

# **NEC ESMPRO Manager Ver.7**

## **User's Guide**

### **Command Line Interface**

**Chapter1 About Command Line Interface**

**Chapter2 Command Summary**

# Contents

---

Contents.....	1
Trademarks.....	4
About This Document .....	5
Chapter1 About Command Line Interface .....	6
1.1 System Requirements .....	7
1.2 How to Execute Commands .....	8
1.2.1 Notes on Entering Commands .....	8
1.3 Execution Results .....	9
1.4 Example.....	9
1.5 Executing Command from Two or More NEC ESMPRO Manager .....	9
Chapter2 Command Summary .....	10
2.1 Group management Commands .....	10
2.1.1 getList .....	10
2.1.2 createGroup .....	12
2.1.3 deleteGroup .....	12
2.1.4 moveGroup .....	12
2.1.5 setGroupProperty .....	13
2.1.6 getGroupProperty .....	13
2.1.7 getGroupStatus .....	14
2.1.8 groupPowerOn.....	15
2.1.9 groupPowerOff .....	16
2.1.10 groupReset .....	17
2.1.11 groupPowerCycle .....	18
2.1.12 groupShutdownOs .....	19
2.1.13 groupSetPowerRestoreDelay .....	20
2.1.14 groupGetRemoteKvmLicense .....	21
2.2 Component Management Commands.....	22
2.2.1 getServerList.....	22
2.2.2 getServerNameByMacAddr .....	23
2.2.3 getServerNameByGuid .....	23
2.2.4 findNewServer.....	24
2.2.5 findNewServerNetAddr .....	25
2.2.6 createServer .....	25
2.2.7 deleteServer .....	26
2.2.8 checkConnection .....	26
2.2.9 setServerProperty.....	27
2.2.10 moveServer.....	28
2.2.11 getServerGroup.....	29
2.2.12 setCurrentPort .....	29
2.2.13 getServerProperty .....	30
2.2.14 getServerInfo .....	30
2.2.15 getDeviceId.....	32
2.2.16 getGuid .....	32
2.2.17 getProductName .....	33
2.2.18 getSoftwareInfo .....	33
2.2.19 setShutdownPolicy .....	34
2.2.20 getShutdownPolicy .....	35
2.2.21 setPowerRestoreDelay .....	36
2.2.22 getPowerRestoreDelay .....	37
2.2.23 setBmcInfo .....	37
2.2.24 getBmcInfo .....	46
2.2.25 setAuthKey .....	47

2.2.26	setSensorLevel.....	47
2.2.27	getSensorLevel .....	52
2.2.28	getAgentExtensionLog .....	53
2.2.29	testAlert .....	54
2.2.30	getTestAlertStatus.....	55
2.2.31	getServerStatus .....	55
2.2.32	getPowerStatus .....	56
2.2.33	getStatusLamp .....	56
2.2.34	getPanelInfo.....	57
2.2.35	powerOn .....	58
2.2.36	powerOff.....	58
2.2.37	reset.....	59
2.2.38	powerCycle.....	60
2.2.39	shutdownOs .....	61
2.2.40	dumpSwitch.....	61
2.2.41	clearSel .....	62
2.2.42	identifyChassis.....	62
2.2.43	getIpmiInfo .....	62
2.2.44	getSensorList .....	63
2.2.45	getSensorStatus.....	63
2.2.46	getConsoleLog.....	64
2.2.47	setBmcIpSync .....	65
2.2.48	getBmcIpSync .....	65
2.2.49	getBladeSlotId .....	66
2.2.50	deleteBmcUser.....	66
2.2.51	getBmcUserList .....	67
2.2.52	setBmcUserInfo .....	68
2.2.53	getBmcUserInfo.....	68
2.2.54	setPowerRestorePolicy .....	69
2.2.55	getPowerRestorePolicy .....	69
2.2.56	getSystemFtLamp.....	70
2.3	EM Card Management Commands .....	71
2.3.1	getEmCardList.....	71
2.3.2	getEmActiveState .....	72
2.3.3	identifyEm .....	72
2.3.4	getEmStatusLamp.....	73
2.4	Chassis Management Commands .....	74
2.4.1	getBladeEnclosureList.....	74
2.4.2	getChassisSlotState.....	74
2.4.3	getChassisInfo .....	75
2.4.4	setChassisProperty .....	76
2.4.5	getChassisProperty .....	76
2.4.6	setBladeAutoSetting .....	77
2.4.7	getBladeAutoSetting.....	78
2.5	Communication Management Commands.....	79
2.5.1	connect.....	79
2.5.2	disconnect .....	79
2.5.3	getConnectionStatus .....	79
2.6	Environment Setting Commands .....	80
2.6.1	setOption.....	80
2.6.2	getOption .....	81
2.6.3	getPermitIpAddrList .....	81
2.6.4	isPermitIpAddr .....	82
2.6.5	addPermitIpAddr .....	82
2.6.6	removePermitIpAddr .....	82

2.6.7	clearPermitIpAddr .....	83
2.7	User Management Commands.....	84
2.7.1	createUser .....	84
2.7.2	deleteUser .....	84
2.7.3	getUserList .....	84
2.7.4	setUserProperty .....	85
2.7.5	getUserProperty .....	86
2.8	Other Commands.....	87
2.8.1	getApplicationLog .....	87
2.8.2	about .....	87
2.8.3	help .....	87
Appendix A. List of Support Commands for BMC (Other) or iLO component .....		88

# Trademarks

---

EXPRESSBUILDER, NEC ESMPRO and EXPRESSSCOPE are registered trademarks of NEC Corporation. Microsoft, Windows, Windows Server are registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.

All other product, brand, or trade names used in this publication are the trademarks or registered trademarks of their respective trademark owners.

All names used in sample applications are fictitious. They are unrelated to existing product, organization, or individual names.

## ■ Notes

- (1) No part of this document may be reproduced in any form without the prior written permission of NEC Corporation.
- (2) The contents of this document may be revised without prior notice.
- (3) The contents of this document shall not be copied or altered without the prior written permission of NEC Corporation
- (4) All efforts have been made to ensure the accuracy of all information in this document. If you notice any part unclear, incorrect, or omitted in the document, contact your authorized NEC sales representative.
- (5) NEC assumes no liability for damages arising from the use of this product, nor any liability for incidental or consequential damages arising from the use of this document regardless of (4)

# About This Document

---

This document introduces command line interface of the component management utility "NEC ESMPRO Manager".

Before attempting to operate the command line interface, read this document so as to gain an adequate understanding of the contents.

## ■ Attention

This document is intended for persons who are familiar with the operating system's functions and operations and the network's functions and setup. For operations and inquiries about the operating system, see its online help information.

This document covers universal information about generally managed components. The notes and restrictions on use of each product as a managed component are explained in the user's guide provided with the managed component.

Names used with screen images in this document are fictitious. They are unrelated to existing product names, names of organizations, or individual names. The setting values on the screen images are shown as examples, so setting values such as IP addresses on screen images are not guaranteed for operation.

## ■ About Symbols in This Document

The following explains three symbols that are used in this document:

- |                   |                                                                                          |
|-------------------|------------------------------------------------------------------------------------------|
| <b>IMPORTANT:</b> | Points that are mandatory or require attention when using the software or the component. |
| <b>CHECK:</b>     | Points that are require confirmation when using the software or the component.           |
| <b>TIP:</b>       | Helpful and convenient piece of information.                                             |

## ■ About Font in This Document

The *Italic* font shows the option of command in this document.

## ■ For other information about the NEC ESMPRO Manager

See the documents below.

NEC ESMPRO Manager Ver.7 Installation Guide  
NEC ESMPRO Manager Ver.7 Setup Guide  
NEC ESMPRO Manager Ver.7 Command Line Interface User's Guide for NEC ExpressUpdate  
NEC ESMPRO Manager Ver.7 User's Guide RESTful API Reference

## Chapter1 About Command Line Interface

---

The NEC ESMPRO Manager command line interface provides a set of commands that can control managed components through the command line from the management PC.

The set of commands covers a part of functions that can be executed by using the web browser.

.....  
**CHECK:**

- The set of commands mainly enables to execute functions by communication with BMC or NEC ESMPRO Agent Extension on the managed component. It does not support the functions that require NEC ESMPRO Agent or NEC ESMPRO Agent Service on the managed component.
  - You cannot execute some commands for BMC (Other) or iLO. Refer to Appendix A. List of Support Commands for BMC (Other) or iLO component for more detail.
  - You should not execute the command set for chassis sensor card.  
NEC ESMPRO Manager does NOT SUPPORT the command set for the chassis sensor card.  
Use "/exs" option to execute the command excluding the chassis sensor card if you execute the group management command for the group which the chassis sensor card.
- .....

The following commands are available:

- **Group management Commands**  
Use to operate a group due to operate more than one managed components through a single operation.
- **Component Management Commands**  
Use to operate a managed component.
- **EM Card Management Commands**  
Use to operate an EM card.
- **Chassis Management Commands**  
Use to operate a chassis.
- **Communication Management Commands**  
Use to change settings for connection to a managed component via modem or directly.
- **Environment Setting Commands**  
Use to view and change the settings of NEC ESMPRO Manager.
- **User Management Commands**  
Use to manage users who operate NEC ESMPRO Manager on web browser.
- **Other Commands**

## 1.1 System Requirements

The NEC ESMPRO Manager command line interface can be executed only on a management PC that is installed the NEC ESMPRO Manager.

Supported OS conforms to NEC ESMPRO Manager.

The NEC ESMPRO Manager command line interface requires following user level of operating system:

On Windows: Administrator

.....  
**CHECK:**

- In case of Windows, you need to set the permission to access to the directory including Command Line Interface execution file (dscli.exe). After setting the permission to access the directory, the standard user can also use Command Line Interface.
- .....

.....  
**TIP:**

- See “NEC ESMPRO Manager Ver.7 Installation Guide” about the system requirement of NEC ESMPRO Manager.
- .....



