is deleted.</p>

[Syntax examples]

- If you edit virtual machines in a datacenter:

```
>ssc update vmproperty virtual:/192.168.1.1/DataCenter001 -cpu count=2
>ssc update vmproperty 192.168.1.1/DataCenter002 -cpu count=2 share=1
-mem size=512 share=h
```
- If you edit virtual machines on a virtual machine server:

```
>ssc update vmproperty 192.168.1.1/DataCenter001/VMServer01 -cpu count=1
share=35 -mem size=512 share=50
```
- If you edit virtual machines on all virtual machine servers:

```
>ssc update vmproperty resource:/Rack01/Group001 -cpu count=2
>ssc update vmproperty resource:/Rack01/Group001 -mem size=256
```

```

>ssc update vmproperty resource:/Rack01/Group001 -disk modify size=512
>ssc update vmproperty resource:/Rack01/Group001 -disk add size=512 type=thin
location=localstorage independent=persistent
• If you edit a specific virtual machine(name, cost and number of CPU):
>ssc update vmproperty resource:/Rack01/Group001/vm001 -name vm003 -cost 15
-cpu count=2
>ssc update vmproperty resource:/Rack01/Group001/vm001 -name vm016 -cost 20
-cpu count=3 -vnet nic=1 operation=modify network=NECNET
>ssc update vmproperty resource:/Rack01/Group001/vm001 -name vm016 -cost 20
-cpu count=3 -vnet nic=1 operation=connect
>ssc update vmproperty resource:/Rack01/Group001/vm001 -name vm003 -cost 15
-cpu count=2 -sysdisk size=4000 type=thin independent=nonpersistent

```

[The controller and the location prepared by each virtual infrastructure]

Virtual foundation	Controller	Location(Disk No.)	Note
VMware	IDE0, IDE1	0,1	When there are no disks in 0, it isn't put on 1.
	SCSI0, SCSI1, SCSI2, SCSI3	0-15(Besides 7)	7 is used for DiskController.
Xen	SCSI0	0-7	
Hyper-V	IDE0, IDE1	0,1	
	SCSI0, SCSI1, SCSI2, SCSI3	0-63	
KVM	IDE0, IDE1	0,1	
	PCIO	0-31	

- Each location is used by other devices (NIC, CD-ROM), so a virtual disk may not be able to use anything.
- An extend disk can't be added to the location used by a system disk. It's 'IDE0:0/SCSI0:0' in case of VMware. It's 'SCSI0:0' in case of Xen. It's 'IDE0:0' in case of Hyper-V. PCIO of KVM is used for a virtio disk of a PCI device. It's impossible to use 0-2.

3.2.2. Moving Virtual Machine (Migrate)

Moves a virtual machine (Migration / QuickMigration).

[Syntax]

```
ssc migrate machine SourceName DestinationName [-n] [-q] [-ignorerule]
```

[Parameters and Options]

<i>SourceName</i> (Required)	Specify a name of a target virtual machine in a source in a full path.
<i>DestinationName</i> (Required)	Specify a destination virtual machine server name in a full path.
[-n]	If you do not want to start the virtual machine after the move, specify this option.
[-q]	If you want to suspend the virtual machine before the move (Quick Migration), specify this option. The virtual machine is resumed after the move. If omitted, do Migration.
[-ignorerule]	If you want to ignore the placement rules when you move the virtual machine, specify this option. If omitted, you cannot move the virtual machine against the rules.

[Syntax examples]

```
>ssc migrate machine virtual:/VC-01/DC-001/VMServer-001/VM-001
virtual:/VC-01/DC-001/VMServer-002
>ssc migrate machine operations:/Group-VM001/Model-VM01/VM-002
operations:/Group-VMServer001/Model-VMServer01/VMServer-002
>ssc migrate machine virtual:/VC-01/DC-001/VMServer-001/VM-003
virtual:/VC-01/DC-001/VMServer-002 -n
>ssc migrate machine virtual:/VC-01/DC-001/VMServer-001/VM-001
virtual:/VC-01/DC-001/VMServer-004 -q
```

3.2.3. Moving Virtual Machine (Move)

Moves a virtual machine with disk (StorageMigration / Move).

[Syntax]

```
ssc move machine SourceName DestinationName [-datastore DatastoreName] [-n]
[-s] [-onlysystemdisk] [-ignorerule]
```

[Parameters and Options]

<i>SourceName</i> (Required)	Specify a name of a target virtual machine in a source in a full path.
<i>DestinationName</i> (Required)	Specify a destination virtual machine server name in a full path.
[-datastore <i>DatastoreName</i>]	Specify a destination datastore name.
[-n]	If you do not want to start the virtual machine after the move, specify this option.
[-s]	If you want to move the virtual machine as power supply on (Storage Migration), specify this option. If omitted, moves the virtual machine after power off (Move).
[-onlysystemdisk]	If you want to move the virtual machine without the extended disk, specify this option. If omitted, moves the virtual machine with all the virtual disk.
[-ignorerule]	If you want to ignore the placement rules when you move the virtual machine, specify this option. If omitted, you cannot move the virtual machine against the rules.

[Syntax examples]

```
>ssc move machine virtual:/VC-01/DC-001/VMServer-001/VM-001
virtual:/VC-01/DC-001/VMServer-002
>ssc move machine operations:/Group-VM001/Model-VM01/VM-002
operations:/Group-VMServer001/Model-VMServer01/VMServer-002
>ssc move machine virtual:/VC-01/DC-001/VMServer-001/VM-003
virtual:/VC-01/DC-001/VMServer-002 -datastore storage1
>ssc move machine virtual:/VC-01/DC-001/VMServer-001/VM-003
virtual:/VC-01/DC-001/VMServer-002 -n
>ssc move machine virtual:/VC-01/DC-001/VMServer-001/VM-001
virtual:/VC-01/DC-001/VMServer-002 -s
>ssc move machine virtual:/VC-01/DC-001/VMServer-001/VM-001
virtual:/VC-01/DC-001/VMServer-002 -onlysystemdisk
```

3.2.4. Evacuating Machine (Host Specified)

Evacuates virtual machines to other virtual machine servers.

[Syntax]

```
ssc evacuate host SourceName [DestinationName] [-all] [-q] [-ignorerule]
```

[Parameters and Options]

<i>SourceName</i> (Required)	Specify the path to a host to which a source virtual machine server is assigned, or the path to a host to which a virtual machine to be moved is assigned. If a virtual machine server is specified, powered-on virtual machines on the virtual machine server are moved. (If the -all option is specified, all the virtual machines including powered-off ones are moved.) If a virtual machine is specified, Failover for the virtual machine is executed.
[<i>DestinationName</i>]	Specify the path to a host to which a destination virtual machine server is assigned. If omitted, destination virtual machine servers are selected automatically. (This cannot be omitted if a virtual machine is specified for <i>SourceName</i> .)
[-all]	If you want to move all the virtual machines (including powered-off ones) on the virtual machine server, specify this option. If omitted, only powered-on virtual machines are moved. (This option is available only if a virtual machine server is specified for <i>SourceName</i> .)
[-q]	If you want to suspend the virtual machine before it is moved (Quick Migration), specify this option. The virtual machine is resumed after it was moved. If omitted, Migration is executed. (This option is available only if a virtual machine server is specified for <i>SourceName</i> .)
[-ignorerule]	If you want to ignore the placement rules when you move the virtual machine, specify this option. If omitted, you cannot move the virtual machine against the rules. (This option is available only if a virtual machine is specified with <i>SourceName</i> .)

[Note]

- If a virtual machine server is specified for *SourceName*, powered-on virtual machines stored in local datastores are not moved. Powered-off virtual machines are moved even if they are stored in local datastores. (Their virtual disks are moved to other datastores.)
- If a virtual machine is specified for *SourceName*, Failover of the virtual machine stored in a local datastore cannot be executed.
- If a virtual machine server of XenServer Pool Master is specified for *SourceName* and it is down, the other virtual machine server which has the largest capacity in the pool becomes new Pool Master.
- If a virtual machine server is specified for *SourceName*, virtual machines to be moved and their destination virtual machine servers are selected automatically by the VM Optimized Placement feature. (If *DestinationName* is specified, virtual machines are moved to the specified virtual machine server.) There are some cases that virtual machines cannot be moved according to the condition for the VM Optimized Placement feature or placement rules. Refer to SigmaSystemCenter Overview

Reference Guide “2.12.3. Conditions for VM Optimized Placement” for details.

[Syntax examples]

```
>ssc evacuate host //Category1/Group01/HOST-01
>ssc evacuate host //Group-VM001/Host-A001 //Group-VMServer001
>ssc evacuate host //Group-VMServer001/Host-VMS001 //Group-VMServer002
>ssc evacuate host //Group-VM002 -all
>ssc evacuate host //Category1/Group01/HOST-01 -q
```

3.2.5. Creating Virtual Machine

Makes a virtual machine and runs it in a group.

[Syntax]

```
ssc create machine <GroupName [-host HostName[...]] [-count Count] [-index
start=value <end=value | count=value>] [-vmname VMName] [-installmanually] |
SmartGroupName> [-vms VmsName] [-datastore DatastoreName] [-import Type]
[-filepath FilePath] [-osname <Name | Code>] [-iso IsoFile...]
```

[Parameters and Options]

<i>GroupName</i>	Specify the full path of the target group. E.g: Category/group, group, group/model Only categories cannot be specified.
<code>[-host HostName[...]]</code>	Specify a host name or IP address of the host to be run. When specifying an IP address, describe it in the xxx.xxx.xxx.xxx form. Set a pre-defined host definition on the destination group to create the host. This option cannot be specified along with -count. If multiple values are specified with this option, -index cannot be specified.
<code>[-count Count]</code>	Specify the number of virtual machines that are to be created. This option cannot be specified along with either -index or -host.
<code>[-index start=value <end=value count=value>]</code>	Specify the start number of the host names of the virtual machines that are to be created, with the end number or the number of them. This option is disabled if an IP address or multiple values is / are specified with -host. This option is disabled if -count is specified. When both -host and -count are omitted, it becomes the host setting list order. (E.g.) When creating virtual machines from vm001 to vm010. -host vm -index start=001 end=010 -host vm -index start=001 count=10 (E.g.)When creating hosts from the fifth to the tenth. -index start=5 end=10 -index start=5 count=6
<code>[-vmname VMName]</code>	Specify the name of the virtual machine. This option is enabled when creating one virtual machine.

<code>[-installmanually]</code>	Specify this option if you want to manually install the OS after creating a virtual machine. The power is OFF and the maintenance is ON after you created.
<i>SmartGroupName</i>	Specify a smart group's path in the Operations view in order to run hosts correspond to the condition of the specified smart group. Note: * The group path must exist. Setting examples: [category1/group11/smartgroup101] Smartgroup101 below the group11 node of the category1 of the Operations view is specified. [smartgroup102] smartgroup102 below the operation node of the Operations view is specified. -host, -count, -index, or -vmname cannot be specified together.
<code>[-vms VmsName]</code>	Specify the machine name of the destination virtual machine server to create the virtual machines.
<code>[-datastore DatastoreName]</code>	Specify the name of the destination datastore.
<code>[-import Type]</code>	Specify the type of the file to be imported.
<code>[-filepath FilePath]</code>	Specify the path of file that you want to import. When you don't specify the <code>-import</code> option, the file type will be detected automatically.
<code>[-osname Name Code]</code>	Specify the type of the operating system to be installed on the virtual machine. This option is enabled when you specify the <code>-installmanually</code> option.
<code>[-iso IsoFile...]</code>	Specify the ISO file to be mounted on the virtual machine. This option is enabled when you specify the <code>-installmanually</code> option.

- Specification of the group is *GroupName* or *SmartGroupName* should specify any.
- When *GroupName* is specified for the group, `-host`, `-count`, or `-index` should specify any.

[Note]

- If a host already used is specified with `-index` option, an error occurs.
- When specification of the group is *SmartGroupName* and hosts other than the VM group are included, an error occurs.
- When a smart group is specified by this command, and the host extracted in a smart group has divided into two or more groups, two or more jobs are generated, then, the jobs are processed sequentially.
When any error occurs in this case, the following jobs are not executed. Please remove the cause of the error, and execute again.
- The following notes were canceled in SSC0300-0002.
 - When using the IP address pool function to generate IP addresses, It is not possible to specify smart group or to omit to input a model name.

[Syntax examples]

```
>ssc create machine vmgroup1 -host host1
>ssc create machine vmgroup1 -host host1 host2
specified VMS,datastore
>ssc create machine vmgroup1 -host host1 -vms vms1 -datastore datastore1
>ssc create machine vmgroup1 -host host1 -datastore datastore1
creates virtual machines of "vm010" from "vm001"
```

```

>ssc create machine vmgroup1 -host vm -index start=001 end=010 -vms vms1
-datastore datastore1
>ssc create machine vmgroup1 -host vm -index start=001 count=10 -vms vms1
-datastore datastore1
creates virtual machines from the fifth to the tenth with the turn of the list of
host setting
>ssc create machine vmgroup1 -index start=5 end=10
>ssc create machine vmgroup1 -index start=5 count=6
creates a virtual machine by a specified name.
>ssc create machine vmgroup1 -host host1 -vmname vm1 -datastore datastore1
>ssc create machine vmgroup1 -count 1 -vmname vm1
specified smart group
>ssc create machine category1/group11/smartgroup101

```

3.2.6. Creating Template

Creates a template.

[Syntax]

```

ssc create template Path -name name -cost costValue -type <full | hw | diff |
disk> [-image name] [-vmserver vmServer] [-datastore value] [-snapshot name]
[-mastervmpasswd Password] [-fixedreplica] [-ostype OperatingSystemType]
[-osname <name | code>] [-ownername value] [-orgname value] [-timezone value]
[-productkey value] [-license mode=<perserver | perseat>] [users=value]
[-modevm < on | off >]

```

[Parameters and Options]

<i>Path</i> (Required)	Specify the full path of the target virtual machine. VC1/DataCenter1/VMServer1/vm100
-name <i>name</i> (Required)	Specify the name of the template to be created.
-cost <i>costValue</i> (Required)	Specify the cost value of the template to be created in the range of the number from 1 to 1000.
-type <full hw diff disk> (Required)	Specify the type of the template from the following: full : Full clone hw : HW Profile clone diff : Differential Clone disk : Disk clone
[-image <i>name</i>]	Specify the name of the image to be created. This value can be specified if the template type is Disk Clone/Differential Clone.
[-vmserver <i>vmServer</i>]	Specify the destination virtual machine server to create the template. This value can be specified if the template type is Full Clone/Disk Clone/Differential Clone.
[-datastore <i>value</i>]	Specify the storage location. This value can be specified if the template type is Full Clone/Disk Clone/Differential Clone.
[-snapshot <i>name</i>]	Specify the snapshot name. This value can be specified if the template type is Differential Clone.
[-mastervmpasswd <i>Password</i>]	Specify the password of the master VM. It is used in order to update the password of Linux guest OS in the VMware environment. Specify it within 256 characters.