## 1.2 How to Execute Commands

To execute a command, enter the command following the command prompt as shown below.

```
dscli CommandName [Option, ...]
```

<b>dscli :</b>	Indicates the NEC ESMPRO Manager command line interface command
<b>CommandName :</b>	Enter the name of the command you want to execute.
<b>Option :</b>	Enter the option parameters defined for each command

### 1.2.1 Notes on Entering Commands

This section explains notes on entering commands

(1) When entering special characters:

If you input null string or special characters as option, enclose the option parameter between double quotation marks. The following shows examples:

Example1: Input null string

```
dscli setGroupProperty MyGroup GROUP_COMMENT ""
```

Example 2: Input special characters

```
dscli setServerProperty MyServer CFG_SERIAL_INIT "ATE1Q0V1X4&D2&C1S0=0"
```

(2) When entering MAC address:

MAC address that can be specified in “*Component*” of command option is the MAC address of LAN that BMC uses on the managed component. Input MAC address as hexadecimal number that is delimited to octets by a colon. The following shows an example:

```
dscli getServerProperty 00:30:13:16:cd:fe SERVER_IP_1
```

(3) When entering GUID:

Input GUID as hexadecimal number that is delimited to sections by a colon. The following shows an example:

```
dscli getServerProperty 80c03228:35d8:d711:8001:003013f10072 SERVER_IP_1
```

.....  
**CHECK:**

- You can enter the command format that MAC address or GUID is specified as Server option after the “Check Connection” is performed for the server.
- .....

## 1.3 Execution Results

All the commands return the end status. If an error has occurred, they return an error message. The end status of all the commands is as follows:

0	Normal end
Non Zero value	Error end

If a command error occurs, a non-zero value will be returned as the end status and the error message will be displayed. Some error messages are displayed followed by an error cause message

.....  
**TIP:**

- If a command is executed with a shell script, the end status can be confirmed with "ERRORLEVEL" for Windows.
- .....

## 1.4 Example

The procedure to manage a component via LAN is as follows:

- (1) Creates a new component group using createGroup command.
- (2) Register a managed component using createServer command.
- (3) Perform a "Check Connection" for the managed component using checkConnection command.

You can manage the managed component after "Check Connection" is completed.

## 1.5 Executing Command from Two or More NEC ESMPRO Manager

As well as one component can be managed from two or more manager server, you can also execute command from two or more NEC ESMPRO Manager.

.....  
**IMPORTANT:**

- See “NEC ESMPRO Manager Ver.7 Installation Guide” about Notes.
- .....

## Chapter2 Command Summary

---

### 2.1 Group management Commands

#### 2.1.1 getList

**Syntax:**

```
dscli getList GroupName [/g] [/x]
```

**Description:**

Displays the list of groups and components registered under the specified group.

If no appending option is specified, displays the groups and components just under the specified group.

**Options:**

*GroupName*

Specify the name of the group.

If you want to display the groups and components under root, specify “root”.

*/g*

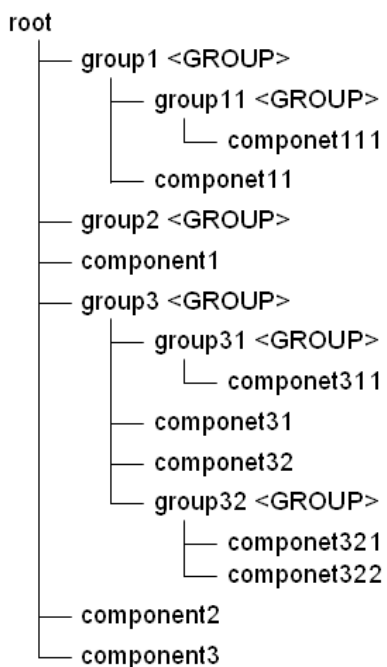
Display only groups.

*/x*

Display the list under the specified group and its sub-groups.

**Output:**

Shows the example that the groups and components have following structure.



Displays the list of groups and components. The following shows an example.

```
>dscli getList root
  group1 <GROUP>
  group2 <GROUP>
  component1
  group3 <GROUP>
  component2
  component3
```

Displays the case specified “/g” option. The following shows an example.

```
>dscli getList root /g
  group1 <GROUP>
  group2 <GROUP>
  group3 <GROUP>
```

Displays the case specified “/x” option. The following shows an example.

```
>dscli getList root /x
root
  group1 <GROUP>
    group11 <GROUP>
      component111
    component11
  group2 <GROUP>
  component1
  group3 <GROUP>
    group31 <GROUP>
      component311
    component31
    component32
    group32 <GROUP>
      component321
      component322
  component2
  component3
```

Displays the case specified “/g” and “/x” option. The following shows an example.

```
>dscli getList root /g /x
root
  group1 <GROUP>
    group11 <GROUP>
  group2 <GROUP>
  group3 <GROUP>
    group31 <GROUP>
    group32 <GROUP>
```

### 2.1.2 createGroup

**Syntax:**

`dscli createGroup GroupName [ParentGroupName]`

**Description:**

Creates a new component group.

**Options:**

*GroupName*

Specify the group name to create. You can input up to 63 characters.

*ParentGroupName*

Specify the name of the parent group when the group is made under the group.

If you create a group under root, specify “root” or omit this option.

.....  
**TIP:**

- The name of group that is already registered cannot be specified to *GroupName*
- .....

### 2.1.3 deleteGroup

**Syntax:**

`dscli deleteGroup GroupName`

**Description:**

Deletes a specified group. All managed components and sub-groups in the group are also deleted.

**Options:**

*GroupName*

Specify the name of the group.

### 2.1.4 moveGroup

**Syntax:**

`dscli moveGroup GroupName [ParentGroupName]`

**Description:**

Move the specified group. All managed components and sub-groups in the group are also moved

**Options:**

*GroupName*

Specify the name of group.

*ParentGroupName*

Specify the name of the parent group to move to.

If you move the group under root, specify “root” or omit this option.

## 2.1.5 setGroupProperty

### Syntax:

`dscli setGroupProperty GroupName PropertyName Value`

### Description:

Sets the property of a group.

### Options:

*GroupName*

Specify the name of group.

*PropertyName*

Specify the name of the group property. The following is group property list:

*Value*

Specify a new value to be set. See the list below.

PropertyName	Contents	Value	Default
GROUP_NAME	Specify the name of the group.	Up to 63 characters.	(None)
GROUP_COMMENT	Enter the comments of the group.	Up to 255 characters.	(None)

.....  
**TIP:**

- The name of group that is already registered cannot be specified to GROUP\_NAME.
- .....

## 2.1.6 getGroupProperty

### Syntax:

`dscli getGroupProperty GroupName PropertyName`

### Description:

Displays the property of a group.

### Options:

*GroupName*

Specify the name of group.

*PropertyName*

Specify the name of group property. For the list of group properties, see the 2.1.5 setGroupProperty command

### Output:

Display the property of a group.

### 2.1.7 getGroupStatus

**Syntax:**

```
dscli getGroupStatus GroupName
```

**Description:**

Displays the status of a specified component group. Among all component condition under the group, displays the worst condition as a status of the group.

Confirms the condition of component by component monitoring function.

**Options:**

*GroupName*

Specify the name of group.

**Output:**

Displays the status of the specified component group. There are following types of status.

ERROR	Error
WARNING	Warning
UNKNOWN	Unknown or connection error
DC-OFF	DC-OFF
NORMAL	Normal
NO_MONITORING	Out of monitoring

## 2.1.8 groupPowerOn

### Syntax:

```
dscli groupPowerOn GroupName [/p] [/exs ComponentName1 ComponentName2 ...  
ComponentNameN] [/exg GroupName1 GroupName2 ... GroupNameN]
```

### Description:

Turns on all managed components in a specified group.

The managed components in the sub-group are also controlled.

#### IMPORTANT:

- In case that the managed component does not support a force network-boot function which boots the component from network regardless of boot order, a force network-boot function cannot be executed. See “NEC ESMPRO Manager Ver.7 Setup Guide Appendix D. Managed Components Summary” whether the managed component supports function.

#### CHECK:

- This command is not executed for the PowerBay, the EM card, and the switch blade.

### Options:

*GroupName*

Specify the name of group.

If you want to control all the components under root, specify “root”.

*/p*

Force boot from network after the power is turned on.

*/exs*

When you specify “/exs” option and the component name after it, the command is not executed on the specified component. You can specify plural component names.

*/exg*

When you specify “/exg” option and the group name after it, the command is not executed on the component under the specified group. You can specify plural group names.

### Output:

If error has occurred, the name and the error message about each error-occurred managed component is displayed.

The following shows an example.

```
Component1  
    : Connection to the server could not be made. (Timeout)  
Component2  
    : Connection to the server could not be made. (Authentication error)
```



## 2.1.9 groupPowerOff

### Syntax:

```
dscli groupPowerOff GroupName [/exs ComponentName1 ComponentName2 ...  
ComponentNameN] [/exg GroupName1 GroupName2 ... GroupNameN]
```

### Description:

Forcibly turns off all managed components in a specified group.  
The managed components in the sub-group are also controlled.

---

#### IMPORTANT:

- Since remote power control using NEC ESMPro Manager is provided by hardware regardless of the condition of operating system on the managed component, the system may be damaged. Be careful when you perform remote power control. Reconfirm the status of the managed component before power controls.
- 

#### CHECK:

- This command is not executed for the PowerBay, the EM card, and the switch blade.
- 

### Options:

*GroupName*

Specify the name of group.

If you want to control all the components under root, specify “root”.

*/exs*

When you specify “/exs” option and the component name after it, the command is not executed on the specified component. You can specify plural component names.

*/exg*

When you specify “/exg” option and the group name after it, the command is not executed on the component under the specified group. You can specify plural group names.

### Output:

If error has occurred, the name and the error message about each error-occurred managed component is displayed.

The following shows an example.

```
Component1  
  : Connection to the server could not be made. (Timeout)  
Component2  
  : Connection to the server could not be made. (Authentication error)
```

## 2.1.10 groupReset

### Syntax:

```
dscli groupReset GroupName [/p] [/exs ComponentName1 ComponentName2 ...  
ComponentNameN] [/exg GroupName1 GroupName2 ... GroupNameN]
```

### Description:

Forcibly resets all managed components in a specified group.  
The managed components in the sub-group are also controlled.

#### IMPORTANT:

- Since remote power control using NEC ESMPRO Manager is provided by hardware regardless of the condition of operating system on the managed component, the system may be damaged. Be careful when you perform remote power control. Reconfirm the status of the managed component before power controls.

- In case that the managed component does not support a force network-boot function which boots the component from network regardless of boot order, a force network-boot function cannot be executed. See “NEC ESMPRO Manager Ver.7 Setup Guide Appendix D. Managed Components Summary” whether the managed component supports function.

#### CHECK:

- This command is not executed for the PowerBay, the EM card, and the switch blade.

### Options:

*GroupName*

Specify the name of group.

If you want to control all the components under root, specify “root”.

*/p*

Force boot from network after reset.

*/exs*

When you specify “/exs” option and the component name after it, the command is not executed on the specified component. You can specify plural component names.

*/exg*

When you specify “/exg” option and the group name after it, the command is not executed on the component under the specified group. You can specify plural group names.

### Output:

If error has occurred, the name and the error message about each error-occurred managed component is displayed.

The following shows an example.

```
Component1  
  : Connection to the server could not be made. (Timeout)  
Component2  
  : Connection to the server could not be made. (Authentication error)
```

## 2.1.11 groupPowerCycle

### Syntax:

```
dscli groupPowerCycle GroupName [/p] [/exs ComponentName1 ComponentName2 ...  
ComponentNameN] [/exg GroupName1 GroupName2 ... GroupNameN]
```

### Description:

Forcibly turns off all managed components in a specified group and then turns them on.  
The managed components in the sub-group are also controlled.

#### IMPORTANT:

- Since remote power control using NEC ESMPRO Manager is provided by hardware regardless of the condition of operating system on the managed component, the system may be damaged. Be careful when you perform remote power control. Reconfirm the status of the managed component before power controls.
- In case that the managed component does not support a force network-boot function which boots the component from network regardless of boot order, a force network-boot function cannot be executed. See “NEC ESMPRO Manager Ver.7 Setup Guide Appendix D. Managed Components Summary” whether the managed component supports function.

#### CHECK:

- This command is not executed for the PowerBay, the EM card, and the switch blade.

### Options:

*GroupName*

Specify the name of group.

If you want to control all the components under root, specify “root”.

*/p*

Force boot from network after the power is turned on.

*/exs*

When you specify “/exs” option and the component name after it, the command is not executed on the specified component. You can specify plural component names.

*/exg*

When you specify “/exg” option and the group name after it, the command is not executed on the component under the specified group. You can specify plural group names.

### Output:

If error has occurred, the name and the error message about each error-occurred managed component is displayed.

The following shows an example.

```
Component1  
  : Connection to the server could not be made. (Timeout)  
Component2  
  : Connection to the server could not be made. (Authentication error)
```

## 2.1.12 groupShutdownOs

### Syntax:

```
dscli groupShutdownOs GroupName [/force] [/exs ComponentName1  
ComponentName2 ... ComponentNameN] [/exg GroupName1 GroupName2 ... GroupNameN]
```

### Description:

Shut downs operating systems on all managed components in a specified group.

The managed components in the sub-group are also controlled.

This command via LAN instructs the NEC ESMPRO Agent Extension service to shutdown the operating system.

If you specify “/force” option, this command executes the forced shutdown OS function without communication to the NEC ESMPRO Agent Extension or the NEC ESMPRO Agent.

You need to specify “/force” option if the connection is via LAN or direct.

### CHECK:

- This command is not executed for the PowerBay, the EM card, and the switch blade.

### Options:

*GroupName*

Specify the name of group.

If you want to control all the components under root, specify “root”.

*/force*

If you specify “/force” option, this command executes the forced shutdown OS function. This shutdown may not work depending on the kind of OS or the OS settings.

*/exs*

When you specify “/exs” option and the component name after it, the command is not executed on the specified component. You can specify plural component names.

*/exg*

When you specify “/exg” option and the group name after it, the command is not executed on the component under the specified group. You can specify plural group names.

### Output:

If error has occurred, the name and the error message about each error-occurred managed component is displayed.

The following shows an example.

```
Component1  
  : Connection to the component could not be made. (Timeout)  
Component2  
  : Connection to the component could not be made. (Authentication error)
```

## 2.1.13 groupSetPowerRestoreDelay

### Syntax:

```
dscli groupSetPowerRestoreDelay GroupName DelayTime [/x Policy] [/exs  
ComponentName1 ComponentName2 ... ComponentNameN] [/exg GroupName1  
GroupName2 ... GroupNameN]
```

### Description:

Changes the power option that specifies working of managed components in a specified group when they are turned AC ON.

The managed components in the sub-group are also controlled.

The power option includes AC-LINK policy and the time that delays Power ON (DC ON) when the managed component is set to be turned DC ON in time with AC ON.

#### IMPORTANT:

- In case that the managed component does not support a setting of power restore delay, this command is invalid. See “NEC ESMPRO Manager Ver.7 Setup Guide Appendix D. Managed Components Summary” whether the managed component supports the function.

#### CHECK:

- This command is not executed for the PowerBay, the EM card, and the switch blade.
- NEC ESMPRO Manager does not set the specified delay time to the blade server in which EXPRESSSCOPE Engine 3 is integrated.

### Options:

*GroupName*

Specify the name of group.

If you want to control all the components under root, specify “root”.

*DelayTime*

AAA-600 Set the delay time from turning on AC to turning on DC.

\* AAA is the minimum value of the delay time of the components.

-1 Set “-1” if you do not change the delay time from turning on AC to turning on DC.

RANDOM Set “RANDOM” if you change the delay time from turning on AC to turning on DC to random setting.

\* If the component supports random setting, the random setting can be specified.

*/x Policy*

Set AC-Link policy. There are 3 types of the policy.

STAY\_OFF The managed component remains OFF when AC power is restored.

LAST\_STATE If the managed component is OFF when AC power is lost, the managed component remains OFF when AC power is restored.

If the managed component is ON, when AC power is lost, the managed component turns ON after the delay time when AC power is restored.

POWER\_ON The managed component turns ON after the delay time when AC power is restored.

*/exs*

When you specify “/exs” option and the component name after it, the command is not executed on the specified component. You can specify plural component names.

*/exg*

When you specify “/exg” option and the group name after it, the command is not executed on the component under the specified group. You can specify plural group names.

**Output:**

If error has occurred, the name and the error message about each error-occurred managed component is displayed.

The following shows an example.

```
Component1
    : Connection to the component could not be made. (Timeout)
Component2
    : Connection to the component could not be made. (Authentication error)
```

## 2.1.14 groupGetRemoteKvmLicense

**Syntax:**

```
dscli groupGetRemoteKvmLicense GroupName
```

**Description:**

Displays the state of “Remote KVM and Media License” for each managed components in a specified group. The managed components in the sub-group are also displayed.

**Options:**

*GroupName*

Specify the name of group.

If you want to control all the components under root, specify “root”.

**Output:**

The following are states of “Remote KVM and Media License”.

Installed	“Remote KVM and Media License” has been installed.
Not Installed	“Remote KVM and Media License” has not been installed.
Unsupported	“Remote KVM and Media License” is not supported for the component.
-	The state of “Remote KVM and Media License” is unknown.

The following shows an example.

```
Component1
    : Installed
Component2
    : Installed
Component3
    : Not Installed
Component4
    : Unsupported
Component5
    : -
:
:
```

## 2.2 Component Management Commands

### 2.2.1 getServerList

**Syntax:**

```
dscli getServerList [/d]
```

**Description:**

Displays the name list of all managed components registered on NEC ESMPRO Manager.

**Options:**

/d

If you specify “/d” option, the managed components list will indicate component name, GUID and MAC address of LAN port that BMC uses of each component. Added information below is also indicated.

EXPRESSSCOPE Engine series	BMC is EXPRESSSCOPE Engine series.
ARMC :	BMC is Advanced Remote Management Card.
SWB :	indicates that the managed component is a kind of switch blade.

**Output:**

Displays the name list of all managed components registered on NEC ESMPRO Manager. The following shows an example.

If “/d” option is not specified:

```
Component1
Component2
Component3
:
:
```

If “/d” option is specified:

```
Component1
GUID  02010202:0000:0000:0000:000000000000
MAC1  00:30:13:f1:00:5a
MAC2  00:30:13:f1:00:5b
EXPRESSSCOPE Engine

Component2
GUID  00301316:cdfe:0180:0010:846e8062d906
MAC1  00:30:13:16:cd:fe
SWB

Component3
GUID  00010203:0405:0607:0809:0a0b0c0d0e0f
MAC1  00:00:4c:9f:13:cb
ARMC
:
:
```

## 2.2.2 getServerNameByMacAddr

**Syntax:**

```
dscli getServerNameByMacAddr MacAddress
```

**Description:**

Displays the name of the managed component that has the specified MAC address.

**Options:**

*MacAddress*

Specify a MAC address of LAN port that BMC uses on the managed component.

The following shows an example.

```
dscli getServerNameByMacAddr 00:30:13:f1:00:5a
```

**Output:**

Displays the name of the managed component. The following shows an example.

```
Component1
```

## 2.2.3 getServerNameByGuid

**Syntax:**

```
dscli getServerNameByGuid GUID
```

**Description:**

Displays the name of the managed component that has the specified GUID.

**Options:**

*GUID*

Specify a GUID.

The following shows an example.

```
dscli getServerNameByGuid 00301316:cdfe:0180:0010:846e8062d906
```

**Output:**

Displays the name of the managed component. The following shows an example.

```
Component2
```



## 2.2.4 findNewServer

### Syntax:

```
dscli findNewServer StartIpAddr EndIpAddr
```

### Description:

Finds BMC on managed components that are not registered on NEC ESMPRO Manager according to IP address range specification.

---

#### TIP:

- To register the managed component that is found using findNewServer command or findNewServerNetAddr command, you can use createServer command. See 2.2.6 createServer.
- 

### Options:

*StartIpAddr*

Specify the start address of IP address range.

*EndIpAddr*

Specify the end address of IP address range.

### Output:

Displays the list of the found managed components. The following shows an example.

```
Status: SUCCESS

No.1
1st IP Address      : 192.168.14.18
2nd IP Address      : 0.0.0.0
Current IP Address  : 192.168.14.18
IPMI Version        : 1.5
GUID                : 84ee20b0:84a1:d511:0080:a0ff94470300

No.2
1st IP Address      : 192.168.14.19
2nd IP Address      : 0.0.0.0
Current IP Address  : 192.168.14.19
IPMI Version        : 1.5
GUID                : 00004c79:45c0:0180:0010:f57f80d8cef8
:
:
```

## 2.2.5 findNewServerNetAddr

### Syntax:

```
dscli findNewServerNetAddr NetAddr NetMask
```

### Description:

Finds BMC on managed components that are not registered on NEC ESMPRO Manager according to Network address specification.

---

#### TIP:

- To register the managed component that is found using findNewComponent command or findNewServerNetAddr command, you can use createServer command. See 2.2.6 createServer.
- 

### Options:

*NetAddr*

Specify network address.

*NetMask*

Specify network mask.

### Output:

Displays the list of the found managed components same as the output by “findNewServer” command. See 2.2.4 findNewServer.