[-fixedreplica]	<p>You can specify it only when you create a replica VM in the same datastore with the image. However, this option will be effective only when Differential Clone is specified in the Template type.</p>
[-ostype <i>OperatingSystemType</i>]	<p>Specify the OS type. You can specify one of the following OperatingSystemTypes: <i>OperatingSystemType</i> : OS type "Windows": Windows Server "Windows-client": Windows Client "Linux": Linux</p>
[-osname <name code>]	<p>Specify the OS name in its code or the strings displayed on Web UI. Refer to Reference materials in this document.</p> <p>This value can be specified if the template type is Full Clone / Disk Clone / Differential Clone.</p>
[-ownername value]	<p>Specify the name of the owner.</p> <p>This value can be specified if the template type is Full Clone / Disk Clone / Differential Clone and only when you specify the Windows or Windows-client as the OS type.</p>
[-orgname value]	<p>Specify the name of the organization.</p> <p>This value can be specified if the template type is Full Clone / Disk Clone / Differential Clone and only when you specify the Windows or Windows-client as the OS type.</p>
[-timezone value]	<p>Specify the timezone. (Optional) The default is the time zone set to the system. Specify the time zone's code or the strings displayed on Web UI.</p> <p>For details, refer to Reference materials in this document. The default value is the same as the value of "Microsoft Time Zone Index Values."</p> <p>This value can be specified if the template type is Full Clone / Disk Clone / Differential Clone and only when you specify the Windows or Windows-client as the OS type.</p>
[-productkey value]	<p>Specify the product key. (Optional) Input it in the xxxxx-xxxxx-xxxxx-xxxxx-xxxxx format.</p> <p>This value can be specified if the template type is Full Clone / Disk Clone / Differential Clone and only when you specify the Windows or Windows-client as the OS type.</p>
[-license mode=<perserver perseat> [users=value]]	<p>Specify the licensing mode. perserver : Number of Connected Server perseat : Connected Client</p> <p>[users=value] Specify the number of servers if you specify "perserver."</p> <p>This value can be specified if the template type is Full Clone / Disk Clone / Differential Clone</p>

	and only when you specify the Windows or Windows-client as the OS type.
[-modevm < on off >]	Specify the vm mode. "on" : The vm mode is turned ON. "off" : The vm mode is turned OFF. If you do not specify this option, "off" is configured to the tag setting. You can specify this option if template type is Disk Clone or Differential Clone.

[Note]

- If you do not specify the -ownername / -orgname options, the -timezone / -productkey / -license options have no effect.

[Syntax examples]

• In the case of Full Clone

```
>ssc create template VC1/DataCenter1/VMServer1/vm100 -name vm100_t -cost 10
-type full -vmserver VMServer1 -datastore disk01 -ostype windows -osname 11
-ownername nec -orgname 2CS -timezone 235 -productkey
xxxxx-xxxxx-xxxxx-xxxxx-xxxxx -license mode=perserver users=5
>ssc create template VC1/DataCenter1/VMServer1/vm100 -name vm100_t -cost 10
-type full -vmserver VMServer1 -datastore disk01 -ostype windows -osname
"Windows Server 2008 Enterprise (x64)" -ownername nec -orgname 2CS
-timezone 235 -productkey xxxxx-xxxxx-xxxxx-xxxxx-xxxxx -license mode=perseat
>ssc create template VC1/DataCenter1/VMServer1/vm100 -name vm100_t -cost 10
-type full -vmserver VMServer1 -datastore disk01 -ostype windows-client
-osname "Windows 7 Professional (x64)" -ownername nec -orgname 2CS
-timezone 235 -productkey xxxxx-xxxxx-xxxxx-xxxxx-xxxxx
>ssc create template VC1/DataCenter1/VMServer1/vm100 -name vm100_t -cost 10
-type full -vmserver VMServer1 -datastore disk01 -ostype linux -osname
"Red Hat Enterprise Linux ES 3"
>ssc create template VC1/DataCenter1/VMServer1/vm100 -name vm100_t -cost 10
-type full -vmserver VMServer1 -datastore disk01
```

• In the case of HW Profile Clone

```
>ssc create template VC1/DataCenter1/VMServer1/vm100 -name vm100_t -cost 10
-type hw
```

• In the case of Differential Clone

```
>ssc create template VC1/DataCenter1/VMServer1/vm100 -name vm100_t -cost 10
-type diff -image image01 -vmserver VMServer1 -datastore disk01 -snapshot
snapshot01 -ostype windows -osname 11 -ownername nec -orgname 2CS -timezone 235
-productkey xxxxx-xxxxx-xxxxx-xxxxx-xxxxx -license mode=perserver users=5
>ssc create template VC1/DataCenter1/VMServer1/vm100 -name vm100_t -cost 10
-type diff -image image01 -vmserver VMServer1 -datastore disk01 -snapshot
snapshot01 -fixedreplica -ostype windows -osname
"Windows Server 2008 Enterprise (x64)" -ownername nec -orgname 2CS -timezone
235 -productkey xxxxx-xxxxx-xxxxx-xxxxx-xxxxx -license mode=perseat
>ssc create template VC1/DataCenter1/VMServer1/vm100 -name vm100_t -cost 10
-type diff -image image01 -vmserver VMServer1 -datastore disk01 -snapshot
snapshot01 -fixedreplica -ostype linux -osname "Red Hat Enterprise Linux ES 3"
>ssc create template VC1/DataCenter1/VMServer1/vm100 -name vm100_t -cost 10
-type diff -image image01 -vmserver VMServer1 -datastore disk01 -snapshot
snapshot01
```

• In the case of Disk Clone

```
>ssc create template VC1/DataCenter1/VMServer1/vm100 -name vm100_t -cost 10
-type disk -image image01 -vmserver VMServer1 -datastore disk01
```

[Reference materials]

- Operating system name and code list.

Windows Server	
OsNameCode	OsName
4	Windows 2000 Professional
5	Windows 2000 Server
6	Windows 2000 Advanced Server
10	Windows Server 2003 Standard (x86)
11	Windows Server 2003 Enterprise (x86)
13	Windows Server 2003 Standard (x64)
14	Windows Server 2003 Enterprise (x64)
15	Windows Server 2003 Datacenter (x86)
16	Windows Server 2003 Datacenter (x64)
20	Windows Server 2008 Standard (x86)
21	Windows Server 2008 Enterprise (x86)
22	Windows Server 2008 Datacenter (x86)
23	Windows Server 2008 Standard (x64)
24	Windows Server 2008 Enterprise (x64)
25	Windows Server 2008 Datacenter (x64)
27	Windows Server 2008 R2 Standard (x64)
28	Windows Server 2008 R2 Enterprise (x64)
29	Windows Server 2008 R2 Datacenter (x64)
20101	Windows Server 2012 Standard
20102	Windows Server 2012 Datacenter
20201	Windows Server 2012 R2 Standard
20202	Windows Server 2012 R2 Datacenter

Windows Client	
OsNameCode	OsName
9	Windows XP Professional (x86)
12	Windows XP Professional (x64)
30	Windows Vista Business (x86)
31	Windows Vista Enterprise (x86)
32	Windows Vista Ultimate (x86)
33	Windows Vista Business (x64)
34	Windows Vista Enterprise (x64)
35	Windows Vista Ultimate (x64)
40	Windows 7 Professional (x86)
41	Windows 7 Ultimate (x86)
42	Windows 7 Enterprise (x86)
43	Windows 7 Professional (x64)
44	Windows 7 Enterprise (x64)
45	Windows 7 Ultimate (x64)
10103	Windows 8 Pro (x86)
10104	Windows 8 Pro (x64)
10105	Windows 8 Enterprise (x86)
10106	Windows 8 Enterprise (x64)
10203	Windows 8.1 Pro (x86)

10204	Windows 8.1 Enterprise (x86)
10205	Windows 8.1 Pro (x64)
10206	Windows 8.1 Enterprise (x64)

Linux	
OsNameCode	OsName
161	Red Hat Enterprise Linux ES 3
30303	Red Hat Enterprise Linux ES 3 (64bit)
162	Red Hat Enterprise Linux AS 3
30304	Red Hat Enterprise Linux AS 3 (64bit)
163	Red Hat Enterprise Linux ES 4
30403	Red Hat Enterprise Linux ES 4 (64bit)
164	Red Hat Enterprise Linux AS 4
30404	Red Hat Enterprise Linux AS 4 (64bit)
165	Red Hat Enterprise Linux AS 5
30503	Red Hat Enterprise Linux AS 5 (64bit)
166	Red Hat Enterprise Linux 5 AP
30504	Red Hat Enterprise Linux 5 AP (64bit)
169	Red Hat Enterprise Linux 6
30602	Red Hat Enterprise Linux 6 (64bit)
30702	Red Hat Enterprise Linux 7 (64bit)
167	SUSE Linux Enterprise Server 9
40902	SUSE Linux Enterprise Server 9 (64bit)
168	SUSE Linux Enterprise Server 10
41002	SUSE Linux Enterprise Server 10 (64bit)

- The following shows cords specified in “-timezone”.
Microsoft Time Zone Index Values

Index	Name of Time Zone	Time
0	Dateline Standard Time	(GMT-12:00) International Date Line West
1	Samoa Standard Time	(GMT-11:00) Midway Island, Samoa
2	Hawaiian Standard Time	(GMT-10:00) Hawaii
3	Alaskan Standard Time	(GMT-09:00) Alaska
4	Pacific Standard Time	(GMT-08:00) Pacific Time (US and Canada); Tijuana
10	Mountain Standard Time	(GMT-07:00) Mountain Time (US and Canada)
13	Mexico Standard Time 2	(GMT-07:00) Chihuahua, La Paz, Mazatlan
15	U.S. Mountain Standard Time	(GMT-07:00) Arizona
20	Central Standard Time	(GMT-06:00) Central Time (US and Canada)
25	Canada Central Standard Time	(GMT-06:00) Saskatchewan
30	Mexico Standard Time	(GMT-06:00) Guadalajara, Mexico City, Monterrey
33	Central America Standard Time	(GMT-06:00) Central America
35	Eastern Standard Time	(GMT-05:00) Eastern Time (US and Canada)
40	U.S. Eastern Standard Time	(GMT-05:00) Indiana (East)
45	S.A. Pacific Standard Time	(GMT-05:00) Bogota, Lima, Quito
50	Atlantic Standard Time	(GMT-04:00) Atlantic Time (Canada)

55	S.A. Western Standard Time	(GMT-04:00) Caracas, La Paz
56	Pacific S.A. Standard Time	(GMT-04:00) Santiago
60	Newfoundland and Labrador Standard Time	(GMT-03:30) Newfoundland and Labrador
65	E. South America Standard Time	(GMT-03:00) Brasilia
70	S.A. Eastern Standard Time	(GMT-03:00) Buenos Aires, Georgetown
73	Greenland Standard Time	(GMT-03:00) Greenland
75	Mid-Atlantic Standard Time	(GMT-02:00) Mid-Atlantic
80	Azores Standard Time	(GMT-01:00) Azores
83	Cape Verde Standard Time	(GMT-01:00) Cape Verde Islands
85	GMT Standard Time	(GMT) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London
90	Greenwich Standard Time	(GMT) Casablanca, Monrovia
95	Central Europe Standard Time	(GMT+01:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague
100	Central European Standard Time	(GMT+01:00) Sarajevo, Skopje, Warsaw, Zagreb
105	Romance Standard Time	(GMT+01:00) Brussels, Copenhagen, Madrid, Paris
110	W. Europe Standard Time	(GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna
113	W. Central Africa Standard Time	(GMT+01:00) West Central Africa
115	E. Europe Standard Time	(GMT+02:00) Bucharest
120	Egypt Standard Time	(GMT+02:00) Cairo
125	FLE Standard Time	(GMT+02:00) Helsinki, Kiev, Riga, Sofia, Tallinn, Vilnius
130	GTB Standard Time	(GMT+02:00) Athens, Istanbul, Minsk
135	Israel Standard Time	(GMT+02:00) Jerusalem
140	South Africa Standard Time	(GMT+02:00) Harare, Pretoria
145	Russian Standard Time	(GMT+03:00) Moscow, St. Petersburg, Volgograd
150	Arab Standard Time	(GMT+03:00) Kuwait, Riyadh
155	E. Africa Standard Time	(GMT+03:00) Nairobi
158	Arabic Standard Time	(GMT+03:00) Baghdad
160	Iran Standard Time	(GMT+03:30) Tehran
165	Arabian Standard Time	(GMT+04:00) Abu Dhabi, Muscat
170	Caucasus Standard Time	(GMT+04:00) Baku, Tbilisi, Yerevan
175	Transitional Islamic State of Afghanistan Standard Time	(GMT+04:30) Kabul
180	Ekaterinburg Standard Time	(GMT+05:00) Ekaterinburg
185	West Asia Standard Time	(GMT+05:00) Islamabad, Karachi, Tashkent
190	India Standard Time	(GMT+05:30) Chennai, Kolkata, Mumbai, New Delhi
193	Nepal Standard Time	(GMT+05:45) Kathmandu
195	Central Asia Standard Time	(GMT+06:00) Astana, Dhaka
200	Sri Lanka Standard Time	(GMT+06:00) Sri Jayawardenapura
201	N. Central Asia Standard Time	(GMT+06:00) Almaty, Novosibirsk
203	Myanmar Standard Time	(GMT+06:30) Yangon Rangoon
205	S.E. Asia Standard Time	(GMT+07:00) Bangkok, Hanoi, Jakarta
207	North Asia Standard Time	(GMT+07:00) Krasnoyarsk

210	China Standard Time	(GMT+08:00) Beijing, Chongqing, Hong Kong SAR, Urumqi
215	Singapore Standard Time	(GMT+08:00) Kuala Lumpur, Singapore
220	Taipei Standard Time	(GMT+08:00) Taipei
225	W. Australia Standard Time	(GMT+08:00) Perth
227	North Asia East Standard Time	(GMT+08:00) Irkutsk, Ulaanbaatar
230	Korea Standard Time	(GMT+09:00) Seoul
235	Tokyo Standard Time	(GMT+09:00) Osaka, Sapporo, Tokyo
240	Yakutsk Standard Time	(GMT+09:00) Yakutsk
245	A.U.S. Central Standard Time	(GMT+09:30) Darwin
250	Cen. Australia Standard Time	(GMT+09:30) Adelaide
255	A.U.S. Eastern Standard Time	(GMT+10:00) Canberra, Melbourne, Sydney
260	E. Australia Standard Time	(GMT+10:00) Brisbane
265	Tasmania Standard Time	(GMT+10:00) Hobart
270	Vladivostok Standard Time	(GMT+10:00) Vladivostok
275	West Pacific Standard Time	(GMT+10:00) Guam, Port Moresby
280	Central Pacific Standard Time	(GMT+11:00) Magadan, Solomon Islands, New Caledonia
285	Fiji Islands Standard Time	(GMT+12:00) Fiji Islands, Kamchatka, Marshall Islands
290	New Zealand Standard Time	(GMT+12:00) Auckland, Wellington
300	Tonga Standard Time	(GMT+13:00) Nuku'alofa

3.2.7. Adding Image

Adds a image in a template.

[Syntax]

```
ssc image add ImageName Template Vmserver Datastore [-snapshot SnapshotName]
[-notdefault] [-fixedreplica] [-mastervmpasswd password] [-modevm <on | off>]
```

[Parameters and Options]

<i>ImageName</i> (Required)	Specify an image name that you intend to add in a template. You can enter up to 53 characters. Available characters are as follows: Alphabetic characters, numerals, spaces, parentheses (), hyphens (-), and underscores (_).
<i>Template</i> (Required)	Specify a template.
<i>Vmserver</i> (Required)	Specify a the destination virtual machine server.
<i>Datastore</i> (Required)	Specify a location where the image is to be stored.
[-snapshot <i>SnapshotName</i>]	Specify a snapshot. If the template type is Differential Clone, specify a snapshot for this option.
[-notdefault]	Adding a image. If you do not specify this option, the adding image is registered as a default image for templates.
[-fixedreplica]	To create a replica VM in a datastore where the image is to be created, specify this option.

<code>[-mastervmpasswd password]</code>	Specify the password of the master VM. It is used in order to update the password of the Linux guest operating system in the VMware environment.
<code>[-modevm <on off>]</code>	Specify VM Mode. on : VM Mode is turned ON. off : VM mode is turned OFF. When it is omitted, VM mode is turned off as well as when you specified "off" for this option. You can specify it only when Disk Clone/Differential Clone is specified as the type of a template.

[Note]

- This command can be executed if the template type is Disk Clone/Differential Clone.

[Syntax examples]

```
>ssc image add diffclone-image differentialclone-template 192.168.10.1 datastore1
-snapshot snapshotA
>ssc image add diskclone-image diskclone-template 192.168.10.1 datastore1
-notdefault
```

3.2.8. Reconfiguring Virtual Machine

Reconfigures virtual machines.