## 2.2.6 createServer

### Syntax:

```
dscli createServer ComponentName GroupName AuthKey [IpAddr1] [IpAddr2]
```

### Description:

Newly registers a managed component on the NEC ESMPRO Manager.

### Options:

*ComponentName*

Specify the name of the managed component. You can input up to 63 characters.

*GroupName*

Specify the name of group that the managed component belongs to.

*AuthKey*

Specify the authentication key that is configured on BMC. You can input up to 16 characters.

*IpAddr1*

Specify the IP address of the managed component's BMC. This option is omissible if you control the managed component via modem or with direct connection.

*IpAddr2*

Specify the extra IP address of the managed component's BMC. This option is omissible.

---

#### TIPS:

- The name of component that is already registered cannot be specified to *ComponentName*.
  - The IP address that is already registered cannot be specified to *IpAddr1* and *IpAddr2*.
  - Set other properties using 2.2.9 setServerProperty command.
-

## 2.2.7 deleteServer

### Syntax:

```
dscli deleteServer Component [/force]
```

### Description:

Deletes the specified managed component that is registered on the NEC ESMPRO Manager.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*/force*

When you delete the managed component that has been set schedule running, the schedule is deleted from NEC ESMPRO Agent Extension. But if the schedule deletion is failed (such as NEC ESMPRO Agent Extension is uninstalled), the component cannot be deleted. In this case you can specify “/force” option to delete component forcibly.

## 2.2.8 checkConnection

### Syntax:

```
dscli checkConnection Component [/force]
```

### Description:

Confirms connection with BMC on a managed component. This command also collects information for remote control of the managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*/force*

Execute the command with “/force” option if the managed component is replaced.

---

### TIP:

- If NEC ESMPRO Manager Ver.5 manage NEC ESMPRO Manager Ver.4, and the “/force” option is specified, NEC ESMPRO Manager Ver.5 may connect with different component in communication with NEC ESMPRO Manager Ver.4 and BMC communication.
-

## 2.2.9 setServerProperty

### Syntax:

`dscli setServerProperty Component PropertyName Value`

### Description:

Sets the property of a managed component.

### Options:

#### *Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

#### *PropertyName*

Specify the name of the property. The following is property list:

#### *Value*

Specify new value to be set. See the list below.

PropertyName	Contents	Value	Default
CONSOLE_LOG_ENABLE	Determine whether to enable/disable the get console log function to save the Remote Console screen data in text format.	0: Disabled 1: Enabled	1
CONSOLE_LOG_SIZE	Specify the maximum size (in KB) of the console log.	4 - 1000	64
CONSOLE_LOG_KEEP_CONNECTION	Determine whether to get console log even while remote console is not open on web browser.	0: Disabled 1: Enabled	0
CONSOLE_LOG_FAULT_MESSAGE_MONITORING	Determine whether to enable/disable the fault message monitoring function that set fault condition when a fault message string is found on head of each console log line.	0: Disabled 1: Enabled	1
CONSOLE_LOG_FAULT_MESSAGE_IDENTIFIER	Specify the character string for the fault message monitoring function.	Up to 20 characters	</BP>
SERVER_NAME *1	Specify the name of the managed component.	Up to 63 characters.	(None)
SERVER_AUTHKEY *1	Specify the authentication key to communicate with BMC of the managed component.	Up to 16 characters	(None)
SERVER_CURRENT_PORT_TYPE	Specify the connection type between the NEC ESMPRO Manager component and the managed component. Only LAN can be specified for the EM card.	0: LAN 1: Direct 2: Modem	0
SERVER_IP_1 *1	Specify BMC IP address to communicate via LAN.	IP address format	0.0.0.0
SERVER_IP_2	Specify extra BMC IP address to communicate via LAN.	IP address format	0.0.0.0
SERVER_CURRENT_IP *1	Specify current BMC IP address to communicate via LAN.	IP address format	0.0.0.0

PropertyName	Contents	Value	Default
SERVER_SUBNETMASK_1 *1	Specify subnet mask of the BMC IP address.	IP address format	255.255.255.0
SERVER_SUBNETMASK_2	Specify subnet mask of the extra BMC IP address.	IP address format	255.255.255.0
SERVER_PHONE_NUMBER	Specify the phone number to communicate via modem.	Up to 19 characters	(Blank)
SERVER_ALIAS *1	Specify the alias of the managed component.	Up to 255 bytes	(Same as component name)

\*1 The property can be also set for an EM card.

.....  
**TIPS:**

- The name of component that is already registered cannot be specified to SERVER\_NAME.
  - The IP address that is already registered cannot be specified to SERVER\_IP\_1 and SERVER\_IP\_2.
  - You can use moveServer command to change group that the managed component belongs to. See 2.2.10.
- .....

## 2.2.10 moveServer

**Syntax:**

`dscli moveServer Component GroupName`

**Description:**

Changes the group that a managed component belongs to.

**Options:**

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*GroupName*

Specify the name of new group.

If you want to move the component under root, specify “root”.

## 2.2.11 getServerGroup

### Syntax:

```
dscli getServerGroup Component
```

### Description:

Display the name of group that a managed component belongs to.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

Display the name of group that the managed component belongs to.

If it belongs to root, displays “root”.

## 2.2.12 setCurrentPort

### Syntax:

```
dscli setCurrentPort Component Connection
```

### Description:

Changes the connection type between the NEC ESMPRO Manager component and a managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*Connection*

Specify the connection type between the NEC ESMPRO Manager component and the managed component.

LAN	Connects via LAN
SERIAL	Connects directly to serial port
MODEM	Connects via modem

## 2.2.13 getServerProperty

### Syntax:

```
dscli getServerProperty Component PropertyName
```

### Description:

Displays the specified property of a managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*PropertyName*

Specify the name of component property. For the list of component properties, see the 2.2.9 setServerProperty command.

### Output:

Displays the specified property of a managed component.

## 2.2.14 getServerInfo

### Syntax:

```
dscli getServerInfo Component
```

### Description:

Displays the managed component information that includes main component properties.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

Displays the managed component information. The following information is shown:

Item Name	Contents
Component Name	Name of the managed component
Alias	Alias of the managed component
Group	Name of the group that the managed component belongs to.
Connection Type	Connection type between the managed component and the NEC ESMPRO Manager component.
BMC Control	Display BMC management status Enable : management is valid Disable : management is invalid Not Registered : not registered for management Not Support : out of management (BMC is not integrated)
Check Connection	Display "Completed" if the Check connection has been executed.
BMC Current IP Address	Current BMC IP address to connect to the managed component via LAN.
Failover	Determine whether to enable/disable the Fail over function that continues communication by changing to the other IP address if communication with the current BMC IP address encounters an error.
BMC LAN1 IP Address	BMC IP address to connect to the managed component via LAN.
BMC LAN1 Subnet Mask	Subnet mask of the BMC IP address

BMC LAN2 IP Address	Extra BMC IP address to connect to the managed component via LAN.
BMC LAN2 Subnet Mask	Subnet mask of the extra BMC IP address
Phone Number	Phone number of the managed component
Product Name	Product name of the managed component
Serial Number	Serial number of the managed component
GUID	ID for identifying the managed component
IPMI Version	IPMI version that the managed component supports
Remote KVM and Media License	State of "Remote KVM and Media License" of the managed component. If this managed component does not contain EXPRESSSCOPE Engine series, this item is not shown. See 2.1.14"groupGetRemoteKvmLicense" for details.
Chassis Name	Name of chassis in which the managed component is installed. This item is shown If the managed component is CPU blade or switch blade.
Slot Number	Number of the slot in which the managed component is installed. This item is shown If the managed component is CPU blade or switch blade.
Blade Width	Blade width with the occupied slot count. This item is shown If the managed component is CPU blade or switch blade.
Blade Height	Blade Height with the occupied slot count. This item is shown If the managed component is CPU blade or switch blade.
Blade Name	Blade name. This item is shown if the managed component has the name.



## 2.2.15 getDeviceId

### Syntax:

```
dscli getDeviceId Component
```

### Description:

Obtains management controller information of the managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

Displays management controller information. The following shows an example.

Device ID	: 20H
Device Rev.	: 1
Fw Rev.	: 00.08
Manufacturer ID	: 119
Product ID	: 2c3H

## 2.2.16 getGuid

### Syntax:

```
dscli getGuid Component
```

### Description:

Obtains GUID of a managed component. GUID is ID for identifying a managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

Displays GUID.

## 2.2.17 getProductName

### Syntax:

`dscli getProductName Component`

### Description:

Obtains the product name and serial number of a managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

Displays the following information.

ProductName	product name of the managed component.
SerialNumber	serial number of the managed component.

## 2.2.18 getSoftwareInfo

### Syntax:

`dscli getSoftwareInfo Component`

### Description:

Obtains version information about NEC ESMPRO Agent Extension, operating system and BIOS on the managed component.

This command can be used via LAN when NEC ESMPRO Agent Extension service is running on the managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

Displays version information. The following shows an example.

Agent Extension Version	: 2.03.04
BIOS Version	: 6.0.0106
OS Version	: Windows 2003 Server

## 2.2.19 setShutdownPolicy

### Syntax:

`dscli setShutdownPolicy Component KeyName Value`

### Description:

Changes shutdown policy of NEC ESMPRO Agent Extension on a managed component.

This command can be used via LAN when NEC ESMPRO Agent Extension service is running on the managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*KeyName*

Specify a key name to be set. See the list below.

*Value*

Specify a new value to be set. See the list below.

KeyName	Contents	Value
SCH_ACLINK_STAYON_ENABLE	Determine whether to enable/disable the function that changes AC-LINK policy to "Always Power On" when "OS shutdown" is executed through "scheduled running"	0: Disabled 1: Enabled
SCH_AC_LINK	Specify AC-LINK Policy. (This setting works like as setPowerRestoreDelay command.) * Display only. Cannot be set.	-
SCH_DC_OFF_ENABLE	Determine whether to enable/disable the function that turns the managed component off forcibly after shutdown OS. If the managed component is still DC-ON state after OS shutdown, set enable to turn it off when NEC ESMPRO Agent Extension shutdowns its OS.	0: Disabled 1: Enabled
SCH_DC_OFF_DELAY	Specify delay time in minutes to turn the managed component off after shutdown OS. This setting is effective only when SCH_DC_OFF_ENABLE is enabled.	5-60
SCH_SHUTDOWN_ENABLE	Determine whether to enable/disable the function which shutdowns OS when the managed component is turned on during the down period specified through "scheduled running".	0: Disabled 1: Enabled

KeyName	Contents	Value
SCH_SHUTDOWN_WAIT	Specify delay time in seconds to shutdown the managed component after shutdown OS command is issued. * Display only. Cannot be set.	-

## 2.2.20 getShutdownPolicy

### Syntax:

`dscli getShutdownPolicy Component`

### Description:

Obtains shutdown policy of NEC ESMPRO Agent Extension on a managed component.

This command can be used via LAN when NEC ESMPRO Agent Extension service is running on the managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

Displays shutdown policy. For details, see 2.2.19.

The following shows an example.

```
SCH_ACLINK_STAYON_ENABLE=0
SCH_AC_LINK=1
SCH_DC_OFF_ENABLE=1
SCH_DC_OFF_DELAY=10
SCH_SHUTDOWN_ENABLE=1
SCH_SHUTDOWN_WAIT=60
```

## 2.2.21 setPowerRestoreDelay

### Syntax:

```
dscli setPowerRestoreDelay Component DelayTime [/x Policy]
```

### Description:

Changes the power option that specifies working of a managed component when it is turned AC ON. The power option includes AC-LINK policy and the time that delays Power ON (DC ON) when the managed component is set to be turned DC ON in time with AC ON.

#### IMPORTANT:

- In case that the managed component does not support a setting of power restore delay, This command is invalid. See “NEC ESMPRO Manager Ver.7 Setup Guide Appendix D. Managed Components Summary” whether the managed component supports the function.

#### CHECK:

- NEC ESMPRO Manager does not set the specified delay time to the blade server in which EXPRESSSCOPE Engine 3 is integrated.

### Options:

#### Component

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

#### DelayTime

- |           |                                                                                                                                                                                                                                                        |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AAA – BBB | Set the delay time from turning on AC to turning on DC.<br>* AAA is the minimum value of the delay time of the components.<br>* If the component is EXPRESSSCOPE Engine 3, BBB is 600.<br>* If the component is not EXPRESSSCOPE Engine 3, BBB is 255. |
| -1        | Set “-1” if you do not change the delay time from turning on AC to turning on DC.                                                                                                                                                                      |
| RANDOM    | Set “RANDOM” if you change the delay time from turning on AC to turning on DC to random setting.<br>* If the component supports random setting, the random setting can be specified.                                                                   |

#### /x Policy

Set AC-Link policy. There are 3 types of the policy.

- |            |                                                                                                                                                                                                                                                                             |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STAY_OFF   | The managed component remains OFF when AC power is restored.                                                                                                                                                                                                                |
| LAST_STATE | If the managed component is OFF when AC power is lost, the managed component remains OFF when AC power is restored.<br>If the managed component is turned AC OFF during it is in DC ON, the managed component is turned DC ON after the delay time when it is turned AC ON. |
| POWER_ON   | The managed component is turned DC ON after the delay time when it is turned AC ON.                                                                                                                                                                                         |

### 2.2.22 getPowerRestoreDelay

**Syntax:**

`dscli getPowerRestoreDelay Component`

**Description:**

Obtains power option that specifies working of a managed component when it is turned AC ON.  
For details, see 2.2.21 setPowerRestoreDelay.

**Options:**

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

**Output:**

Display power option information. The following shows an example.

Policy	: LAST_STATE
Delay Time	: RANDOM
Delay Time Range	: 45 - 600 sec

### 2.2.23 setBmcInfo

**Syntax:**

`dscli setBmcInfo Component KeyName Value [/x ModuleNo]`

**Description:**

Changes BMC configuration information on the managed component. The parameter supported according to the kind of BMC is different.

- .....
- TIPS:
- Use setAuthKey command to change authentication key or password of PPP server. See 2.2.25 setAuthKey.
  - Use setSensorLevel command to change separate sensor level. See 2.2.26 setSensorLevel.
  - CFG\_NETWORK\_SHARED\_BMC\_LAN,CFG\_NETWORK\_BMC\_MAC, CFG\_NETWORK\_GUID cannot be specified for setBmcInfo command. Specify those for getBmcInfo command. See 2.2.24 getBmcInfo.
- .....

**Options:**

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*KeyName*

Specify the key name of BMC configuration. See the list below.

*Value*

Specify the new values to be set. See the list below.

/x ModuleNo

Specify the CPU/IO module number (0 or 1) if the managed component is a fault tolerant server. This parameter is valid for the network items.

For network items, this command changes the setting of the CPU/IO module 0 if you omit this parameter for the fault tolerant server.

For the other items, this command changes the setting of both CPU/IO modules regardless of the parameter.

Specify the Master BMC(0) or Standby BMC(1) if the managed component is the server which has EXPRESSSCOPE Engine SP3 (2BMC model). This option is valid for network configurations.

For network property items, this command changes the setting of the Master BMC(0) if you omit this parameter for the server which has EXPRESSSCOPE Engine SP3 (2BMC model).

KeyName	Contents	Value
CFG_COMPUTER_NAME	Common: Computer Name	Up to 15 characters
CFG_COMMUNITY	Common: Community Name	Up to 16 characters
CFG_ALERT_ALL	Common: Alert	0: Disabled 1: Enabled
CFG_POLICY	Common: Alert Policy	1: One Alert Destination 2: All Alert Destination
CFG_ALERT_ACKNOWLEDGE	Common:Alert Acknowledge	0: Disabled 1: Enabled
CFG_ALERT_LEVEL	Common: Alert Level	0: no Alert 1-6: Alert Level 1-6
CFG_LAN_CONTROL_LAN1	Common: Remote Control (LAN1)	0: Disabled 1: Enabled
CFG_SERIAL_CONTROL	Common: Remote Control (WAN/Direct)	0: Disabled 1: Enabled
CFG_LAN_REDIRECTION	Common: Redirection (LAN)	0: Disabled 1: Enabled
CFG_SERIAL_REDIRECTION	Common: Redirection (WAN/Direct)	0: Disabled 1: Enabled
CFG_LAN_CONTROL_LAN2	Common: Remote Control (LAN2)	0: Disabled 1: Enabled
CFG_LAN_ALERT_POLICY_LAN	Common: LAN1 / LAN2 priority	0: LAN1 1: LAN2
CFG_LAN_ALERT_POLICY_DESTINATION	Common: LAN / Alert Receiver priority	0: LAN Channel 1: Alert Receiver
CFG_DHCP	LAN1: Obtain an IP Address automatically(DHCP)	0: Disabled 1: Enabled
CFG_LAN_IP_LAN1	LAN1: IP Address	IP address format
CFG_LAN_SUBNET_LAN1	LAN1: Subnet Mask	IP address format
CFG_LAN_GATEWAY_LAN1	LAN1: Default Gateway	IP address format
CFG_LAN_MANAGE1_ALERT_LAN1	LAN1: Alert Receiver/ management PC(1) Alert	0: Disabled 1: Enabled

KeyName	Contents	Value
CFG_LAN_MANAGE1_IP_LAN1	LAN1: Alert Receiver/ management PC(1) IP address	IP address format
CFG_LAN_MANAGE2_ALERT_LAN1	LAN1: Alert Receiver/ management PC(2) Alert	0: Disabled 1: Enabled
CFG_LAN_MANAGE2_IP_LAN1	LAN1: Alert Receiver/ management PC(2) IP address	IP address format
CFG_LAN_MANAGE3_ALERT_LAN1	LAN1: Alert Receiver/ management PC(3) Alert	0: Disabled 1: Enabled
CFG_LAN_MANAGE3_IP_LAN1	LAN1: Alert Receiver/ management PC(3) IP address	IP address format
CFG_LAN_ALERT_RETRY_COUNT_LAN1	LAN1: Alert Retry Count	0 - 7
CFG_LAN_ALERT_RETRY_TIMEOUT_LAN1	LAN1: Alert Timeout (in seconds)	3 - 30
CFG_DHCP_LAN2	LAN2: Obtain an IP Address automatically(DHCP)	0: Disabled 1: Enabled
CFG_LAN_IP_LAN2	LAN2: IP Address	IP address format
CFG_LAN_SUBNET_LAN2	LAN2: Subnet Mask	IP address format
CFG_LAN_GATEWAY_LAN2	LAN2: Default Gateway	IP address format
CFG_LAN_MANAGE1_ALERT_LAN2	LAN2: Alert Receiver/ management PC (1) Alert	0: Disabled 1: Enabled
CFG_LAN_MANAGE1_IP_LAN2	LAN2: Alert Receiver/ management PC (1) IP address	IP address format
CFG_LAN_MANAGE2_ALERT_LAN2	LAN2: Alert Receiver/ management PC (2) Alert	0: Disabled 1: Enabled
CFG_LAN_MANAGE2_IP_LAN2	LAN2: Alert Receiver/ management PC (2) IP address	IP address format
CFG_LAN_MANAGE3_ALERT_LAN2	LAN2: Alert Receiver/ management PC (3) Alert	0: Disabled 1: Enabled
CFG_LAN_MANAGE3_IP_LAN2	LAN2: Alert Receiver/ management PC (3) IP address	IP address format
CFG_LAN_ALERT_RETRY_COUNT_LAN2	LAN2: Alert Retry Count	0 – 7
CFG_LAN_ALERT_RETRY_TIMEOUT_LAN2	LAN2: Alert Timeout (in seconds)	3 – 30
CFG_SERIAL_MODE	WAN/Direct: Mode	1: Direct 2: Modem