[Syntax]

```
ssc reconfigure machine GroupFullPath [-target Name[... ...]] [-reconstruct |
-revert | -apply] [-concurrent value] [-interval value] [-turnoff <0 | 1>]
[-disksize size] [-shutdown]
```

[Parameters and Options]

<i>GroupFullPath</i> (Required)	The group path of the Operations view is specified. You cannot specify a tenant or category. (E.g. /Category/Group/)
<code>[-target <i>Name</i>[... ...]]</code>	Specify the host name of the machine running in group. If you do not specify this option, all the machines running under the specified group are targeted. Multiple parameters can be specified.
<code>[-reconstruct]</code>	Reconstructs the virtual machine(s) to be the same state with templates or images that are set on the specified group, model or host setting.
<code>[-revert]</code>	Destroys the difference disk.
<code>[-apply]</code>	Applies a machine profile.
<code>[-concurrent <i>value</i>]</code>	Specify the max number of concurrent Processing. (The default value is 1) Specify the value in the range of 1-100.
<code>[-interval <i>value</i>]</code>	Specifies the execution interval. (The default value is 0) Specify the value in the range from 0 to 99999 seconds.
<code>[-turnoff <0 1>]</code>	Specify the power state as an execution condition. (The default value is 1.) 0 : Executes without checking the power state. 1 : Executes only when the power state is Off.
<code>[-disksize <i>size</i>]</code>	Specify the disk usage (MB) as an execution condition. Virtual machines whose the disk usages are the specified usage or over are targeted. Specify the value in the range of 10 to 99999999 MB.

<code>[-shutdown]</code>	When specifying this option, Applies a machine profile after shutdown of machine.
--------------------------	---

- You cannot specify `-reconstruct`, `-revert` and `-apply` at the same time. Omitting this option is the same as specifying `-reconstruct`.

[Syntax examples]

```
* reconstruct
>ssc reconfigure machine operation:/vmgroup1 -reconstruct
>ssc reconfigure machine operation:/vmgroup1 -target host1 host2
* reconstruct(specify command alias)
>ssc reconstruct machine operation:/vmgroup1 -target host1 host2
* revert
>ssc reconfigure machine operation:/vmgroup1 -revert
* apply machine profile
>ssc reconfigure machine operation:/vmgroup1 -apply -shutdown
* specify conditions
>ssc reconfigure machine operation:/vmgroup1 -target host1 -concurrent 2
-interval 500 -turnoff 1 -disksize 2048
```

3.2.9. Creating Snapshot

Creates a snapshot.

[Syntax]

```
ssc snapshot create SnapshotName Path [-vm name[...]]
```

[Parameters and Options]

<i>SnapshotName</i> (Required)	Specify the name of the snapshot to be created.
<i>Path</i> (Required)	Specify the path to the virtual machine server or the virtual machine. virtual:/vc1/dc1/esx1 virtual:/vc1/dc1/esx1/vm1
<code>[-vm <i>name[...]</i>]</code>	This option is enabled if a virtual machine server is specified for <i>Path</i> . Specify names of the virtual machines belong to the virtual machine server specified with <i>Path</i> . If this option is not specified, all the virtual machines belong to the virtual machine server will be targeted. Multiple parameters can be specified for this option.

[Note]

- Progress logs are displayed only when multiple virtual machines are specified for creating snapshots.

[Syntax examples]

```
When all the virtual machines of the esx1 position is target.
>ssc snapshot create snapshot1 virtual:/vc1/dc1/esx1
When vm1, vm2 as virtual machine of the esx1 position is target.
>ssc snapshot create snapshot1 virtual:/vc1/dc1/esx1 -vm vm1 vm2
When vm1 as virtual machine of the esx1 position is target.
>ssc snapshot create snapshot1 virtual:/vc1/dc1/esx1/vm1
>ssc snapshot create snapshot1 virtual:/vc1/dc1/esx1 -vm vm1
```

3.2.10. Deleting Template

Deletes templates.

[Syntax]

```
ssc delete template TemplateName[...] [-vmserver VMServerName]
```

[Parameters and Options]

<i>TemplateName</i> [...] (Required)	Specify the name of the template to delete.
[-vmserver <i>VMServerName</i>]	Specify the name of the virtual machine server where the template to delete exists if the same name template exists in another virtual machine server.

[Syntax examples]

```
>ssc delete template FullCloneTemplate_W2K8  
>ssc delete template FullCloneTemplate_W2K8 DiffCloneTemplate_Linux  
>ssc delete template FullCloneTemplate_W2K3 -vmserver VMS-01
```

3.2.11. Deleting Virtual Machine

Deletes virtual machines.

[Syntax]

```
ssc delete machine <GroupName [-auto] [-host HostName...] [-index start=value  
<end=value | count=value>] | -path Path... | -smartgroup SmartGroupName>  
[-diskdelete] [-i]
```

[Parameters and Options]

<i>GroupName</i>	Specify the full path of the target group. E.g) Category/group, group, group/model -host and -index can be specified with this parameter. If you do not specify -host or -index, one of the active machines in the group is automatically selected by specifying -auto. * If you specify -auto, just a category name can be specified for this parameter. In such a case, a group to be deleted is selected from the specified category in the descending order of priority.
[-auto]	One of the active machines in the group is automatically selected. This option is enabled only when the target group is selected.
[-host <i>HostName</i> ...]	Specify the name or IP address of the host where the target virtual machine is activated. When specifying an IP address, describe it in the xxx.xxx.xxx.xxx form.
[-index start= <i>value</i> <end= <i>value</i> count= <i>value</i> >]	Specify the start number of the host names of the virtual machines that are to be deleted, with the end number or the number of them. This option is disabled if an IP address or multiple values is / are specified with -host. When -host are omitted, it becomes the host setting list order. (E.g.) When deleting virtual machines from vm001 to vm010. -host vm -index start=001 end=010

	<p>-host vm -index start=001 count=10 (E.g.)When deleting hosts from the fifth to the tenth. -index start=5 end=10 -index start=5 count=6</p>
-path <i>Path...</i>	<p>Specify the full path of the group to which the target virtual machines belong. Or, specify the full path of the path to the target machines. You can specify the path of a virtual machine server, a Datacenter or a resource as a group When specifying a resource group (View Type is "resource:") resource:/Rack01 When specifying a virtual group (View Type is "virtual:") virtual:/VC1/DataCenter1/VMServer1</p> <p>You can omit View Type ("virtual:"). If you omit View Type, the specified path is treated as the path to the Virtual view.</p> <p>Managed virtual machines exist under the specified group are the target of deleting. A virtual machine being activated is not the target of deleting.</p>
-smartgroup <i>SmartGroupName</i>	<p>Specify a smart group's path in the Operations or Resource view in order to delete machines correspond to the condition of the specified smart group. Note: * The group path must exist. If you want to specify it in the Operations view, please specify "operations:" to the root of path. And if you want to specify it in the Resource view, please specify "resource:" to the root of path. When specified target view is [operations:], the activated machine in the group is deleted. When specified target view is [resource:], the not activated machine is deleted. Setting examples: [operations:/category1/group11/smartgroup101] Smartgroup101 below the group11 node of the category1 of the Operations view is specified. [resource:/smartgroup102] Smartgroup102 below the machine node of the Resource view is specified.</p>
[-diskdelete]	Specify this option to delete the connected virtual disk.
[-i]	Specify this option to display any confirmation message.

[Note]

- If a host unused is specified with "-index" option, an error occurs.
- When a smart group is specified by this command, and the host extracted in a smart group has divided into two or more groups, two or more jobs are generated, then, the jobs are processed sequentially.
When any error occurs in this case, the following jobs are not executed. Please remove the cause of the error, and execute them again.

[Syntax examples]

```
>ssc delete machine vmgroup1 -host host1 host2 -diskdelete
>ssc delete machine -path resource:/vmgroup1/vm1
>ssc delete machine -path virtual:/vms-gp1/vm-gp1/vm1
>ssc delete machine -path vms-gp1/vm-gp1
Deletes an activated virtual machine which will be selected by a system.
```

```

>ssc delete machine vmgroup1 -auto
>ssc delete machine category1 -auto
Deletes virtual machines from "vm001" to "vm010".
>ssc delete machine vmgroup1 -host vm -index start=001 end=010
>ssc delete machine vmgroup1 -host vm -index start=001 count=10
Deletes virtual machines from the fifth to the tenth
in the list of host setting.
>ssc delete machine vmgroup1 -index start=5 end=10
>ssc delete machine vmgroup1 -index start=5 count=6
The activated machine in the group is deleted by specifying a smart group.
>ssc delete machine -smartgroup operations:/category1/group11/smartgroup101
The not activated machine is deleted by specifying a smart group.
>ssc delete machine -smartgroup resource:/smartgroup102

```

3.2.12. Cloning Virtual Machine

Clones the virtual machine.

[Syntax]

```
ssc clone machine SourceName VMName VmsName DatastoreName
```

[Parameters and Options]

<i>SourceName</i> (Required)	Specify the virtual machine name which is clone origin. Specify a full path. The following views can be specified: "operations:" for Operations view, "virtual:" for Virtual view, and "resource:" for Resource view. If you omit View Type, the specified path is treated as the path to the Virtual view. E.g.) operations:/Category/Group/Model/VM1 virtual:/VC1/Datacenter/VMS1/VM1 resource:/VM1
<i>VMName</i> (Required)	Specify the name of the new virtual machine.
<i>VmsName</i> (Required)	Specify the machine name of the destination virtual machine server to create the virtual machine.
<i>DatastoreName</i> (Required)	Specify the name of the destination datastore.

[Syntax examples]

```
>ssc clone machine virtual:/vc1/dc1/VMServer1/MasterVm1 CloneVm1 VmHost1 Storage1
```

3.2.13. Deleting Images

Deletes images

[Syntax]

```
ssc image delete Template ImageName... [-vmserver VMServerName]
```

[Parameters and Options]

<i>Template</i> (Required)	Specify name of template of images which deletes.
-------------------------------	---

<i>ImageName...</i> (Required)	Specify name of images which deletes.
<i>[-vmserver VMServerName]</i>	Specify a virtual machine server name to have templates of images to delete. Specify it in the case of a name same as a template in the other virtual machine servers.

[Syntax examples]

```
>ssc image delete testTemplate testImage1
>ssc image delete testTemplate testImage1 testImage2
>ssc image delete testTemplate testImage1 -vmserver 192.168.220.142
```

3.2.14. Deleting Snapshots

Deletes snapshots

[Syntax]

```
ssc snapshot delete Path <SnapshotName... | -all>
```

[Parameters and Options]

<i>Path</i> (Required)	Specify the path to the virtual machine. virtual:/vc1/dc1/esx1/vm1
<i>SnapshotName...</i>	Specify name of snapshots which will be deleted. If you specify -all you can omit this option.
-all	All snapshots of virtual machine is deleted.

[Syntax examples]

```
>ssc snapshot delete virtual:/vc1/dc1/esx1/vm1 snapshot1
>ssc snapshot delete virtual:/vc1/dc1/esx1/vm1 snapshot1 snapshot2
>ssc snapshot delete virtual:/vc1/dc1/esx1/vm1 -all
```

3.2.15. Reverting a Snapshot

Reverts a snapshot

[Syntax]

```
ssc snapshot revert SnapshotName Path
```

[Parameters and Options]

<i>SnapshotName</i> (Required)	Specify the name of the snapshot to be reverted.
<i>Path</i> (Required)	Specify the path to the virtual machine. virtual:/vc1/dc1/esx1/vm1

[Syntax examples]

```
>ssc snapshot revert snapshot1 virtual:/vc1/dc1/esx1/vm1
```

3.2.16. Displaying Snapshots Information

Displays snapshots information.

[Syntax]

```
ssc snapshot show Path [-vertical]
```

[Parameters and Options]

<i>Path</i> (Required)	Specify the path to the virtual machine. virtual:/vc1/dc1/esx1/vm1
[-vertical]	Specify format. If you do not specify this option, information is displayed in the csv format.

[Syntax examples]

```
>ssc snapshot show virtual:/vc1/dc1/esx1/vm1  
>ssc snapshot show virtual:/vc1/dc1/esx1/vm1 -vertical
```

3.2.17. Updating Template

Updates a template.

[Syntax]

```
ssc template update TemplateName [-vmserver vmserver] [-name name] [-cost  
costValue] [-mastervmpasswd Password] [-image name] [-ostype  
OperatingSystemType] [-osname <name | code>] <[-ownername value] [-orgname  
value] [-timezone value] [-productkey value] [-license mode=<perserver |  
perseat> [users=value]] | [-del] >
```

[Parameters and Options]

<i>TemplateName</i> (Required)	Specify the name of the template to be updated.
[-vmserver <i>vmserver</i>]	Specify a virtual machine server name, if the template with the same name as the name you specify exists on another virtual machine server.
[-name <i>name</i>]	Specify in the case of changing the template name. This value can be specified if the template type is HW Profile Clone / Disk Clone / Differential Clone.
[-cost <i>costValue</i>]	Specify the cost value of the template in the range of the number from 1 to 1000
[-mastervmpasswd <i>Password</i>]	Specify the password of the master VM. It is used in order to update the password of the Linux guest operating system in the VMware environment. Specify it within 256 characters.
[-image <i>name</i>]	Specify the name of the image to be used. This value can be specified if the template type is Disk Clone / Differential Clone.
[-ostype <i>OperatingSystemType</i>]	Specify the OS type. You can specify one of the following OperatingSystemTypes: <i>OperatingSystemType</i> : OS type "Windows": Windows Server "Windows-client": Windows Client "Linux": Linux When you release this option, specify "None". This value can be specified if the template type is Full Clone / Disk Clone / Differential Clone.

<p>[-osname <name code>]</p>	<p>Specify the OS name. Specify the os name's code or the strings displayed on Web UI. Refer to Reference materials in 3.2.6, Creating Template in this document.</p> <p>When you release this option, specify 0.</p> <p>This value can be specified if the template type is Full Clone/Disk Clone/Differential Clone.</p>
<p>[-ownername value]</p>	<p>Specify the name of the owner.</p> <p>This value can be specified if the template type is Full Clone / Disk Clone / Differential Clone, and [Windows] or [Windows-client] is specified in the -ostype option.</p>
<p>[-orgname value]</p>	<p>Specify the name of the organization.</p> <p>This value can be specified if the template type is Full Clone / Disk Clone / Differential Clone, and [Windows] or [Windows-client] is specified in the -ostype option.</p>
<p>[-timezone value]</p>	<p>Specify the timezone. (Optional) The default is the time zone set to the system. Specify the time zone's code or the strings displayed on Web UI.</p> <p>Refer to Reference materials in 3.2.6, Creating Template in this document. The default value is the same as the value of "Microsoft Time Zone Index Values."</p> <p>This value can be specified if the template type is Full Clone / Disk Clone / Differential Clone, and [Windows] or [Windows-client] is specified in -ostype option.</p>
<p>[-productkey value]</p>	<p>Specify the product key.(Optional) Input it in the xxxxx-xxxxx-xxxxx-xxxxx-xxxxx format.</p> <p>This value can be specified if the template type is Full Clone / Disk Clone / Differential Clone, and [Windows] or [Windows-client] is specified in -ostype option.</p>
<p>[-license mode= <perserver perseat> [users= value]]</p>	<p>Specify the licensing mode. perserver : Number of Connected Server perseat : Connected Client</p> <p>[users= value] Specify the number of servers if you specify "perserver."</p> <p>This value can be specified if the template type is Full Clone / Disk Clone / Differential Clone, and [Windows] is specified in the -ostype option.</p>
<p>[-del]</p>	<p>Setting of profile information(Owner Name, Organization Name, Time Zone, Product Key, License Mode) is released.</p> <p>This value can be specified if the template type is Full Clone / Disk Clone / Differential Clone, and [Windows] or [Windows-client] is specified in the -ostype option.</p>

[Note]

- You can specify the `-timezone`, `-productkey` and `-license` option, if the target template has an owner name and organization name or if you specify the `-ownername` and `-orgname` option.

[Syntax examples]

```
> ssc template update template1 -name tempalteA -cost 10 -ostype windows
-osname "Windows Server 2008 Enterprise (x64)" -ownername owner1 -orgname org1
-productkey xxxxx-xxxxx-xxxxx-xxxxx-xxxxx -license mode=perserver user=5
> ssc template update template1 -name tempalteA -cost 10 -ostype windows-client
-osname "Windows 7 Professional (x64)" -ownername owner1 -orgname org1
-productkey xxxxx-xxxxx-xxxxx-xxxxx-xxxxx
> ssc template update template1 -name tempalteA -cost 10 -ostype linux
-osname "SUSE Linux Enterprise Server 10"
> ssc template update template1 -del
```

3.2.18. Updating Image

Update an image in a template.

[Syntax]

```
ssc image update ImageName Template Vmserver Datastore [-mastervmpasswd
password]
```

[Parameters and Options]

<i>ImageName</i> (Required)	Specify an image name that you intend to add in a template. You can enter up to 53 characters. Available characters are as follows: Alphabetic characters, numerals, spaces, parentheses (), hyphens (-), and underscores (_).
<i>Template</i> (Required)	Specify a template in which the image will be created.
<i>Vmserver</i> (Required)	Specify a the destination virtual machine server.
<i>Datastore</i> (Required)	Specify a datastore where the image will be stored.
[-mastervmpasswd password]	Specify the password of the master VM. It is used in order to update the password of the Linux guest operating system in the VMware environment.

[Syntax examples]

```
> ssc image update diffclone-image differentialclone-template 192.168.10.1
datastore1 -mastervmpasswd pw
```

3.2.19. Creating a Virtual Machine (no OS)

Creates a virtual machine without an operating system.

[Syntax]

```
ssc vm create -vms VmsName -vmname VMName -cost costValue -cpu count=value
[share=value] [reservation=value] [limit=value] -mem size=value [share=value]
[reservation=value] [limit=value] -systemdisk size=value datastore [type=<thin
| thick>] [independent] [-osname <Name | Code>] [-vnet VirtualNetworkName...]
[-extdisk [size=value] [ctrl=value] [position=value]] [type=<thin | thick |
rdm-p | rdm-v>] [independent] [datastore] [lun, ...] [-iso IsoFile...]
```

[Parameters and Options]

-vms <i>VmsName</i>	Specify a target virtual machine server in a full path.
-vmname <i>VMName</i>	Specify the name of the virtual machine.
-cost <i>costValue</i>	Specify a cost value. Specify a value in the range of 1-1000.
<p>[-cpu count= <i>value</i> [share= <i>value</i>] [reservation= <i>value</i>] [limit= <i>value</i>]]</p>	<p>Specify the number of CPUs, shared value, reservation value and limit value. The number of CPUs must be specified. You cannot specify leading or trailing spaces in the equal ("=").</p> <p>count: Specify the number of CPUs. Specify a value in the range of 1-9999. (E.g.: count=2) share: Specify a CPU shared value. CPU shared value settings for each virtualization infrastructure are as follows: VMware Setting * CPU count Hyper-V Setting / 10 Xen Setting * 256 / 1000 KVM Setting * 1024 / 1000 Specify one of the following values.</p> <p>"he": Highest (4000) "h" : High (2000) "n" : Normal (1000) "l" : Low (500) "le": Lowest (250) "1" - "99999": Manual (E.g.: share=h, share=30) Optional. The default value is "n".</p> <p>reservation : Specify a CPU allocation value (MHz). Specify a value in the range of 0-99999. (E.g.: reservation=1000) Optional. The default value is 0.</p> <p>limit : Specify the upper limit of a CPU resource assignment. (MHz). Specify a value in the range of 0-99999. (E.g.: limit=1500) Optional. The default value is 0 (unlimited).</p>
<p>[-mem size= <i>value</i> [share= <i>value</i>] [reservation= <i>value</i>] [limit= <i>value</i>]]</p>	<p>Specify memory size, shared value, reservation value and limit value. You cannot specify leading or trailing spaces in the equal ("=").</p> <p>size: Specify memory size (MB). Specify a value in the range of 1-9999999 (MB). (E.g.: size=512)</p> <p>share: Specify a memory shared value. Memory shared value settings for each virtualization infrastructure are as follows: VMware Setting * the Memory size / 100 Hyper-V Setting * 5 Xen you cannot specify.</p>

	<p>KVM you cannot specify. Specify one of the following values.</p> <p>"h" : High (2000) "n" : Standard (1000) "l" : Low (500) "O" - "10000": Manual (E.g.: share=h, share=100) Optional. The default value is "n".</p> <p>reservation : Specify a memory resource allocation value(MB). Specify a value in the range of 0-99999.(E.g.: reservation=2048) Optional. The default value is 0.</p> <p>limit : Specify the upper limit of a memory size (MB). Specify a value in the range of 0-99999. (E.g.: limit=4096) Optional. The default value is 0 (unlimited).</p>
<p><code>[-systemdisk size=<i>value</i> datastore [type=<thin thick>] [independent]</code></p>	<p>Set the system disk information.</p> <p>size : Specify system disk size.</p> <p>datastore : Specify the datastore name of the system disk.</p> <p>type : Specify the type of system disk. thin / thick specify either. Optional. The default type is thick.</p> <p>independent : The Independent mode of a disk is configured by specifying it as "independent". The Independent mode is only used in the VMware environment.</p>
<p><code>[-osname <Name Code>]</code></p>	<p>Specify an OS name. Specify the code of the OS name or the strings displayed on a Web UI. Refer to Reference materials in this document.</p>
<p><code>[-vnet <i>VirtualNetworkName...</i>]</code></p>	<p>Specify a virtual network name. You can specify up to ten names divided by a space. NICs are assigned in the specified order from NIC #1.</p>
<p><code>[-extdisk [size=<i>value</i>] [ctrl=<i>value</i> [position=<i>value</i>]] [type=<thin thick rdm-p rdm-v>] [independent] [datastore] [lun], ...]</code></p>	<p>Set the extended disk information. (You can specify multiple items.) When you specify multiple items, separate the data with commas (","). (Max 6)</p> <p>size : Specify disk size Specify a value in the range of 10-999999999 (MB).</p> <p>ctrl : Specify the controller on which an extended disk is connected. Specify the following value PCIx IDEx SCSIx AutoDetect (auto detection)</p>

	<p>x: Bus Number</p> <p>position : Specify the position where an extended disk is connected.</p> <p>You can specify the following values: PCI: 0 - 31 IDE: 0 - 1 SCSI: 0 - 63 When 'ctrl' is 'AutoDetect', it can't be specified.</p> <p>The value which can be specified is different in the controller and position depending on virtual foundations. Possible values, please refer to the manual.</p> <p>type : Specify the type of extended disk. Specify either thin / thick / rdm-p / rdm-v. The default type is thick. rdm-p: RDM (physical) rdm-v: RDM (virtual)</p> <p>independent : The Independent mode of a disk is configured by specifying it as "independent". The Independent mode is only used in the VMware environment. When you specify the disk type is RDM (physical), you cannot specify "Independent" for the mode.</p> <p>*If type = thick or thin datastore : Specify the datastore name of the extended disk.</p> <p>*If type = rdm-p / rdm-v lun : Specify the target LUN (LUN Name).</p>
<code>[-iso <i>IsoFile...</i>]</code>	Specify the ISO file to be mounted on virtual machine.

[Syntax examples]

```
>ssc vm create -vms virtual:/VC/DataCenter/VMServer -vmname vm -cost 10
-cpu count=2 -mem size=1024 -systemdisk size=4000 datastore -osname 40
-iso "[datastore] ISO/Windows7.iso"
>ssc vm create -vms virtual:/VC/DataCenter/VMServer -vmname vm -cost 10
-cpu count=2 share=h reservation=1000 limit=1500 -mem size=1024 share=h
reservation=1024 limit=1024 -systemdisk size=4000 datastore type=thin
-osname 40 -vnet "VM Network" -iso "[datastore] ISO/Windows7.iso"
```

3.2.20. Exporting Virtual Machine

Export virtual machine.

[Syntax]

```
ssc export vm VmName Type [-Path Path]
```

[Parameters and Options]

VmName	Specify the full path of the target machine.
--------	--

(Required)	
Type (Required)	Specify the type of exporting machine.
<code>[-Path <i>Path</i>]</code>	Specify the destination directory. If omitted, the current directory will be used.

[Syntax examples]

```
>ssc export vm resource:¥sample_vm ovf
>ssc export vm resource:¥sample_vm ova -Path c:¥tmp
```

3.2.21. Importing Virtual Machine

Imports a virtual machine.

[Syntax]

```
ssc import vm FilePath VmName Cost VmsName DatastoreName [-import Type]
```

[Parameters and Options]

<i>FilePath</i> (Required)	Specify the path of file that you want to import. When you don't specify -import, the file type will be detected automatically.
<i>VmName</i> (Required)	Specify the name of the virtual machine.
<i>Cost</i> (Required)	Specify a cost value. Specify a value in the range of 1-1000.
<i>VmsName</i> (Required)	Specify the name of a virtual machine server.
<i>DatastoreName</i> (Required)	Specify the name of the destination datastore.
<code>[-import <i>Type</i>]</code>	Specify the type of the file to be imported.

[Syntax examples]

```
>ssc export vm resource:¥sample_vm ovf
>ssc export vm resource:¥sample_vm ova -Path c:¥tmp
```

3.2.22. Mounting the ISO Image to a Virtual Machine

Mounts the ISO image to a virtual machine.

[Syntax]

```
ssc iso mount VMName IsoFilePath Ctrl Position
```

[Parameters and Options]

<i>VMName</i> (Required)	Specify the full path of the virtual machine. virtual://vc1/dc1/esx1/vm1
<i>IsoFilePath</i> (Required)	Specify the full path of the ISO image.
<i>Ctrl</i> (Required)	Specify the controller.
<i>IsoFilePath</i> (Required)	Specify the position.

[Syntax examples]

```
>ssc iso mount virtual:/VC/DataCenter/VMServer/vm "[datastore] ISO/file.iso"  
ide1 0
```

3.2.23. Showing a Mountable ISO Image and a List of the CD / DVD Drive on the Virtual Machine

Shows a mountable ISO image and a list of the CD/DVD drives on the virtual machine.

[Syntax]

```
ssc iso show VMName [-vertical]
```

[Parameters and Options]

<i>VMName</i> (Required)	Specify the full path of the virtual machine. virtual://vc1/dc1/esx1/vm1
<i>[-vertical]</i>	Specify the format. If you do not specify this option, the information is displayed in the csv format.

[Syntax examples]

```
>ssc iso show virtual:/VC/DataCenter/VMServer/vm  
>ssc iso show virtual:/VC/DataCenter/VMServer/vm -vertical
```

3.2.24. Unmounting the ISO Image from a Virtual Machine

Unmounts an ISO image from a virtual machine.

[Syntax]

```
ssc iso unmount VMName Ctrl Position
```

[Parameters and Options]

<i>VMName</i> (Required)	Specify the full path of the virtual machine. virtual://vc1/dc1/esx1/vm1
<i>Ctrl</i> (Required)	Specify the controller.
<i>Position</i> (Required)	Specify the position.

[Syntax examples]

```
>ssc iso unmount virtual:/VC/DataCenter/VMServer/vm ide1 0
```

3.3. VM Placement Rule

3.3.1. Configuring VM Placement Rule

Configures the VM Placement Rule for virtual machines.

[Syntax]

```
ssc vmop set-rule GroupName SourceName [TargetName] [-type Type] [-o options]
[-priority n]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a group or model for VM Server to which you intend to configure the placement rule. Specify a path to the group or model (E.g.: <i>Category/Group</i> , <i>Group/Model</i>).
<i>SourceName</i> (Required)	Specify a name of a source host or restriction group to which you intend to configure the placement rule. Specify a path including the group to which the host belongs if <i>SourceName</i> shows a host. The type of <i>SourceName</i> is automatically detected but considered as a restriction group if you specify <i>SourceName</i> enclosing it in parentheses (E.g.: <i>Category/Group/Host</i> , <i>Group/Host</i> , <i>RestrictionGroup</i> , (<i>RestrictionGroup</i>)).
[<i>TargetName</i>]	Specify a name of a destination host or restriction group to which you intend to configure the placement rule. When you specify "-type eq", "-type ne" or "-type hold", do not specify <i>TargetName</i> . Specify a path including the group to which the host belongs if <i>TargetName</i> shows a host. The type of <i>TargetName</i> is automatically detected but considered as a restriction group if you specify <i>TargetName</i> enclosing it in parentheses (E.g.: <i>Category/Group/Host</i> , <i>Group/Host</i> , <i>RestrictionGroup</i> , (<i>RestrictionGroup</i>)). If you specify only a destination host name, the host is regarded as a host that belongs to a <i>GroupName</i> group.
[-type <i>Type</i>]	Specify a type of the placement rule. "pinned" : Places a <i>SourceName</i> virtual machine on a <i>TargetName</i> virtual machine server. "eq" : Places virtual machines specified in the member of the restriction group to the same virtual machine server. "ne" : Places virtual machine specified in the members of restriction group to different virtual machine servers. "hold" : Excludes virtual machines for Optimized Placement feature. If you do not specify -type, "pinned" is specified.
[-o <i>options</i>]	Specify options for the placement rule (You can specify multiple items). When you specify "-type pinned", you can specify it. "force" : Forces of the placement rule. "weak" : At the time of the use of the Optimized start, when there is not the virtual machine server which can start, for reasons of the trouble, ignores it.

[-priority <i>n</i>]	Specify a priority of the placement rule. When you specify "-type pinned", you can specify it. Range 1 <= <i>n</i> <= 4 The default value is 1(highest).
-----------------------	---

- If these settings have been already specified (if *GroupName*, *SourceName*, and *TargetName* are the same as before), the settings are overwritten.

[Syntax examples]

```
>ssc vmop set-rule VmServer-g/Esx-g-01 Vm-g/vm01 VMServer-g/Esx-g-01/esx01
>ssc vmop set-rule VmServer-g/Esx-g-01/VmsModel01
Vm-g/vm01 VMServer-g/Esx-g-01/esx01 -type pinned
>ssc vmop set-rule VmServer-g/Esx-g-01/VmsModel01
(vm-pinned-group) (vms-pinned-group) -type pinned
>ssc vmop set-rule VmServer-g/Esx-g-01/VmsModel01
(vm-eq-group) -type eq
>ssc vmop set-rule VmServer-g/Esx-g-01/VmsModel01
(vm-hold-group) -type hold
>ssc vmop set-rule VmServer-g/Esx-g-01/VmsModel01
Vm-g/vm01 VMServer-g/Esx-g-01/esx01 -type pinned -o force
>ssc vmop set-rule VmServer-g/Esx-g-01/VmsModel01
Vm-g/vm01 VMServer-g/Esx-g-01/esx01 -type pinned -o force weak
>ssc vmop set-rule VmServer-g/Esx-g-01/VmsModel01
Vm-g/vm01 VMServer-g/Esx-g-01/esx01 -type pinned -o weak -priority 2
```

3.3.2. Releasing VM Placement Rule

Deletes the VM Placement Rule for virtual machines.

[Syntax]

```
ssc vmop delete-rule GroupName [SourceHostName] [TargetHostName] [-all]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a group or model for VM Server from which you intend to delete the placement rule. Specify a path to the group or model. (E.g.: <i>Category/Group/Model</i> , <i>Group/Model</i>)
[<i>SourceName</i>]	Specify a target source host name or restriction group (virtual machine) of the placement rule. You cannot omit this option except when you specify -all. Specify a path including the group to which the host belongs if <i>SourceName</i> shows a host. The type of <i>SourceName</i> is automatically detected but considered as a restriction group if you specify <i>SourceName</i> enclosing it in parentheses. (E.g.: <i>Category/Group/Host</i> , <i>Group/Host</i> , <i>RestrictionGroup</i> , <i>(RestrictionGroup)</i>)
[<i>TargetName</i>]	Specify a target destination host name or restriction group (virtual machine server) of the placement rule. Specify a path including the group to which the host belongs if <i>TargetName</i> shows a host. The type of <i>TargetName</i> is automatically detected but considered as a restriction group if you specify <i>TargetName</i> enclosing it in parentheses. (E.g.: <i>Category/Group/Host</i> , <i>Group/Host</i> , <i>RestrictionGroup</i> , <i>(RestrictionGroup)</i>)

[-all]	<p>If you specify only <i>GroupName</i>, deletes all placement rules that are correlated to a group or model for VM Server.</p> <p>If you specify <i>GroupName</i>, <i>SourceName</i>, or <i>TargetName</i>, deletes all placement rules that are correlated to a VM Server model and host.</p>
--------	---

[Syntax examples]

```

1) If you delete rule of a SourceHost (virtual machine) and
   TargetHost (virtual machine server):
>ssc vmop delete-rule VmServer-g/Esx-g-01 Vm-g/vm01 VmServer-g/Esx-g-01/esx01
2) If you delete rule of a SourceGroup (VM restriction group) and
   TargetHost (virtual machine server):
>ssc vmop delete-rule VmServer-g/Esx-g-01/VmsModel01
   (vm-pinned-group) VmServer-g/Esx-g-01/esx01
3) If you delete rule (eq-restriction) of a SourceGroup (VM restriction group):
>ssc vmop delete-rule VmServer-g/Esx-g-01/VmsModel01 (vm-eq-group)
4) If you delete all rules of a SourceHost (virtual machine):
>ssc vmop delete-rule VmServer-g/Esx-g-01/VmsModel01
   Vm-g/vm01 -all
5) If you delete all rules of a TargetHost (virtual machine server):
>ssc vmop delete-rule VmServer-g/Esx-g-01/VmsModel01
   VmServer-g/Esx-g-01/esx01 -all
6) If you delete all rules of a SourceGroup (VM restriction group):
>ssc vmop delete-rule VmServer-g/Esx-g-01/VmsModel01
   (vm-restriction-group) -all
7) If you delete all rules of a GroupName (VM Server model):
>ssc vmop delete-rule VmServer-g/Esx-g-01/VmsModel01 -all

```

3.3.3. Enabling VM Placement Rule

Enables the VM Placement Rule feature for virtual machines.