KeyName	Contents	Value
CFG_SERIAL_BAUDRATE	WAN/Direct: Baud Rate	1: 9600bps 2: 19.2Kbps 3: 57.6Kbps 4: 115.2Kbps
CFG_SERIAL_FLOW_CONTROL	WAN/Direct Flow Control	1: None 2: RTS/CTS 3: XON/XOFF
CFG_SERIAL_DIAL_MODE	WAN/Direct Dial Mode	1: Pulse 2: Tone
CFG_SERIAL_INIT	WAN/Direct Initial Command	Up to 48 characters
CFG_SERIAL_HANG_UP	WAN/Direct Hang-up Command	Up to 8 characters
CFG_SERIAL_DTR_HANG_UP	WAN/Direct DTR Hang-up	0: Disabled 1: Enabled
CFG_SERIAL_ESCAPE_CODE	WAN/Direct Escape Code	1character
CFG_SERIAL_DIAL_RETRY_COUNT	WAN/Direct Dial retry count	0 – 7
CFG_SERIAL_DIAL_RETRY_INTERVAL	WAN/Direct Dial retry interval (in seconds)	60 – 240
CFG_SERIAL_ALERT_RETRY_COUNT	WAN/Direct Alert retry count	0 – 7
CFG_SERIAL_ALERT_RETRY_INTERVAL	WAN/Direct Alert timeout Interval (in seconds)	3 – 30
CFG_SERIAL_ALERT_PPP1	WAN/Direct Primary PPP component Alert	0: Disabled 1: Enabled
CFG_SERIAL_DIAL_NUMBER_PPP1	WAN/Direct Primary PPP component Phone Number	Up to 19 characters
CFG_SERIAL_USER_ID_PPP1	WAN/Direct Primary PPP component User ID	Up to 16 characters
CFG_SERIAL_DOMAIN_PPP1	WAN/Direct Primary PPP component Domain	Up to 16 characters
CFG_SERIAL_ALERT_PPP2	WAN/Direct Secondary PPP component Alert	0: Disabled 1: Enabled
CFG_SERIAL_DIAL_NUMBER_PPP2	WAN/Direct Secondary PPP component Phone Number	Up to 19 characters
CFG_SERIAL_USER_ID_PPP2	WAN/Direct Secondary PPP component User ID	Up to 16 characters
CFG_SERIAL_DOMAIN_PPP2	WAN/Direct Secondary PPP component Domain	Up to 16 characters
CFG_SERIAL_MANAGE1_IP	WAN/Direct Alert Receiver (1) IP address	IP address format

KeyName	Contents	Value
CFG_SERIAL_MANAGE2_IP	WAN/Direct Alert Receiver (2) IP address	IP address format
CFG_SERIAL_MANAGE3_IP	WAN/Direct Alert Receiver (3) IP address	IP address format
CFG_PAGER_MANAGE1_ALERT	Pager: Alert Receiver (1) Alert	0: Disabled 1: Enabled
CFG_PAGER_MANAGE1_DIAL_NUMBER	Pager: Alert Receiver (1) Phone Number	Up to 19 characters
CFG_PAGER_MANAGE2_ALERT	Pager: Alert Receiver (2) Alert	0: Disabled 1: Enabled
CFG_PAGER_MANAGE2_DIAL_NUMBER	Pager: Alert Receiver (2) Phone Number	Up to 19 characters
CFG_PAGER_MESSAGE	Pager: Pager message	Up to 29 characters
CFG_PAGER_TIMEOUT	Pager: Guide Message Waiting Time (2 seconds unit)	0-30
CFG_NETWORK_SHARED_BMC_LAN	Network Property: Management LAN Management LAN Port	0:Management LAN 1:Shared System LAN
CFG_NETWORK_SHARED_BMC_LAN_DUP LICABLE	Network Property: Shared BMC LAN Duplication	0: Disabled 1: Enabled
CFG_NETWORK_VLAN	Network Property: VLAN	0: Disabled 1: Enabled
CFG_NETWORK_VLAN_ID	Network Property: VLAN ID	1 - 4094
CFG_NETWORK_VLAN_PRIORITY	Network Property: VLAN Priority	0 - 7
CFG_NETWORK_CONNECTION_TYPE	Network Property: Basic Connection Type	0: Auto Negotiation 1: 100Mbps Full Duplex 2: 100Mbps Half Duplex 3: 10Mbps Full Duplex 4: 10Mbps Half Duplex 5: 1Gbps Full Duplex 6: 1Gbps Half Duplex 7: 10Gbps Full Duplex 8: 10Gbps Half Duplex

KeyName	Contents	Value
CFG_NETWORK_BMC_MAC	Network Property: BMC MAC Address	MAC address format
CFG_NETWORK_DHCP	Network Property: Basic DHCP	0: Disabled 1: Enabled
CFG_NETWORK_IP_LAN	Network Property: Basic IP Address	IP address format
CFG_NETWORK_SUBNET_LAN	Network Property: Basic Subnet Mask	IP address format
CFG_NETWORK_GATEWAY_LAN	Network Property: Basic Default Gateway	IP address format
CFG_NETWORK_DYNAMIC_DNS	Network Property: Basic Dynamic DNS	0: Disabled 1: Enabled
CFG_NETWORK_DNS_SERVER	Network Property: Basic DNS Server	IP address format
CFG_NETWORK_HOST_NAME	Network Property: Basic Host Name	Up to total of 254 characters of Host Name and Domain Name
CFG_NETWORK_DOMAIN_NAME	Network Property: Basic Domain Name	Up to total of 254 characters of Host Name and Domain Name
CFG_NETWORK_GUID	Network Property: Basic System GUID	
CFG_NETWORK_IPV6	IPv6	0: Disabled 1: Enabled
CFG_NETWORK_IPV6_ASSIGNMENT_MODE	IPv6 Address Assignment Mode	0:Static 1:Dynamic
CFG_NETWORK_IPV6_LINK_LOCAL_ADDRESS	IPv6 Link Local Address	
CFG_NETWORK_IPV6_GLOBAL_ADDRESS	IPv6 Global Address	
CFG_NETWORK_IPV6_STATIC_ADDRESS	IPv6 Static Address	
CFG_NETWORK_IPV6_PREFIX_LENGTH	IPv6 Prefix Length	0 - 64
CFG_NETWORK_IPV6_GATEWAY_ADDRESS	IPv6 Gateway Address	
CFG_NETWORK_IPV6_DNS_SERVER	IPv6 DNS Server Address	
CFG_NETWORK_ACCESS_LIMITATION_TYPE	Network Property: Access Limitation Access Limitation Type	0: Allow All 1: Allow Address 2: Deny Address

KeyName	Contents	Value
CFG_NETWORK_ACCESS_ADDRESS	Network Property: Access Limitation IP Address	IP address format Please delimit Internet Protocol address by using comma The wildcard (*) can be used in IP address.
CFG_NETWORK_HTTP	Network Service: Web Server HTTP	0: Disabled 1: Enabled
CFG_NETWORK_HTTP_PORT	Network Service: Web Server HTTP Port	1 - 65535
CFG_NETWORK_HTTPS	Network Service: Web Server HTTPS	0: Disabled 1: Enabled
CFG_NETWORK_HTTPS_PORT	Network Service: Web Server HTTPS Port	1 - 65535
CFG_NETWORK_SSH	Network Service: SSH Interface SSH	0: Disabled 1: Enabled
CFG_NETWORK_SSH_PORT	Network Service: SSH Interface SSH Port	1 - 65535
CFG_MAIL_ALERT	Alert Mail Alert: Alert	0: Disabled 1: Enabled
CFG_MAIL_ALERT_TIMEOUT	Alert Mail Alert: Response time of SMTP server	30 - 600
CFG_MAIL_ALERT_SERVER	Alert Mail Alert: SMTP Server SMTP Server	Up to 255 characters
CFG_MAIL_ALERT_PORT	Alert Mail Alert: SMTP Server SMTP Port	1 - 65535
CFG_MAIL_ALERT_CRAMMD5	Alert Mail Alert: SMTP Server SMTP Authentication CRAM-MD5	0: Disabled 1: Enabled
CFG_MAIL_ALERT_LOGIN	Alert Mail Alert: SMTP Server SMTP Authentication LOGIN	0: Disabled 1: Enabled

KeyName	Contents	Value
CFG_MAIL_ALERT_PLAIN	Alert Mail Alert: SMTP Server SMTP Authentication PLAIN	0: Disabled 1: Enabled
CFG_MAIL_ALERT_USER	Alert Mail Alert: SMTP Server User Name	Up to 64characters
CFG_MAIL_ALERT_TO1	Alert Mail Alert: Mail To1 Mail To1 Address	Up to 255 characters Please specify 0 when Mail Alert is disabled.
CFG_MAIL_ALERT_TO2	Alert Mail Alert: Mail To2 Mail To2 Address	Up to 255 characters Please specify 0 when Mail Alert is disabled.
CFG_MAIL_ALERT_TO3	Alert Mail Alert: Mail To3 Mail To3 Address	Up to 255 characters Please specify 0 when Mail Alert is disabled.
CFG_MAIL_ALERT_FROM	Alert Mail Alert: Mail From	Up to 255 characters
CFG_MAIL_ALERT_REPLY	Alert Mail Alert: Mail Reply-To	Up to 255 characters
CFG_MAIL_ALERT_SUBJECT	Alert Mail Alert: Mail Subject	Up to 63characters
CFG_MAIL_ALERT_LEVEL	Alert Mail Alert: Alert Level	0: Error 1: Error, Warning 2: Error, Warning, Information 3: Separate setting
CFG_SNMP_ALERT	Alert SNMP Alert: Alert	0: Disabled 1: Enabled
CFG_SNMP_COMPUTER_NAME	Alert SNMP Alert: Computer Name	Up to 16characters
CFG_SNMP_COMMUNITY	Alert SNMP Alert: Community Name	Up to 16characters
CFG_SNMP_ALERT_ACKNOWLEDGE	Alert SNMP Alert: Alert Acknowledge	0: Disabled 1: Enabled
CFG_SNMP_ALERT_POLICY	Alert SNMP Alert: Alert Process	1: One Alert Receiver 2: All Alert Receivers
CFG_SNMP_ALERT_RETRY_COUNT	Alert SNMP Alert: Alert Retry Count	0 – 7

KeyName	Contents	Value
CFG_SNMP_ALERT_TIMEOUT	Alert SNMP Alert: Alert Timeout	3 - 30
CFG_SNMP_MANAGE1_ALERT	Alert SNMP Alert: Alert Receiver Primary Alert	0: Disabled 1: Enabled
CFG_SNMP_MANAGE1_IP	Alert SNMP Alert: Alert Receiver Primary IP Address	IP address format
CFG_SNMP_MANAGE2_ALERT	Alert SNMP Alert: Alert Receiver Secondary Alert	0: Disabled 1: Enabled
CFG_SNMP_MANAGE2_IP	Alert SNMP Alert: Alert Receiver Secondary IP Address	IP address format
CFG_SNMP_MANAGE3_ALERT	Alert SNMP Alert: Alert Receiver Tertiary Alert	0: Disabled 1: Enabled
CFG_SNMP_MANAGE3_IP	Alert SNMP Alert: Alert Receiver Tertiary IP Address	IP address format
CFG_SNMP_ALERT_LEVEL	Alert SNMP Alert: Alert Level	0: Error 1: Error, Warning 2: Error, Warning, Information 3: Separate setting
CFG_MISCELLANEOUS_SEL	Other: SEL Behavior when SEL repository is full	0: Stop logging SEL 1: Clear all SEL 2: Overwrite oldest SEL
CFG_MISCELLANEOUS_PEF	Other: Platform Event Filter Platform Event Filter	0: Disabled 1: Enabled

## 2.2.24 getBmcInfo

### Syntax:

`dscli getBmcInfo Component [/x ModuleNo]`

### Description:

Obtains BMC configuration information of a specified managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*/x ModuleNo*

Specify the CPU/IO module number (0 or 1) if the managed component is a fault tolerant server. This parameter is valid for the network items.