[Syntax]

```
ssc vmop enable-rule GroupName
```

[Parameters and Options]

<i>GroupName</i> (Required)	<p>Specify a group or model for VM Server to which you intend to enable the VM Placement Rule feature.</p> <p>Specify a path to the group or model. (E.g.: <i>Category/Group</i>, <i>Group/Model</i>)</p>
--------------------------------	---

[Syntax examples]

```

>ssc vmop enable-rule VmServer-g/Esx-g-01
>ssc vmop enable-rule VmServer-g/Esx-g-01/VmsModel01

```

3.3.4. Disabling VM Placement Rule

Disables the VM Placement Rule feature for virtual machines.

[Syntax]

```
ssc vmop disable-rule GroupName
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a group or model for VM Server to which you intend to disable the VM Placement Rule feature. Specify a path to the group or model. (E.g.: <i>Category/Group, Group/Model</i>)
--------------------------------	--

[Syntax examples]

```
>ssc vmop disable-rule VmServer-g/Esx-g-01  
>ssc vmop disable-rule VmServer-g/Esx-g-01/VmsModel01
```

3.3.5. Placement by VM Placement Rule

Places virtual machines according to the VM Placement Rule.

[Syntax]

```
ssc vmop apply-rule GroupName [TargetHostName]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a group or model for VM Server of a target of the VM Placement Rule. Specify a path to the group or model. (E.g.: <i>Category/Group, Group/Model</i>)
[<i>TargetHostName</i>]	Specify a name of a target host to which you intend to apply the VM Placement Rule. A target virtual machine server needs to be running.

[Syntax examples]

```
>ssc vmop apply-rule VmServer-g/Esx-g-01  
>ssc vmop apply-rule VmServer-g/Esx-g-01/VmsModel01  
VmServer-g/Esx-g-01/esx01
```

3.3.6. Displaying VM Placement Rule

Displays the VM Placement Rule setting for virtual machines.

[Syntax]

```
ssc vmop show-rule [GroupName] [-vertical]
```

[Parameters and Options]

[<i>GroupName</i>]	Specify a group or model for VM Server whose placement rules you want to display. Specify a path to the group or model. If you do not specify <i>GroupName</i> , only names of all groups and models to which the VM Placement Rule feature is configured are displayed. (E.g.: <i>Category/Group, Group/Model</i>)
[-vertical]	Displays information in the information display format. If you do not specify this option, the information is displayed in the csv format (in one line divided with commas).

- The restriction group is displayed as (*[Restriction Group Name]*) in the CVS format.

[Syntax examples]

```
>ssc vmop show-rule -vertical
  GroupName : //test1/test2/vmsgroup/vmsmodel01      Restriction : Enabled
  GroupName : //test1/test2/vmsgroup2/vmsmodel1      Restriction : Disabled
>ssc vmop show-rule
#GroupName, Restriction
//test1/test2/vmsgroup/vmsmodel01, Enabled
//test1/test2/vmsgroup2/vmsmodel1, Disabled
```

```
>ssc vmop show-rule test1/test2/vmsgroup/vmsmodel01 -vertical
* GroupName      : vmsmodel01
* Restriction    : Enabled
* Source
  HostName       : vmhost01
  GroupName      : ¥¥test1¥test2¥vmsgroup002
  MachineName    : vm100
* Target
  HostName       : vmshost01
  GroupName      : ¥¥test1¥test2¥vmsgroup
  MachineName    : Not Running
* RestrictionType : Pinned
* RestrictionPriority : 1
* RestrictionFlag : none
-----
* Source
  HostName       : vmhost02
  GroupName      : ¥¥test1¥test2¥vmsgroup002
  MachineName    : vm200
* Target
  HostName       : vmshost01
  GroupName      : ¥¥test1¥test2¥vmsgroup
  MachineName    : Not Running
* RestrictionType : Pinned
* RestrictionPriority : 2
* RestrictionFlag : none
-----
* Source
  RestrictionGroupName : vm-group
  GroupName            : ¥¥test1¥test2¥vmsgroup002
  HostName             : vmhost03
  HostName             : vmhost04
  HostName             : vmhost05
* Target
  HostName            : vmshost01
  GroupName           : ¥¥test1¥test2¥vmsgroup
  MachineName         : Not Running
* RestrictionType    : Pinned
* RestrictionPriority : 1
* RestrictionFlag    : none
>ssc vmop show-rule test1/test2/vmsgroup/vmsmodel01
#GroupName, Restriction, SourceHost, TargetHost, Type, Priority, Flag
"vmsmodel01", "Enabled", "vmhost01", "vmshost01", "Pinned", "1", "none"
"vmsmodel01", "Enabled", "vmhost02", "vmshost01", "Pinned", "2", "none"
"vmsmodel01", "Enabled", "(vm-group)", "vmshost01", "Pinned", "1", "none"
```

3.3.7. Verifying VM Placement Rule

Verifies the VM Placement Rule setting for virtual machines.

[Syntax]

```
ssc vmop verify-rule GroupName
```


[Parameters and Options]

<i>GroupName</i> (Required)	Specify a group or model for VM Server from which you intend to verify placement rule setting. Specify a path to the group or model. E.g.) Category/Group, Group/Model
--------------------------------	--

[Syntax examples]

```
>ssc vmop verify-rule category/vmsGroup/model1
```

3.3.8. Creating Restriction Group

Creates a restriction group for the VM Placement Rule feature.

[Syntax]

```
ssc vmop create-group GroupName RestrictionGroupName
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a group or model to which you intend to create a restriction group. Specify a group when you intend to create a restriction group for virtual machines. Specify a group or model when you intend to create a restriction group for virtual machine servers. Specify a path to the group or model. (E.g.: <i>Category/Group, Group/Model</i>)
<i>RestrictionGroupName</i> (Required)	Specify a name of restriction group which are to create.

[Syntax examples]

```
1) If you create a restriction group for virtual machines:  
>ssc vmop create-group Category/VmGroup-01 restriction-group  
2) If you create a restriction group for virtual machine servers:  
>ssc vmop create-group Category/VmsGroup-01/EsxModel-01 vms-restriction-group
```

3.3.9. Deleting Restriction Group

Deletes a restriction group for the VM Placement Rule feature.

[Syntax]

```
ssc vmop delete-group GroupName RestrictionGroupName
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a group or model from which you intend to delete a restriction group. Specify a group when you intend to delete a restriction group for virtual machines. Specify a group or model when you intend to delete a restriction group for virtual machine servers. Specify a path to the group or model. (E.g.: <i>Category/Group, Group/Model</i>)
<i>RestrictionGroupName</i> (Required)	Specify a name of restriction group to be deleted.

[Syntax examples]

```
1) If you delete a restriction group for virtual machines:  
>ssc vmop delete-group Category/VmGroup-01 restriction-group  
2) If you delete a restriction group for virtual machine servers:  
>ssc vmop delete-group Category/VmsGroup-01/EsxModel-01 vms-restriction-group
```

3.3.10. Adding Member to Restriction Group

Adds a member to a restriction group for the VM Placement Rule feature.

[Syntax]

```
ssc vmop add-member GroupName RestrictionGroupName HostName1 [HostName2]...
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a group or model to which you intend to configure a restriction group. Specify a group when you intend to configure a restriction group for virtual machines. Specify a group or model when you intend to configure a restriction group for virtual machine servers. Specify a path including the group or model to which the hosts belong. (E.g.: <i>Category/Group, Group/Model</i>)
<i>RestrictionGroupName</i> (Required)	Specify the name of the restriction group to which are to add member.
<i>HostName1</i> (Required) <i>[HostName2]</i> ...	Specify host names which are added to a restriction group. Specify a path including the group to which the hosts belong. (E.g.: <i>Category/Group/Host, Group/Host</i>) If you specify multiple host names, all of them are added to a restriction group.

[Syntax examples]

```
>ssc vmop add-member Category/VmGroup-01 vm-group vm-001  
>ssc vmop add-member Category/VmGroup-01 vm-group vm-001 vm-002 vm-003  
>ssc vmop add-member Category/VmsGroup-01/EsxModel-01 vms-group vms-001
```

3.3.11. Removing Member from Restriction Group

Removes a member from a restriction group for the VM Placement Rule feature.

[Syntax]

```
ssc vmop remove-member GroupName RestrictionGroupName HostName1 [HostName2]...
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a group or model to which you intend to configure a restriction group. Specify a group when you intend to configure a restriction group for virtual machines. Specify a group or model when you intend to configure a restriction group for virtual machine servers. Specify a path including the group or model to which the hosts belong. (E.g.: <i>Category/Group, Group/Model</i>)
--------------------------------	---

<i>RestrictionGroupName</i> (Required)	Specify a name of the restriction group from which you intend to remove the member.
<i>HostName1</i> (Required) <i>[HostName2]</i> ...	Specify host names which are removed from a restriction group. Specify a path including the group to which the host belongs. (E.g.: <i>Category/Group/Host, Group/Host</i>) If you specify multiple host names, all of them are removed from a restriction group.

[Syntax examples]

```
>ssc vmop remove-member Category/VmGroup-01 vm-group vm-001
>ssc vmop remove-member Category/VmGroup-01 vm-group vm-001 vm-002 vm-003
>ssc vmop remove-member Category/VmsGroup-01/EsxModel-01 vms-group vms-001
```

3.3.12. Displaying Restriction Group

Displays the restriction group setting for VM Placement Rule feature.

[Syntax]

```
ssc vmop show-group [GroupName] [-vertical]
```

[[Parameters and Options]

<i>[GroupName]</i>	Specify a group or model whose restriction group you want to display. Specify a path to the group or model. If you do not specify <i>GroupName</i> , all of settings of restriction group for virtual machine are displayed. (E.g.: <i>Category/Group, Group/Model</i>)
<i>[-vertical]</i>	Displays information in the information display format. If you do not specify this option, the information is displayed in the CSV format (in one line divided with commas).

[Syntax examples]

```
1) If you display the information of a restriction group for virtual machines:
>ssc vmop show-group Category/VmGroup-01
2) If you display the information of a restriction group for virtual machine server
>ssc vmop create-group Category/VmsGroup-01/EsxModel-01
3) If you display the information of a restriction group for virtual machines with
>ssc vmop show-group Category/VmGroup-01 -vertical
4) If you display the information of all restriction groups for virtual machines:
>ssc vmop show-group
```

[Display examples]

```
>ssc vmop show-group Category/VmGroup-01
#GroupName, RestrictionGroupName, Member1, Member2, ...
"VmGroup-01", "vm-group-01", "vm-001", "vm-002", "vm-003"
"VmGroup-01", "vm-group-02", "vm-004", "vm-005"
>ssc vmop show-group Category/VmGroup-01 -vertical
* RestrictionGroupName : vm-group-01
  GroupName             : ¥¥Category¥VmGroup-01
  HostName              : vm-001
  HostName              : vm-002
  HostName              : vm-003
-----
* RestrictionGroupName : vm-group-02
  GroupName             : ¥¥Category¥VmGroup-01
  HostName              : vm-004
```

```
HostName          : vm-005
>ssc vmop show-group Category/VmsGroup-01/EsxModel-01
#GroupName, RestrictionGroupName, Member1, Member2, ...
"EsxModel-01", "vms-group-01", "vms-001", "vms-002"
"EsxModel-01", "vms-group-02", "vms-003", "vms-004", "vms-005"
```

3.4. Datastore

3.4.1. Displaying Datastore

Displays datastore information.

The list is output in the csv format (in one line divided with commas).

[Syntax]

```
ssc show datastore [DatastoreName <-vm | -template>] [-storage] [-path Path]  
[-vms VmsName] [-vertical]
```

[Parameters and Options]

[<i>DatastoreName</i>]	Specify a datastore name to display the datastore information.
[-vm]	Displays the information of the virtual machine located under the specified datastore.
[-template]	Displays the information of the template located under the specified datastore.
[-storage]	Displays the information of the datastore/LUN connected to the VM server.
[-path <i>Path</i>]	Specify a path to the datacenter or the VM Server to which the datastore belongs.
[-vms <i>VmsName</i>]	Specify a name of the VM server to which the datastore belongs. (This option is enabled if -storage is specified.)
[-vertical]	Specify format. If you do not specify this option, information is displayed in the csv format.

[Note]

Notes : ssc show datastore -storage

- If the datastore is composed of some LUNs or the multipath environment, the datastores that indicate different PathIds and the same datastore name are displayed.
- Even an unused case, the disk volume(LUN) established for RDM by 'ssc rdmstorage update' command or by a cooperation product aren't displayed.

[Syntax examples]

```
>ssc show datastore  
>ssc show datastore -path VC1/DC  
>ssc show datastore -path VC1/DC/VMServer  
>ssc show datastore Storage1  
>ssc show datastore Storage1 -vm  
>ssc show datastore Storage1 -template  
>ssc show datastore -storage -path vc1/datacenter/vms1  
>ssc show datastore -storage -vms vms1 -vertical
```

[Display examples]

```
>ssc show datastore  
#DatastoreName,DatastoreSize (GB),DatastoreUsage (GB),DatastoreFree (GB),Datastore  
"NECStorageS500","265.8","261.2","4.5","98","virtual:/192.168.10.220/dataCenterA",  
"NECStorageS500","265.8","217.7","48.1","81","virtual:/192.168.10.220/dataCenterB"
```

```
>ssc show datastore -path
"virtual:/192.168.10.220/dataCenterA"
#DatastoreName,DatastoreSize (GB),DatastoreUsage (GB),DatastoreFree (GB),Datastore
"NECStorageS500","265.8","261.2","4.5","98","virtual:/192.168.10.220/dataCenterA",
```

```
>ssc show datastore NECStorageS500 -path
"virtual:/192.168.10.220/dataCenterA"
[Datastore]
#DatastoreName,DatastoreSize (GB),DatastoreUsage (GB),DatastoreFree (GB),Datastore
"NECStorageS500","265.8","261.2","4.5","98","virtual:/192.168.10.220/dataCenterA",
[Machine]
#MachineName,MachineType,Uuid,MacAddress,ProductName,ModelName,ManagedStatus,Summa
"MasterMachine","VMware, Virtual Machine","42043949-9fde-6cb5-297c-bc5cd39a6de7",
"MasterVM","VMware, Virtual Machine","42049b63-168e-86d0-83c8-e57319cb622d","00:50
[Template]
#SoftwareName,CreateTime,SoftwareCost,SoftwareType,VMServerName,SoftwareLocation,I
"FullCloneTemplate","2010/07/09 15:16:13","1","Template, FullClone","192.168.220.1
```

```
>ssc show datastore "NECStorageS500" -path
"virtual:/192.168.10.220/dataCenterA" -vm
[Machine]
#MachineName,MachineType,Uuid,MacAddress,ProductName,ModelName,ManagedStatus,Summa
"MasterMachine","VMware, Virtual Machine","42043949-9fde-6cb5-297c-bc5cd39a6de7",
"MasterVM","VMware, Virtual Machine","42049b63-168e-86d0-83c8-e57319cb622d","00:50
```

```
>ssc show datastore NECStorageS500 -path
"virtual:/192.168.10.220/dataCenterA" -template
#SoftwareName,CreateTime,SoftwareCost,SoftwareType,VMServerName,SoftwareLocation,I
"FullCloneTemplate","2010/07/09 15:16:13","1","Template, FullClone","192.168.220.1
```

```
>ssc show datastore Storage1 -vertical
[Datastore-01]
DatastoreName      : NECStorageS500
DatastoreSize (GB) : 265.8
DatastoreUsage (GB) : 261.2
DatastoreFree (GB) : 4.5
DatastoreUtilization (%) : 98
DataCenterPath     : virtual:/192.168.10.220/dataCenterA
VmsManagerName    : 192.168.220.142,192.168.220.148
[Machine-01]
MachineName       : MasterMachine
MachineType       : VMware, Virtual Machine
Uuid              : 42043949-9fde-6cb5-297c-bc5cd39a6de7
MacAddress        : 00:50:56:84:78:F6
ProductName       : VMware Virtual Machine 7
:
:
IPAddress         :
MachineSubType    : MasterVM
Cost              : 0
MemorySize (MB)  :
Processor         :
CPUCount         :
CPULimit (MB)    :
CPUShare         :
DiskUsage (GB)   :
[Machine-02]
:
:
:
[Template-01]
SoftwareName      : FullCloneTemplate
CreateTime        : 2010/07/09 15:16:13
SoftwareCost      : 1
```

```

SoftwareType      : Template, FullClone
VMServerName     : 192.168.220.142
SoftwareLocation : NECStorageS500
ImageName        : FullCloneTemplate
DiskSize (MB)    : 1024
Description      :

```

```

>ssc show datastore -storage -vms vms1 -vertical
[Datastore-01]
DatastoreName : iStorage001
LUN           : 1
PathId        : vmhba1:2:3:4:5
UniqueId      : eui.123456789e123456
WWPN          : -
WWNN          : -
RemoteHost    : -
MountPoint    : -
Size (GB)     : 500.0
[Datastore-02]
DatastoreName : Storage1
LUN           : 2
PathId        : vmhba1:3:5:7:9
UniqueId      : mpx.vmhba1:C3:T5:L7
WWPN          : -
WWNN          : -
RemoteHost    : -
MountPoint    : -
Size (GB)     : 40.5
[Datastore-03]
DatastoreName : iStorage002
LUN           : 3
PathId        : vmhba2:4:6:8:0
UniqueId      : eui.987654321e654321
WWPN          : -
WWNN          : -
RemoteHost    : -
MountPoint    : -
Size (GB)     : 550.6

```

3.4.2. Creating Datastore

Creates datastore.

[Syntax]

```

ssc create datastore DatastoreName VmsName <-lun LUN -hban HBANo |
-pathid PathId | -uniqueid UniqueId | -folder FolderName -server ServerAddress>

```

[Parameters and Options]

<i>DatastoreName</i> (Required)	Specify a datastore name to create.
<i>VmsName</i> (Required)	Specify the VM server to create the datastore.
-lun <i>LUN</i>	Specify a LUN No. of the datastore to create.
-hban <i>HBANo</i>	Specify an HBA No. of the datastore to create. This parameter cannot be specified for a local disk or a virtual machine server to which HBA is not registered.
-pathid <i>PathId</i>	Specify a path Id of the datastore to create.
-uniqueid <i>UniqueId</i>	Specify a unique Id of the datastore to create.
-folder <i>FolderName</i>	Specify a folder of the datastore to create. (E.g. /nfs_volume)

-server <i>ServerAddress</i>	Specify a server with the folder of the datastore to create.
---------------------------------	--

[Note]

- If a HBA is connected to some storage devices, the datastore cannot be created by specifying “-lun LUN” and “-hbano HBANO”.
- When create an NFS datastore, please specify < -folder FolderName -server ServerAddress >.
- The disk volume(LUN) established for RDM by the command or by a compatible product can't be used for creating of datastore.

[Syntax examples]

```
>ssc create datastore DatastoreSan1 vms-1 -lun 0 -hbano 1
>ssc create datastore DatastoreSan1 vms-1 -pathid vmhba0:1:1:0
>ssc create datastore DatastoreSan1 vms-1 -uniqueid "eui.003013840e640001"
>ssc create datastore DatastoreSan1 vms-1 -uniqueid "003013840e640001"
>ssc create datastore DatastoreSan1 vms-1
  -uniqueid "naa.60060160967021004ab70806c311de10"
>ssc create datastore NfsDatastore1 esx10.ssc-asc.net -folder /Volume-001
  -server 172.26.0.201
```

3.4.3. Deleting Datastore

Deletes datastore.

[Syntax]

```
ssc delete datastore DatastoreName VmsName
```

[Parameters and Options]

<i>DatastoreName</i> (Required)	Specify the name of the datastore to delete.
<i>VmsName</i> (Required)	Specify a virtual machine server name to which the datastore to delete is connected.

[Note]

- When there are virtual machines and templates in the specified datastore, the datastore cannot be deleted.

[Syntax examples]

```
>ssc delete datastore storage1 vms1
```

3.4.4. Scanning and Updating Datastore Information

Scans and updates the information of the datastore which is connected to a VM server.

[Syntax]

```
ssc scan datastore <VmsName | -model Mode/Name>
```

[Parameters and Options]

<i>VmsName</i>	Specify a VM server name of the scan target.
-model <i>Mode/Name</i>	Specify a VM Server model. If this parameter is specified, the system scans virtual machine servers under the VM server model.

Only VM server model can be specified.

[Syntax examples]

```
>ssc scan datastore vms-1
>ssc scan datastore -model tenant1/vmsgroup1/esxmodel
```

3.4.5. Updating Datastore settings

Updates datastore settings.

[Syntax]

```
ssc update datastore DatastoreName [-path Path] [-capacity Value] [-desiredmax Value] [-tag Tag...]
```

[Parameters and Options]

<i>DatastoreName</i> (Required)	Specify the datastore name for updating. This specification is case sensitive.
[-path <i>Path</i>]	Specify a path to the datacenter or the VM server to which the datastore belongs. If you do not specify this option, all VM server in the system is the target.
[-capacity <i>Value</i>]	Updates the upper limit of the number of virtual machines. (0 <= value <= 100000)
[-desiredmax <i>Value</i>]	Updates the range of use upper limit. (0 <= value <= 100)
[-tag <i>Tag...</i>]	Updates tag. You can specify multiple tags.

- Specify at least one of the -capacity, -desiredmax and -tag options.
- This command doesn't correspond to tags setting of RDM storage.

[Syntax examples]

```
>ssc update datastore storage1 -path vc1/DataCenter1/VMS1 -capacity 1000
>ssc update datastore storage1 -path vc1/DataCenter1/VMS1 -desiredmax 50
>ssc update datastore storage1 -path vc1/DataCenter1/VMS1 -tag public
>ssc update datastore storage1 -path vc1/DataCenter1/VMS1 -capacity 1000
  -desiredmax 50 -tag private VMS1
>ssc update datastore storage1 -capacity 1000 -desiredmax 50
```

3.4.6. Setting the Virtual Machine Creating Datastore

Sets the datastore where virtual machines to be created.

[Syntax]

```
ssc set datastore-setting Path [DatastoreName] [-host HostName] < [-priority Value] [-candidate < true | false >] | [-delete] >
```

[Parameters and Options]

<i>Path</i> (Required)	Specify the path to the target operations group or host. You can omit View Type ("operations:/") You can specify neither a tenant nor a category for this option. E.g.: When specifying a group name: Category/Group When specifying a model name:
---------------------------	--

	Category/Group/Model When specifying a host name: Category/Group/Host When specifying a host name (full path): operations:/Category/Group/Host
[<i>DatastoreName</i>]	Specify the datastore name for setting. Enter the case-sensitive string. When you specify "-candidate false", this option can be omitted.
[-host <i>HostName</i>]	Specify the host name of the target. If you specify this option, specify the operation group for Path. Specify this option if there is a model with the same name as the target host.
[-priority <i>Value</i>]	Specify the priority with a number from 1 to 10.
[-candidate < true false >]	Specify whether the datastore should be set as a destination candidate on which virtual machines will be created. true: candidate false: non-candidate * When "false" is specified, <i>DatastoreName</i> can be omitted. In such a case, all datastores are excluded from the candidates.
[-delete]	Deletes setting.

- Specify at least one of the -priority or -candidate options.

[Syntax examples]

```
>ssc set datastore-setting category/vmsgroup storage1 -priority 2
-candidate false
>ssc set datastore-setting category/vmsgroup storage1 -candidate true
>ssc set datastore-setting category/vmsgroup/model storage1 -priority 2
>ssc set datastore-setting category/vmsgroup/host1 storage1 -priority 2
>ssc set datastore-setting category/vmsgroup storage1 -delete
>ssc set datastore-setting category/vmsgroup -candidate false
```

3.4.7. Displaying Folder/File of Datastore

Displays a folder/file of the specified datastore.

[Syntax]

```
ssc datastorefile show -vms Vms -datastore DataStore [-path Path] [-type Type]
[-size Size] [-index [start=Start] count=Count]
```

[Parameters and Options]

-vms <i>Vms</i> (Required)	Specify a virtual machine server name.
-datastore <i>DataStore</i> (Required)	Specify a datastore name.
[-path <i>Path</i>]	Specify the path of the folder.
[-type <i>Type</i>]	Specify a type of the file.
[-size <i>Size</i>]	Specify a size.
[-index [start= <i>Start</i>] count= <i>Count</i>]	"start" is optional. When specifying -index, "count" must be specified.

[Syntax examples]

```
>ssc datastorefile show -vms 192.**.** -datastore DS1
```

3.5. Resource Pool

3.5.1. Creating Resource Pool

Creates a resource pool.

[Syntax]

```
ssc resourcepool create <-root GroupName ResourcePoolName vCPU |
ParentResourcePool SubResourcePool [-resource [overcommit=on] [vcpu=value]
[memory=value] [storage=value] [vm=value]]> [-private [GroupName]] [-desc
description]
```

[Parameters and Options]

<p>-root <i>GroupName ResourcePoolName vCPU</i></p>	<p>To create a resource pool, specify this parameter. Specify the group of the virtual machine server. GroupName : Specify the path of the group where the resource pool is to be created. Specify a VM server group. ResourcePoolName : Specify a resource pool name. vCPU : Specify the Number of vCPU or Frequency(MHz) of vCPU. E.g.) When specifying a number, specify 10vpc or 10. When specifying a frequency, specify 300mhz.</p>
<p><i>ParentResourcePool SubResourcePool</i> [-resource [overcommit=on] [vcpu=<i>value</i>] [memory=<i>value</i>] [storage=<i>value</i>] [vm=<i>value</i>]]</p>	<p>To divide a sub-pool, specify this parameter. ParentResourcePool : Specify a parent resource pool name. SubResourcePool : Specify a sub-pool name. -resource : Specify Resource information. You cannot specify leading or trailing spaces in the equal ("="). overcommit=on : To allow overcommitment of resources, specify this option. vcpu : Specify the number of vCPU in value. memory : Specify memory size(MB) in value. storage : Specify storage capacity(GB) in value. vm : Specify the number of virtual machine in value.</p>
<p>[-private [<i>GroupName</i>]]</p>	<p>To create a dedicated resource pool, specify this option. If you do not specify this option, a shared resource pool is created. Specify a group to which the resource pool is to be allocated for <i>GroupName</i>. (Optional)</p>

[-desc description]

Specify the description.

[Syntax examples]

```
>ssc resourcepool create -root vms/vmsgroup1 resourcepool1 10vpc
>ssc resourcepool create -root vms/vmsgroup1 resourcepool1 20
>ssc resourcepool create -root vms/vmsgroup1 resourcepool1 300mhz
>ssc resourcepool create -root vms/vmsgroup1 resourcepool1 20vpc
-private -desc "private resourcepool"
>ssc resourcepool create -root vms/vmsgroup1 resourcepool1 300mhz
-private tenant/tenant1
>ssc resourcepool create resourcepool1 subresource1 -private
-resource vcpu=2 memory=512 storage=100 vm=5
>ssc resourcepool create resourcepool1 subresource1 -resource vcpu=2 vm=5
>ssc resourcepool create resourcepool1 subresource1 -private tenant/tenant1
>ssc resourcepool create resourcepool1 subresource1 -desc "public resource pool"
```

3.5.2. Displaying Resource Pool Information

Displays resource pool information.

[Syntax]

```
ssc resourcepool show [ResourcePoolName] [-all]
```

[Parameters and Options]

[<i>ResourcePoolName</i>]	Specify the name of the resource pool to display. A sub-pool also can be specified. If you do not specify this option, resource pool names are enumerated. 'R' of first character in the line shows Root and 'S' shows Sub.
[-all]	To enumerate names of sub-pools, specify this option.

[Syntax examples]

```
>ssc resourcepool show
>ssc resourcepool show -all
>ssc resourcepool show rp-gold-tokyo-1
>ssc resourcepool show subResourcePool-A
```

[Display examples]

```
>ssc resourcepool show
R rp-gold-tokyo-1
R rp-gold-kobe-1
R rp-gold-us-east-1
R rp-silver-tokyo-1
R rp-silver-kobe-1
```

```
>ssc resourcepool show -all
R rp-gold-tokyo-1
R rp-gold-kobe-1
S subResourcePool-A
S subResourcePool-B
R rp-gold-us-east-1
R rp-silver-tokyo-1
R rp-silver-kobe-1
S subResourcePool-C
```

```
>ssc resourcepool show rp-gold-tokyo-1
[Base]
```

```
vCPU: 300MHz
Type: shared
Overcommit: false
[ResourcePool]
#type, capacity, consumed, unused, reserved, actually-used
cpu, 170624MHz, 50MHz, 170574MHz, 300000MHz, 1440MHz
vcpu, 100, 20, 80, 50, 10
memory, 2048MB, 512MB, 1536MB, 1024MB, 3000MB
storage, 200GB, 10GB, 190GB, 100GB, 150GB
vm, 20, 10, 10, 20, 15
[SubResourcePool]
#name, vcpu, vcpu-reserved, memory, memory-reserved, storage, storage-reserved, vm, vm-rese
subResourcePool-A, 50/500, 0, 12800/200000, 0, 200.00/2000.00, 0.0, 50/600, 0, "Tenant1"
subResourcePool-B, 50/300, 0, 12800/300000, 0, 200.00/1000.00, 0.0, 50/400, 0, ""
```

```
>ssc resourcepool show rp-silver-kobe-1
[Base]
vCPU: 20vpc
Type: dedicated
Overcommit: false
[ResourcePool]
#type, capacity, consumed, unused, reserved, actually-used
cpu, 170624MHz, 50MHz, 170574MHz, 300000MHz, 1440MHz
vcpu, 100, 20, 80, 50, 10
memory, 2048MB, 512MB, 1536MB, 1024MB, 3000MB
storage, 200GB, 10GB, 190GB, 100GB, 150GB
vm, 20, 10, 10, 20, 15
[SubResourcePool]
#name, vcpu, vcpu-reserved, memory, memory-reserved, storage, storage-reserved, vm, vm-rese
subResourcePool-C, 50/500, 0, 12800/200000, 0, 200.00/2000.00, 0.0, 50/600, 0, "Tenant2"
```

```
>ssc resourcepool show subResourcePool-A
[Base]
Parent: rp-gold-tokyo-1
Type: dedicated
Overcommit: true
[ResourcePool]
#type, capacity, consumed, unused, reserved, actually-used
vcpu, 100, 20, 80, 50, 10
memory, 2048MB, 512MB, 1536MB, 1024MB, 3000MB
storage, 200GB, 10GB, 190GB, 100GB, 150GB
vm, 20, 10, 10, 20, 15
[SubResourcePool]
#name, vcpu, vcpu-reserved, memory, memory-reserved, storage, storage-reserved, vm, vm-rese
```

3.5.3. Deleting a Resource Pool

Deletes a resource pool.