For the network items, this command obtains the setting of the CPU/IO module 0 if you omit this parameter for the fault tolerant server.

For the other items, this command obtains the setting of the current primary CPU/IO module regardless of the parameter.

Specify the Master BMC(0) or Standby BMC(1) if the managed component is the server which has EXPRESSSCOPE Engine SP3 (2BMC model). This option is valid for network configurations.

For the network property items, this command obtains the setting of the Master BMC(0) if you omit this parameter for the server which has EXPRESSSCOPE Engine SP3 (2BMC model).

### Output:

Displays BMC configuration information. See 2.2.23 setBmcInfo for details.

The following shows an example.

```
CFG_COMPUTER_NAME=Component1
CFG_COMMUNITY=public
CFG_ALERT_ALL=1
CFG_POLICY=1
CFG_ALERT_ACKNOWLEDGE=1
CFG_ALERT_LEVEL=4
CFG_LAN_REDIRECTION=1
CFG_LAN_CONTROL_LAN1=1
CFG_SERIAL_REDIRECTION=1
CFG_SERIAL_CONTROL=1
CFG_LAN_IP_LAN1=192.168.14.14
CFG_LAN_SUBNET_LAN1=255.255.255.0
CFG_LAN_GATEWAY_LAN1=192.168.14.1
CFG_LAN_MANAGE1_ALERT_LAN1=0
CFG_LAN_MANAGE1_IP_LAN1=0.0.0.0
CFG_LAN_MANAGE2_ALERT_LAN1=0
CFG_LAN_MANAGE2_IP_LAN1=0.0.0.0
CFG_LAN_MANAGE3_ALERT_LAN1=0
CFG_LAN_MANAGE3_IP_LAN1=0.0.0.0
CFG_LAN_ALERT_RETRY_COUNT_LAN1=3
CFG_LAN_ALERT_RETRY_TIMEOUT_LAN1=6
:
:
```

## 2.2.25 setAuthKey

### Syntax:

```
dscli setAuthKey Component OldPassword NewPassword SelectAuthKey
```

### Description:

Changes the authentication key, PPP server's password or SMTP server's password of a BMC configuration. The parameter supported according to the kind of BMC is different.

#### CHECK:

- Only Password of SMTP server can be changed for the managed component in which EXPRESSSCOPE Engine 3 is integrated.

#### TIP:

- After you succeed to change authentication key, you should change the authentication key registered on NEC ESMPro Manager using setServerProperty command. See 2.2.9 setServerProperty.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*OldPassword*

Specify current password.

*NewPassword*

Specify new authentication key or PPP sever's password up to 16 characters.  
Specify new SMTP server's password up to 20 characters.

*SelectAuthKey*

Specify a type of password.

0	Authentication key
1	Password of primary PPP server
2	Password of secondary PPP server
3	Password of SMTP server

## 2.2.26 setSensorLevel

### Syntax:

```
dscli setSensorLevel Component Type SensorName Level1 Level2 Level3
```

### Description:

Changes separate setting at the alert level of BMC configuration information on the managed component. This command can be used when alert Level is only a separate setting.

#### TIP:

- Use setBmcInfo command to change alert level to the separate setting of component. See 2.2.23 setBmcInfo.
- 8 is not use. Use getSensorLevel command. See 2.2.27 getSensorLevel.



**Options:***Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*Type*

Specify an alert type.

SNMP: SNMP alert  
MAIL: MAIL alert

*SensorName*

Specify the key name of sensor. See the following list.

*Level1*

Specify the alert level of error.

*Level2*

Specify the alert level of warning.

*Level3*

Specify the alert level of information.

0: Disable to change SNMP alert or MAIL alert of alert level  
1: Enable to change SNMP alert or MAIL alert to1 of alert level  
2: Enable to change MAIL alert to2 of alert level  
3: Enable to change MAIL alert to3 of alert level  
4: Enable to change MAIL alert to1 or MAIL alert to2 of alert level  
5: Enable to change MAIL alert to1 or MAIL alert to3 of alert level  
6: Enable to change MAIL alert to2 or MAIL alert to3 of alert level  
7: Enable to change MAIL alert to1,  
MAIL alert to2 or MAIL alert to3 of alert level  
8: SNMP alert and MAIL alert of unalterable alert level

.....  
TIP:

- 0 is specified for a unalterable alert level.
- .....

See the following list.

OK : Enable to change, NG : Disable to change

SensorName	Contents	Level1	Level2	Level3
TEMP_THRESHOLD	Temperature (Monitoring Threshold)	OK	OK	OK
VOLT_THRESHOLD	Voltage (Monitoring Threshold)	OK	OK	OK
FAN_SENSOR	FAN(Speed)	OK	OK	OK
COOL_DEV_THRESHOLD	Cooling Device (Monitoring Threshold)	OK	OK	OK
TEMP_ABNORMAL	Temperature (Monitoring Abnormal State)	OK	NG	OK
POST_MEM_RESIZE	POST Memory Resize	NG	OK	OK
MODULE_BOARD	Module/Board(Missing)	OK	NG	OK

SensorName	Contents	Level1	Level2	Level3
SMI_TIMEOUT	SMI Timeout	OK	NG	OK
VOL_ABNORMAL	Voltage (Monitoring Abnormal State)	OK	NG	OK
COOL_DEV_ABNORMAL	Cooling Device (Monitoring Abnormal State)	OK	OK	OK
TRANSITION_PW_SAVE	Transition to Power Save	NG	NG	OK
MICROCONTROLL_STS	Microcontroller State	NG	OK	OK
PW_UNIT_REDUN	Power Unit Redundancy	OK	OK	OK
MEM_REDUN	Memory Redundancy	NG	NG	OK
PHY_SEC	Physical Security(Chassis Intrusion)	NG	OK *1	OK
PLATFORM_SEC	Platform Security Violation Attempt	NG	NG	OK
PROCESSOR	Processor	OK	NG	OK
PW_SUPPLY	Power Supply	NG	OK	OK
PW_UNIT_STS	Power Unit State	OK	OK	OK
MEM	Memory	OK	NG	OK
DRIVE_SLOT	Drive Slot(Bay)	OK	OK	OK
POST_ERR	POST	OK	NG	OK
EVT_LOG_DISABLED	Event Logging	NG	OK	OK
SYS_EVT	System Event	NG	NG	OK
CRITICAL_INT	Critical Interrupt	OK	NG	OK
BUTTON_SWITCH	Button/Switch	NG	NG	OK
CHIP_SET	Chip Set	OK	NG	OK
CABLE_INTERRUPT	Cable/Interconnect	NG	NG	OK
SYS_BOOT_RESTART_INIT	System Boot/Restart Initiated	NG	NG	OK
BOOT_ERR	Boot Error	NG	NG	OK
OS_BOOT	OS Boot	NG	NG	OK
OS_STOP_SHUTDOWN	OS Stop/Shutdown	OK	NG	OK
SLOT_CONNECTOR	Slot/Connector	OK	OK	OK
ACPI	System ACPI Power State	NG	NG	OK
WATCHDOG_TIMER	Watchdog Timer	OK	NG	OK
ENTITY_PRESENCE_INFO	Entity Presence Information	NG	NG	OK
VERSION_CHANGE	Version Change	NG	NG	OK
SSD_STATUS	SSD Status	OK	OK	OK
SECURE_BOOT	Secure Boot	NG	NG	OK
FRU_HOT_SWAP	FRU Hot Swap	NG	NG	OK
SYS_SPEC_PW_STATE	System Specific Power State	NG	NG	OK
PW_CAPPING	Power Capping	OK	OK	NG
SENSOR_FAILURE	Sensor Failure	OK	NG	OK
MANAGEMENT_ENGINE	Management Engine	OK	OK *1	OK

\*1 Some models of managed servers may not support.

See the following list for a fault tolerant server.  
OK : Enable to change, NG : Disable to change

SensorName	Contents	Level1	Level2	Level3
TEMP_THRESHOLD	Temperature (Monitoring Threshold)	NG	OK	OK
VOLT_THRESHOLD	Voltage (Monitoring Threshold)	NG	OK	OK
FAN_SENSOR	FAN(Speed)	NG	OK	OK
PROCESSOR	Processor	NG	OK	OK
PW_SUPPLY	Power Supply	NG	OK	OK
PW_UNIT_STS	Power Unit State	NG	NG	OK
MEM	Memory	NG	OK	OK
POST_ERR	POST	NG	OK	OK
EVT_LOG_DISABLED	Event Logging	NG	NG	OK
SYS_EVT	System Event	NG	NG	OK
CRITICAL_INT	Critical Interrupt	OK	NG	OK
BUTTON_SWITCH	Button/Switch	NG	NG	OK
SYS_BOOT_RESTART_INIT	System Boot/Restart Initiated	NG	NG	OK
BOOT_ERR	Boot Error	NG	NG	OK
SLOT_CONNECTOR	Slot/Connector	NG	NG	OK
ACPI	System ACPI Power State	NG	NG	OK
WATCHDOG_TIMER	Watchdog Timer	NG	OK	OK
SENSOR_FAILURE	Sensor Failure	NG	OK	OK
HA EVENT	HA Event	OK	OK	OK

See the following list for the server which has EXPRESSSCOPE Engine SP3 (2BMC model).  
OK : Enable to change, NG : Disable to change

SensorName	Contents	Level1	Level2	Level3
TEMP_THRESHOLD	Temperature( Monitoring Threshold)	OK	OK	OK
VOLT_THRESHOLD	Voltage(Monitoring Threshold)	OK	OK	OK
FAN_SENSOR *1	FAN(Speed)	OK	OK	OK
POST_MEM_RESIZE *1	POST Memory Resize	NG	OK	OK
SMI_TIMEOUT	SMI Timeout	OK	OK *1	OK *1
VOL_ABNORMAL	Voltage (Monitoring Abnormal State)	OK	OK	OK
PROCESSOR_ABNORMAL	Processor(Monitoring Abnormal State)	OK	OK *1	OK
MODULE_BOARD_ABNORMAL	Module/Board(Monitoring Abnormal State)	OK	NG	OK
MODULE_BOARD_DISABLED	Module/Board(Monitoring Disabled State)	NG	NG	OK
SLOT_CONNECTOR_DISABLED *1	Slot/Connector(Monitoring Disabled State)	OK	OK	OK