[Syntax]

```
ssc resourcepool delete Path ResourcePoolName
```

[Parameters and Options]

<i>Path</i> (Required)	Specify a group path which delete a resource pool. Group Type is only VM Server.
<i>ResourcePoolName</i> (Required)	Specify a name of resource pool or sub resource pool.

[Syntax examples]

```
>ssc resourcepool delete category1/VMServer ResourcePool1
```

```
>ssc resourcepool delete category1/VMserver SubResourcePool1
```

3.6. Placement Information

3.6.1. Configuring Placement Information

Configures the Placement Information for virtual machines.

[Syntax]

```
ssc vmop set-position GroupName [SourceHostName] [TargetHostName] -key keyword
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a VM group or model to which you intend to configure the Placement Information. Specify a path to the group or model. (E.g.: Category/Group, Group/Model)
[<i>SourceHostName</i>]	Specify a name of a source host to which you intend to configure the Placement Information. Specify a path including a group to which the host belongs. (E.g.: Category/Group/Host, Group/Host) If you do not specify <i>SourceHostName</i> , set the current position for all hosts in the specified group by <i>GroupName</i> .
[<i>TargetHostName</i>]	Specify a name of a destination host to which you intend to configure the Placement Information. Specify a path including a group to which the host belongs. (E.g.: Category/Group/Host, Group/Host) If you do not specify <i>TargetHostName</i> , set the current position for host which is specified by <i>SourceHostName</i> .
-key <i>keyword</i> (Required)	Specify a name of the Placement Information.

[Note]

- If you do not specify *TargetHostName* and the source VM is worked on unmanaged host, the Placement Information will be not created.
- *keyword* has the following limitations:
 - Length : 32 or fewer characters.
 - Available characters : Alphabets (*a-z*, *A-Z*), numbers (*0-9*), a hyphen (-), an underscore (_)

[Syntax examples]

```
>ssc vmop set-position Vm-g/Vm-g-01 -key keyword  
>ssc vmop set-position Vm-g/Vm-g-01 Vm-g/vm01 -key keyword  
>ssc vmop set-position Vm-g/Vm-g-01 Vm-g/vm01 VmServer-g/Esx-g-01/esx01  
-key keyword
```

3.6.2. Deleting Placement Information

Deletes the Placement Information for virtual machines.

[Syntax]

```
ssc vmop delete-position GroupName [HostName] -key keyword
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a VM group or model from which you intend to delete the Placement Information. Specify a path to the group or model. (E.g.: Category/Group, Group/Model)
[<i>HostName</i>]	Specify a host name of the virtual machine that you intend to delete the Placement Information. Specify a path including a group to which the host belongs. (E.g.: Category/Group/Host, Group/Host) If you do not specify <i>HostName</i> , delete all Placement Information belonging to the group specified by <i>GroupName</i> .
-key <i>keyword</i> (Required)	Specify a name of the Placement Information.

[Syntax examples]

```
>ssc vmop delete-position Vm-g/Vm-g-01 -key keyword  
>ssc vmop delete-position Vm-g/Vm-g-01 Vm-g/vm01 -key keyword
```

3.6.3. Displaying Placement Information

Displays the Placement Information setting for virtual machines.

[Syntax]

```
ssc vmop show-position GroupName [-key keyword]
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a VM group or model whose Placement Information you want to display. Specify a path to the group or model. (E.g.: Category/Group, Group/Model)
[-key <i>keyword</i>]	Specify a name of the Placement Information. If you do not specify <i>keyword</i> , show all keywords that are set for all hosts in the group specified by <i>GroupName</i> .

[Note]

- If one of the following conditions is satisfied, the destination host is displayed as *<INVALID>*.
 - No machine is assigned to the source host (VM)
 - No machine is assigned to the destination host (VM server).
 - Destination host which contains the VM can not be detected for some reasons.
(e.g.: The VM server which was specified as the destination host was deleted.)

[Syntax examples]

```
>ssc vmop show-position Vm-g/Vm-g-01  
>ssc vmop show-position Vm-g/Vm-g-01 -key keyword
```

[Output examples]

```
>ssc vmop show-position Vm-g/Vm-g-01  
#Keyword  
"keyword1"  
"keyword2"  
"keyword3"
```



```
>ssc vmop show-position Vm-g/Vm-g-01 -key keyword1
#SourceHost,TargetHost
"vmhost01","vmshost01"
"vmhost02","vmshost01"
"vmhost03","vmshost02"
"vmhost04","<INVALID>"
```

3.6.4. Applying Placement Information

Migrates virtual machines according to the Placement Information.

[Syntax]

```
ssc vmop apply-position GroupName [TargetHostName] -key keyword
```

[Parameters and Options]

<i>GroupName</i> (Required)	Specify a VM/VM server group or model to which the Placement Information will be applied. Specify a path to the group or model. (E.g.: Category/Group, Group/Model)
[<i>TargetHostName</i>]	Specify a name of a target host. Specify a path including a group to which the host belongs. A target host needs to be on running. (E.g.: Category/Group/Host, Group/Host) If you do not specify the <i>TargetHostName</i> , apply the information to all hosts in the group which is specified by <i>GroupName</i> .
-key <i>keyword</i> (Required)	Specify a name of the Placement Information.

[Note]

- If you specify the VM group or model as the parameter of *GroupName*:
 - The targets of migration are virtual machines which belong to this group or model.
 - *TargetHostName* needs to be specified in this group or model.
- If you specify the VM server group or model to the parameter of *GroupName*:
 - The target of migration are virtual machines which is running on all hosts in this group or model.
 - If you specify the *TargetHostName*, the targets of migration are what meet the following conditions.
 - All virtual machines which are running on this host.
 - All virtual machines that this host is specified as their destination host of the Placement Information.
- Refer to the SigmaSystemCenter Overview Reference Guide "3.12.18. VM Placement Information Feature" for details of the Placement Information.

[Syntax examples]

```
>ssc vmop apply-position Vm-g/Vm-g-01 -key keyword
>ssc vmop apply-position Vm-g/Vm-g-01 Vm-g/vm01 -key keyword
>ssc vmop apply-position VmServer-g/Esx-g-01 -key keyword
>ssc vmop apply-position VmServer-g/Esx-g-01 VmServer-g/Esx-g-01/esx01
-key keyword
```

4. Command for Maintenance

This chapter explains commands regarding maintenance in SigmaSystemCenter.

4.1. Operations Log

4.1.1. Displaying Operations Log

Displays the Operations log.

The maximum number of logs to be displayed is 100 if you do not specify the `-all` option. If you do not specify any parameter, the latest 100 logs are displayed. If you specify `-all`, all logs are displayed in the database.

[Syntax]

```
ssc show log [-date [yyyy/mm/dd] [hh:mm:ss]] [-days Number] [-level LogLevel]
[-category <user | policy | system>] [-eventnum EventNumber] [-jobid JobID]
[-ip IPAddress] [-username UserName] [-all] [-vertical]
```

[Parameters and Options]

<p><code>[-date [yyyy/mm/dd] [hh:mm:ss]]</code></p>	<p>Specify the date and time of a base point from which logs are displayed. The maximum number of logs to display is 100. If you do not specify time (hour, minute, and second), 00:00:00 is specified. If you do not specify date, the date that executes command is specified. If you do not specify <code>-date</code>, the latest update date of the Operations Log is specified as the base point. This option cannot be specified simultaneously with the <code>-all</code> option.</p>
<p><code>[-days Number]</code></p>	<p>Specify the number of days of which logs you are to display. A positive number indicates displaying logs for the number of days after the date specified in <code>-date</code> to be a base point. A negative number indicates displaying logs for the number of days before the date specified in <code>-date</code> to be a base point. 0 is regarded as -1. The default value is "-3." This option cannot be specified simultaneously with the <code>-all</code> option.</p>
<p><code>[-level LogLevel]</code></p>	<p>Specify a log level. Displays the Operations logs over the specified log level. You can specify one of the following level: "fatal," "error," "warning," "normal," "detail," or "trace."</p>
<p><code>[-category <user policy system>]</code></p>	<p>Specify Event Category. If you do not specify <code>-category</code>, all Event Category is specified. The Event Category which can be designated. user : User is designated. policy : Policy is designated.</p>

	system : System is designated.
<code>[-eventnum <i>EventNumber</i>]</code>	Specify an EventNumber. <i>EventNumber</i> : Event is designated. This option cannot be specified simultaneously with the -all option and -joid option.
<code>[-jobid <i>JobID</i>]</code>	Specify a JobID. <i>JobID</i> : JobID is designated. This option cannot be specified simultaneously with the -all option and -eventnum option.
<code>[-ip <i>IPAddress</i>]</code>	Specify an IPAddress. You can specify an IP address when -category option is "user." -all can not be specified simultaneously.
<code>[-username <i>UserName</i>]</code>	Specify a UserName. You can specify a user name when -category option is "user." -all can not be specified simultaneously.
<code>[-all]</code>	Displays all Operations logs.
<code>[-vertical]</code>	Specify format.

[Syntax examples]

```

>ssc show log
>ssc show log -date "2008/10/14 09:00:00" -days -1
>ssc show log -date "2008/10/14" -days -1 -level error
>ssc show log -category user system
>ssc show log -eventnum SY00002
>ssc show log -jobid 00001
>ssc show log -all

```

4.2. Policy

4.2.1. Exporting Policy

Exports policy information to an XML file.

[Syntax]

```
ssc export policy FileName PolicyName[...] [-template]
```

[Parameters and Options]

<i>FileName</i> (Required)	Specify an XML file name to which you are to output policy information. If you specify -template, specify an XML file name that outputs action template data. If a path of a file name includes a space, you need to surround the name in double quotation marks (""). If you do not specify a path, but a file name, a file is created in a folder where the command is run.
<i>PolicyName</i> (Required)	Specify a target policy name. If you specify -template, specify an action template name.
[-template]	Outputs an action template data.

[Syntax examples]

```
>ssc export policy C:\work\policy1.xml policyA1  
>ssc export policy C:\work\policy2.xml "policy B1" "policy B2"  
>ssc export policy "C:\Documents and Settings\users\template.xml"  
template1 template2 -template
```

4.2.2. Importing Policy

Imports policy information from an XML file.

[Syntax]

```
ssc import policy FileName [-template]
```

[Parameters and Options]

<i>FileName</i> (Required)	Specify an XML file name from which you intend to import policy information. If you specify -template, specify an XML file name of action template data. If a path of a file name includes a space, you need to surround the name in double quotation marks (""). If you specify only a file name, a file in Current Folder of when you run this command becomes a target.
[-template]	Imports an action template data from an XML file.

[Syntax examples]

```
>ssc import policy C:\work\policy1.xml  
>ssc import policy policy2.xml  
>ssc import policy "C:\Documents and Settings\users\template.xml" -template
```

4.3. Maintenance

4.3.1. Maintaining Configuration Information

Executes maintenance of the configuration database.
To change the configuration database, we recommend stopping SystemProvisioning.

[Syntax]

```
ssc maintenance cmdb [-recoverymodel <simple | full>] [-defrag Average]  
[-shrinkdata]  
[-shrinklog] [-all] [-tbl]
```

[Parameters and Options]

[-recoverymodel <simple full>]	Configure the recovery model of the database. simple : Simple recovery model (recommended) full: Complete recovery model
[-defrag <i>Average</i>]	Resolves fragmentation of tables whose fragmentation rates are over the rate specified in <i>Average</i> . Specify from 0 to 99 in <i>Average</i> . To execute the resolution to all tables, specify 0.
[-shrinkdata]	Compresses size of data files.
[-shrinklog]	Compresses size of log files. Specify this option if size of log files exceeds the threshold value (300 MB or greater).
[-all]	Displays the detailed information of database (such as the path of the log file).
[-tbl]	This option is enabled if "-all" option is specified. Displays the fragmentation rate of tables.

You cannot specify `-recoverymodel`, `-defrag`, `-shrinkdata`, or `-shrinklog` at the same time.

If you do not specify an option, information of the configuration database is displayed.

[Syntax examples]

```
>ssc maintenance cmdb -recoverymodel simple  
>ssc maintenance cmdb -defrag 0  
>ssc maintenance cmdb -defrag 80  
>ssc maintenance cmdb -shrinkdata  
>ssc maintenance cmdb -shrinklog
```

[Display examples]

- without option

```
>ssc maintenance cmdb  
[Cmdb Information]  
  Datfile Name      : PVMINF  
           Allocate Size : 142.19 MB  
  Secondary Name    : pvminf_2  
           Allocate Size : 40.00 MB  
  Logfile Name      : PVMINF_log  
           Allocate Size : 83.88 MB  
  RecoveryModeType  : Simple
```

• -all

```

>ssc maintenance cldb -all
[Cldb Information]
#----
Database Name      : pvminf
Datafile Name      : PVMINF
                Location      : c:\Program Files\Microsoft SQL Server\MSSQL.1\
                Allocate Size  : 142.19 MB
                Unallocated Size : 122.75 MB
                Unallocated Ratio : 86.33 %
Secondary Name     : pvminf_2
                Location      : c:\Program Files\Microsoft SQL Server\MSSQL.1\
                Allocate Size  : 40.00 MB
                Unallocated Size : 0.44 MB
                Unallocated Ratio : 1.09 %
Logfile Name       : PVMINF_log
                Location      : c:\Program Files\Microsoft SQL Server\MSSQL.1\
                Allocate Size  : 83.88 MB
                Unallocated Size : 75.08 MB
                Unallocated Ratio : 89.52 %
#----
Database Name      : tempdb
Datafile Name      : tempdev
                Location      : c:\Program Files\Microsoft SQL Server\MSSQL.1\
                Allocate Size  : 2.19 MB
                Unallocated Size : 0.81 MB
                Unallocated Ratio : 37.14 %
Logfile Name       : templog
                Location      : c:\Program Files\Microsoft SQL Server\MSSQL.1\
                Allocate Size  : 0.50 MB
                Unallocated Size : 0.25 MB
                Unallocated Ratio : 49.60 %
RecoveryModeType  : Simple

```

• -all -tbl

```

>ssc maintenance cldb -all -tbl
[Cldb Information]
#----
Database Name      : pvminf
Datafile Name      : PVMINF
                Location      : c:\Program Files\Microsoft SQL Server\MSSQL.1\

```

```

                Allocate Size  : 142.19 MB
                Unallocated Size : 122.75 MB
                Unallocated Ratio : 86.33 %
Secondary Name     : pvminf_2
                Location      : c:\Program Files\Microsoft SQL Server\MSSQL.1\
                Allocate Size  : 40.00 MB
                Unallocated Size : 0.44 MB
                Unallocated Ratio : 1.09 %
Logfile Name       : PVMINF_log
                Location      : c:\Program Files\Microsoft SQL Server\MSSQL.1\
                Allocate Size  : 83.88 MB
                Unallocated Size : 75.08 MB
                Unallocated Ratio : 89.52 %
#----
Database Name      : tempdb
Datafile Name      : tempdev
                Location      : c:\Program Files\Microsoft SQL Server\MSSQL.1\
                Allocate Size  : 2.19 MB
                Unallocated Size : 0.81 MB
                Unallocated Ratio : 37.14 %
Logfile Name       : templog

```

```

Location      : c:\Program Files\Microsoft SQL Server\MSSQL.1\
Allocate Size : 0.50 MB
Unallocated Size : 0.25 MB
Unallocated Ratio : 49.60 %
RecoveryModeType : Simple
[Cmdb Table Fragmentation Average]
Table Name      Fragmentation Average

```

Table Name	Fragmentation Average
TBL_EventHistory	99.93
TBL_EventAction	99.23
TBL_Parts	98.87
TBL_ManagementLogHistory	98.50
TBL_PartsGroupRelation	95.51
TBL_DiskPartition	91.67
TBL_PartsGroup	91.30
TBL_DiskVolume	90.00
TBL_Machine	89.61
TBL_ManagerRelation	86.41
TBL_PhysicalGroupRelation	83.33
TBL_Scenario	80.00
TBL_PolicySetting	75.00
TBL_DeployHistory	75.00
TBL_DevicePort	66.67
TBL_PolicyParameters	66.67
TBL_Manager	66.67
TBL_DiskControllerRelation	66.67
TBL_ScenarioRelation	50.00
TBL_PolicyAction	50.00
TBL_DiskController	27.27
TBL_ExtendedParameter	22.22

TBL_Acl	0.00
TBL_InstalledSoftware	0.00
TBL_ComputerSystemProfile	0.00
TBL_AccessControl	0.00
TBL_NetworkDeviceRelation	0.00
TBL_DatabaseVersion	0.00
TBL_DeviceRouting	0.00
TBL_RoutingRelation	0.00
TBL_ComputerSystemProfileRelation	0.00
TBL_Protocol	0.00
TBL_DomainDefinition	0.00
TBL_SmartGroupCondition	0.00
TBL_VirtualNetworkDefinition	0.00
TBL_NameServerDefinition	0.00
TBL_VolumeGroup	0.00
TBL_Policy	0.00
TBL_MachineSettings	0.00
TBL_GroupRelation	0.00
TBL_Reservation	0.00
TBL_CmdbConvertLog	0.00
TBL_Duplicate	0.00
TBL_VolumeGroupRelation	0.00
TBL_LogicalDiskRelation	0.00
TBL_PolicyRelation	0.00
TBL_PoolMachineRelation	0.00
TBL_DiskVolumeRelation	0.00
TBL_SensorGroup	0.00
TBL_ScenarioImage	0.00
TBL_DiskPartitionRelation	0.00
TBL_Sensor	0.00
TBL_GeneralParameter	0.00
TBL_PhysicalGroup	0.00
TBL_License	0.00
TBL_NetworkDevice	0.00
TBL_Tag	0.00

TBL_LoadBalancerGroup	0.00
TBL_DeviceVlan	0.00
TBL_DeviceVlanRelation	0.00
TBL_ScenarioImageRelation	0.00
TBL_EventActionParameter	0.00
TBL_PortRelation	0.00
TBL_VlanGroup	0.00
TBL_ResourceAllocationBase	0.00
TBL_NicTeaming	0.00
TBL_NicTeamingRelation	0.00
TBL_AclRelation	0.00
TBL_ServerGroup	0.00
TBL_NetworkProfile	0.00
TBL_LoadBalancerGroupRelation	0.00
TBL_LinkAggregation	0.00
TBL_PlacementRestriction	0.00
TBL_ServerDefinition	0.00
TBL_LinkAggregationRelation	0.00
TBL_StorageProfile	0.00
TBL_AccessLink	0.00
TBL_DiskArray	0.00
TBL_IpAddressDefinition	0.00
TBL_MachineAccount	0.00
TBL_UserAccount	0.00

4.3.2. Deleting Distribution History

Deletes histories that are before distributing the latest OS image.

[Syntax]

```
ssc delete history <[-all] | [-path Path [-host HostName]]>
```

[Parameters and Options]

[-all]	Targets all machines.
[-path Path]	Specify the full path of the target. You can omit View Type ("operations:/"). If you omit View Type, the specified path is treated as the path to the Operation view. E.g.: When specifying a group name: Category/Group When specifying a host name: Category/Group/Host When specifying a resource machine name: resource:/MachineGroup/Machine-A
[-host HostName]	Specify the host name of the target. If you specify this option, specify the operation group for Path. Specify this option if there is a model with the same name as the target host.

[Syntax examples]

```
>ssc delete history -path Category/Group
>ssc delete history -path operation:/Category/Group/Host
>ssc delete history -path resource:/MachineGroup/Machine-A
```

4.3.3. Updating Status of Machines

Updates the status of the machine as specified.

[Syntax]

```
ssc set-machine-status mode <-name Machine... | -path Path... | -uuid UUID... |  
-mac MAC...>
```

[Parameters and Options]

<i>mode</i> (Required)	<p>Specify the status to be set. Multiple parameters can be specified and combined. Description in brackets () indicates the abbreviation for the parameter. If "+" ("-") is specified at the beginning, it means to be set (reset). If it is not specified, it means to be set.</p> <p>+ : Set the status - : Reset the status</p> <p>maint (m) : Set the Maintenance mode. -error (-e) : Reset job result. ("+" is invalid) degrade (d) : Set degraded status. fault (f) : Set faulted status. resethw (r) : Reset degraded status or faulted status. (Both "+" and "-" are invalid)</p>
<-name <i>Machine...</i> -path <i>Path...</i> -uuid <i>UUID...</i> -mac <i>MAC...</i> > (Required)	<p>Specify the target to be set. One of the following must be specified: -name, -path, -uuid, -mac. Multiple parameters can be specified.</p> <p>-name : Specify the name of the machine. -path : Specify the path of target. E.g.) When specifying machine, specify as follows: Operations view: operations:/Category/Group/Machine Resource view: resource:/Group/Machine Group/Machine Virtual view: virtual:/VC/DC/VMS/VM</p> <p>When specifying group or rack, specify as follows: Resource view: resource:/Group/Rack Group/Rack Operations view: operations:/Category/Group</p> <p>You can omit View Type ("resource:/"). -uuid : Specify the uuid of the machine. -mac : Specify the primary mac address of the machine.</p>

[Note]

- Specify "--degrade" option to reset the degraded status.
- Specify "--fault" option to reset the faulted status.
- Specify "resethw" option to reset the degraded status or the faulted status.
- Setting / cancellation options cannot be specified at the same time.
For example, resethw cannot be specified with fault. Also, -maint cannot be specified with +maint.
- If you omit the View when specifying -path, the specified path is treated as the path to the Resource view.

[Syntax examples]

```
1) If you change the status of a target machine to set the Maintenance mode and fault condition:  
>ssc set-machine-status +m +f -path resource:/vmsgroup/vms001  
>ssc set-machine-status +m +f -path  
operation:/category1/vmsgroup/model1/vms001  
2) If you change the status of a target machine to reset the Maintenance mode and reset job result and clear failure condition:  
>ssc set-machine-status -m -e r -name machine1 machine2
```

4.3.4. Deleting Information of DPM

Deletes information of DPM.

[Syntax]

```
ssc dpminformation delete -machine <MachineName... | UUID... | MAC... | Path...> [-force]
```

[Parameters and Options]

<pre>-machine <MachineName... UUID... MAC... Path...> (Required)</pre>	<p>Deletes the machine-specific information on DPM of a specified machine (More than one, it's possible to designate it.). Specify target machine name, UUID, primary MAC address or full path. When specify full path, you omit View Type("resource:"). If you omit View Type, the specified path is treated as the path to the Resource view. E.g.</p> <ul style="list-style-type: none">case of specifying of machine name Machine1case of specifying of full path resource:/rack1/Group1/Machine1 operation:/Category1/Group1/Model1/Machine1 virtual:/VC1/DataCenterA/ESX01/VM1case of omitting -force option information of running machine can't be deleted. information of virtual machine can't be deleted.
<pre>[-force]</pre>	Deletes information of DPM forcedly.

[Syntax examples]

```
>ssc dpminformation delete -machine machine1 machine2  
>ssc dpminformation delete -machine AFFBAA22-5BC0-46dd-9777-AD268A366589  
>ssc dpminformation delete -machine FF-A0-B0-5A-35-FF  
>ssc dpminformation delete -machine resource:/rack1/Group1/Machine1  
>ssc dpminformation delete -machine machine1 -force
```

4.4. MachineAccessHistory

4.4.1. Displaying the Detail Information of MachineAccessHistory

Displays MachineAccessHistory detail information.

[Syntax]

```
ssc changehistory show [GroupName | -name MachineName | -uuid UUID] [-ghost]
[-rev <REV | REV-REV>] [-latest] [-profile [Type]] [-vertical]
```

[Parameters and Options]

[<i>GroupName</i>]	Specify a group name. The history of the machine running in the specified group is displayed.
[-name <i>MachineName</i>]	Specify a machine name.
[-uuid <i>UUID</i>]	Specify the UUID of a machine.
[-ghost]	With this option specified, the history of the deleted machine is displayed.
[-rev < <i>REV</i> <i>REV-REV</i> >]	Specify a revision of the history. You can specify the specific revision number alone (for example, you specify "0"); or you can specify the range of the revision numbers (for example, you specify "0-5").
[-latest]	Only the latest edition of the history is output.
[-profile [<i>Type</i>]]	Profile information is also acquired. Specify a from the following Types: standard : Displays the CPU and memory information. network : Displays the network information. storage : Displays the storage information. all : Displays all information. If you can omit this option when Standard information. Multiple parameters can be specified.
[-vertical]	Specify the format. (item : value) If you do not specify this option, the information is displayed in the CSV format.

[Syntax examples]

```
>ssc changehistory show
>ssc changehistory show -name MachineA -latest
>ssc changehistory show -ghost
>ssc changehistory show -uuid 30381C00-D797-11DD-0000-001697A70000 -profile
```

[Note]

- The contents of this command might be changed in the next version.

4.4.2. Deleting MachineAccessHistory

Deletes the MachineAccessHistory.

[Syntax]

```
ssc changehistory delete <[-charged | -old Days | -ghost]>
```

[Parameters and Options]

-charged	All histories that are already charged are deleted.
-old <i>Days</i>	The history older than the designated number of days is deleted. When specifying this parameter along with "-ghost", all histories which correspond to one of conditions are deleted.
-ghost	All histories of the eliminated machine are deleted.

[Syntax examples]

```
>ssc changehistory delete -charged  
>ssc changehistory delete -old 3  
>ssc changehistory delete -ghost
```

4.4.3. Setting the Environment Settings of MachineAccessHistory

Sets environment settings of MachineAccessHistory.

[Syntax]

```
ssc changehistory set [-manual | -disabled | -auto [-keepdays Day]]
```

[Parameters and Options]

-manual	MachineAccessHistory is not deleted unless instructed to do so.
-disabled	The MachineAccessHistory is saved to a minimum.
-auto	MachineAccessHistory which isn't used is deleted automatically after a fixed period of time.
[-keepdays <i>Day</i>]	Specify the number of days for which MachineAccessHistory is left.

- Display environment machine access history when options are not specified.

[Syntax examples]

```
>ssc changehistory set  
>ssc changehistory set -manual  
>ssc changehistory set -disabled  
>ssc changehistory set -auto
```

4.5. Exporting (Backing up)/Importing (Restoring) of SSC Configuration Information

4.5.1. Exporting (Backing up) SSC configuration information

Exports (Backs up) the SSC configuration information.

[Syntax]

```
ssc config-export ComponentName [-f filename]
[-d directory] [-o option] [-s]
```

[Parameters and Options]

<i>ComponentName</i> (Required)	Specify the name of the component. pvm: SystemProvisioning dpm: DeploymentManager sysmon: System Monitor - Performance Monitoring Services (example: ssc config-export pvm dpm) Specify "all" to export all components. (example: ssc config-export all)
[-f <i>filename</i>]	Specify the exporting file name with the .zip extension. If <i>filename</i> contains spaces, it must be enclosed in double quotation marks ("). If the existing file is specified, it is overwritten. <i>filename</i> cannot contain directory. If the [-f] option is not specified, the file "MachineName_ComponentName_DateTime.zip" is generated automatically. (example: Computer1_PVM_20130625_013015.zip)
[-d <i>directory</i>]	Set the directory of the file. If the [-d] option is not specified, the file is stored in the current directory. (example: ssc config-export pvm -d c:\tmp)
[-o <i>option</i>]	Select the type of configuration files. db: Database reg: Registry file: Configuration file (example: ssc config-export pvm -o db file)
[-s]	By using this option, the components that are running services can be exported. (example: ssc config-export pvm -s)

[Note]

- Stop all services of the target component. By using the -s option, the configuration can be exported even though the services are running, but the exported files could be inconsistent.
- The clustered environment is not supported.
- This command has the following restrictions on the database.
 - Exporting remotely connected databases is not supported.
 - SQL Server authentication is not supported. (Windows authentication only)
 - If the database settings in installation of SystemProvisioning and SystemMonitor - Performance Monitoring Services are different, SystemMonitor - Performance Monitoring Services database export is not supported.

[Syntax examples]

```
>ssc config-export pvm
>ssc config-export pvm -s
>ssc config-export all -f all.zip
>ssc config-export all -d c:\temp
>ssc config-export all -f all.zip -d c:\temp
>ssc config-export all -o db file
```

4.5.2. Importing (Restoring) SSC configuration information

Imports (Restores) the SSC configuration information.

[Syntax]

```
ssc config-import ComponentName FileName
[-d directory] [-o option] [-b]
```

[Parameters and Options]

<i>ComponentName</i> (Required)	Specify the name of the component. pvm: SystemProvisioning dpm: DeploymentManager sysmon: System Monitor - Performance Monitoring Services (example: ssc config-import pvm dpm import.zip) Specify "all" to import all components. (example: ssc config-import all import.zip)
<i>FileName</i> (Required)	Specify the file name with the .zip extension. If <i>filename</i> contains spaces, it must be enclosed in double quotation marks (").
[-d <i>directory</i>]	Specify the directory of the file. If <i>filename</i> contains spaces, it must be enclosed in double quotation marks ("). If the [-d] option is not specified, the file is stored in the current directory. (example: ssc config-import pvm import.zip -d c:\tmp)
[-o <i>option</i>]	Select the type of configuration files. db: Database reg: Registry file: Configuration file (example: ssc config-import pvm import.zip -o db file)
[-b]	Export file for backup is not created before import. This is not recommended option because the configuration file is not restored if import failed.

[Note]

- Importing configuration files exported in a different environment, where the installation directory or the version of SQL Server is different from the original environment, is not supported.
- Stop all services of the target component.
- The clustered environment is not supported.
- If the import process failed, the restore file that has been obtained in advance will be imported to automatically return to the state before import.
 - The file name for restoring is constructed by appending "Backup_" to the export file name. If a file with the same name exists, it is overwritten.
 - The directory path for the restore file is the same as the specified export file.
 - If importing the restore file failed, import the database, configuration files and registry manually in the restoration file.
 - For manually importing the configuration information, refer to the Chapter 10, "Backup and Restoration" in SigmaSystemCenter Configuration Guide.

- This command is 32bit application. For manually importing the registry, use the utility in "C:\Windows\SysWOW64".
- If the import process failed, the definition files that did not exist before the import may remain.
- This command has the following restrictions on the database.
 - Importing remotely connected databases is not supported.
 - SQL Server authentication is not supported. (Windows authentication only)
 - If the database settings in installation of SystemProvisioning and SystemMonitor - Performance Monitoring Services are different, SystemMonitor - Performance Monitoring Services database import is not supported.

[Syntax examples]

```
>ssc config-import all import.zip
>ssc config-import pvm dpm import.zip
>ssc config-import all import.zip -b
>ssc config-import all import.zip -d c:\temp
>ssc config-import all import.zip -o db file
>ssc config-import all import.zip -o db file -d c:\temp
```