SensorName	Contents	Level1	Level2	Level3
PROCESSOR_DEGRADED	Processor(Monitoring Degraded State)	NG	NG	OK
MODULE_BOARD_DEGRADED	Module/Board(Monitoring Degraded State)	NG	NG	OK
MICROCONTROLL_STS	Microcontroller State	OK *1	OK *1	OK
SLOT_CONNECTOR_DEGRADED	Slot/Connector(Monitoring Degraded State)	OK	OK	OK
FAN_REDUN	FAN Redundancy	OK	NG	OK
MEM_REDUN *1	Memory Redundancy	OK	OK	OK
PW_UNIT_REDUN	Power Unit Redundancy	OK	OK *1	OK
PLATFORM_SEC	Platform Security Violation Attempt	NG	NG	OK
PROCESSOR	Processor	OK	OK *1	OK
PW_SUPPLY	Power Supply	OK	OK	OK
PW_UNIT_STS *1	Power Unit State	OK	OK	OK
MEM	Memory	OK	OK	OK *1
DRIVE_SLOT	Drive Slot(Bay)	OK	NG	OK
POST_ERR	POST	NG	NG	OK
EVT_LOG_DISABLED	Event Logging	NG	NG	OK
SYS_EVT	System Event	OK	NG	OK
CRITICAL_INT	Critical Interrupt	OK	OK *1	OK *1
BUTTON_SWITCH	Button/Switch	NG	NG	OK
CHIP_SET	Chip Set	OK	OK *1	OK *1
SYS_BOOT_RESTART_INIT	System Boot/Restart Initiated	NG	NG	OK
BOOT_ERR	Boot Error	NG	OK *1	OK *1
OS_BOOT	OS Boot	NG	OK *1	OK
OS_STOP_SHUTDOWN	OS Stop/Shutdown	NG	NG	OK
SLOT_CONNECTOR	Slot/Connector	OK	OK *1	OK
ACPI	System ACPI Power State	NG	NG	OK
WATCHDOG_TIMER	Watchdog Timer	NG	OK	NG
ENTITY_PRESENCE_INFO *1	Entity Presence Information	OK	OK	OK
BATTERY	Battery	OK	OK *1	OK
SYS_SPEC_PW_STATE *1	System Specific Power State	OK	OK	OK
PW_CAPPING *1	Power Capping	NG	OK	NG
SENSOR_FAILURE	Sensor Failure	OK	OK *1	OK *1
MANAGEMENT_ENGINE	Management Engine	OK	OK *1	OK
PW_SUPPLY_DISABLED *1	Power Supply(Monitoring Disabled State)	NG	NG	OK
SECURE_BOOT *1	Secure Boot	NG	NG	OK
PLATFORM_SPECIFIC_EVENT1 *1	Platform-specific Event 1	OK	NG	NG

\*1 Some models of managed servers may not support.

## 2.2.27 getSensorLevel

### Syntax:

`dscli getSensorLevel Component Type`

### Description:

Obtains separate setting at the alert level of BMC configuration information of a specified managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*Type*

Specify an alert type.

SNMP:	SNMP alert
MAIL:	MAIL alert

### Output:

Displays alert level of BMC configuration information. See 2.2.26 setSensorLevel for details.

The following shows an example.

```
TEMP_THRESHOLD=111
VOLT_THRESHOLD=000
FAN_SENSOR=000
PLATFORM_SEC=800
PROCESSOR=000
PW_SUPPLY=000
PW_UNIT_STS=000
MEM=000
DRIVE_SLOT=000
EVT_LOG_DISABLED=800
SYS_EVT=080
CRITICAL_INT=000
BUTTON_SWITCH=880
MODULE_BOARD=800
SYS_BOOT_RESTART_INIT=880
BOOT_ERR=880
ACPI=880
SMI_TIMEOUT=800
POST_MEM_RESIZE=800
POST_ERR=800
SLOT_CONNECTOR=080
WATCHDOG_TIMER=080
SENSOR_FAILURE=800
:
```

## 2.2.28 getAgentExtensionLog

### Syntax:

`dscli getAgentExtensionLog Component`

### Description:

Obtains the application logs of the NEC ESMPRO Agent Extension on a managed component. This command can be used via LAN when NEC ESMPRO Agent Extension service is running on the managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

Displays the application logs of the NEC ESMPRO Agent Extension.

## 2.2.29 testAlert

### Syntax:

`dscli testAlert Component Target`

### Description:

Executes an alert test.

You can confirm the result of test using 2.2.30 `getTestAlertStatus` command. The parameter supported according to the kind of BMC is different.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*Target*

Specify an alert receiver.

LAN1_1 or 0:	LAN1 alert receiver (1)
LAN1_2 or 1:	LAN1 alert receiver (2)
LAN1_3 or 2:	LAN1 alert receiver (3)
LAN2_1 or 3:	LAN2 alert receiver (1)
LAN2_2 or 4:	LAN2 alert receiver (2)
LAN2_3 or 5:	LAN2 alert receiver (3)
PPP1_1 or 6:	PPP1 alert receiver (1)
PPP1_2 or 7:	PPP1 alert receiver (2)
PPP1_3 or 8:	PPP1 alert receiver (3)
PPP2_1 or 9:	PPP2 alert receiver (1)
PPP2_2 or 10:	PPP2 alert receiver (2)
PPP2_3 or 11:	PPP2 alert receiver (3)
Pager1 or 12:	Pager alert receiver (1)
Pager2 or 13:	Pager alert receiver (2)
SNMP1 or 14:	SNMP alert receiver (1)
SNMP2 or 15:	SNMP alert receiver (2)
SNMP3 or 16:	SNMP alert receiver (3)
MAIL1 or 17:	MAIL alert receiver (1)
MAIL2 or 18:	MAIL alert receiver (2)
MAIL3 or 19:	MAIL alert receiver (3)

## 2.2.30 getTestAlertStatus

### Syntax:

`dscli getTestAlertStatus Component Target`

### Description:

Obtains the state of an alert test. The parameter supported according to the kind of BMC is different.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*Target*

Specify an alert receiver. See 2.2.29 testAlert.

### Output:

Displays the state of the alert test. One of the following test states is displayed.

TEST_UNKNOWN:	Unknown status
TEST_TESTING:	Now Alerting
TEST_SUCCESS:	Alert test is succeeded.
TEST_ABORT:	Alert test is failed.
TEST_CALL_FAILED:	Alert test is failed. (Dial up error)
TEST_TIMEOUT:	Alert test is failed. (Timeout)
TEST_ERROR:	Alert test is failed (Other reason)

While an alert is being sent, the alert state is displayed as follows:

TEST_TESTING
--------------

## 2.2.31 getServerStatus

### Syntax:

`dscli getServerStatus Component`

### Description:

Displays the status of a specified managed component.

Confirms the managed component status by component monitoring function.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

Displays the managed component status as following.

ERROR:	Error
WARNING:	Warning
UNKNOWN:	Unknown or connection error
DC-OFF:	DC-OFF
NORMAL:	Normal
NO_MONITORING:	Out of monitoring



## 2.2.32 getPowerStatus

### Syntax:

```
dscli getPowerStatus Component
```

### Description:

Obtains the power state of a specified managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

Displays the power state of a specified managed component. There are the following power states:

DC-ON	Power-ON
DC-OFF	Power-OFF

## 2.2.33 getStatusLamp

### Syntax:

```
dscli getStatusLamp Component
```

### Description:

Obtains the state of a specified managed component STATUS lamp.

Obtains the state of system FAULT LED for a fault tolerant server.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

Displays the state of a specified managed component STATUS lamp. There are the following states of the STATUS lamp

OFF	Turn off.
GREEN_ON	Turn on green.
GREEN_BLINK	Blink green.
AMBER_ON	Turn on amber.
AMBER_BLINK	Blink amber
RED_ON	Turn on red.
RED_BLINK	Blink red.

## 2.2.34 getPanelInfo

### Syntax:

```
dscli getPanelInfo Component [/x ModuleNo]
```

### Description:

Obtains the following state as the front panel information of a managed component: power state, the STATUS lamp state, the displays of LCD, the system monitoring state of the watchdog timer, the counter of power-on hours.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

/x *ModuleNo*

Specify the CPU/IO module number (0 or 1) if the managed component is a fault tolerant server.

If you omit this parameter for the fault tolerant server, this command obtains the state of the CPU/IO module 0 for the network items.

### Output:

Displays the front panel information. The following shows an example.

Power Status	: S0_G0
STATUS Lamp	: GREEN_ON
LCD0	: Prepare To Boot
LCD1	:
Watchdog Status	: STARTED
Watchdog Use	: SMS_OS
Watchdog Interval	: 10 sec
POH	: 262920 min
:	:

## 2.2.35 powerOn

### Syntax:

```
dscli powerOn Component [/p]
```

### Description:

Turns on a specified managed component.

If the POWER switch needs to be pressed to recover the managed component from the sleep state, it can also be recovered by executing this command.

---

#### IMPORTANT:

- In case that the managed component does not support a force network-boot function which boots the component from network regardless of boot order, a force network-boot function cannot be executed. See “NEC ESM PRO Manager Ver.7 Setup Guide Appendix D. Managed Components Summary” whether the managed component supports function.
  - In the case of PowerBay, The power control is not performed to the powerbay. It is performed to the maintenance card integrated on the PowerBay.
- 

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*/p*

Force boot from network after the power is turned on.

## 2.2.36 powerOff

### Syntax:

```
dscli powerOff Component
```

### Description:

Forcibly turns off a specified managed component.

---

#### IMPORTANT:

- Since remote power control using NEC ESM PRO Manager is provided by hardware regardless of the condition of operating system on the managed component, the system may be damaged. Be careful when you perform remote power control. Reconfirm the status of the managed component before power controls.
  - In the case of PowerBay, The power control is not performed to the powerbay. It is performed to the maintenance card integrated on the PowerBay.
- 

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

## 2.2.37 reset

### Syntax:

`dscli reset Component [/p]`

### Description:

Forcibly resets a specified managed component.

---

#### IMPORTANT:

- Since remote power control using NEC ESMPRO Manager is provided by hardware regardless of the condition of operating system on the managed component, the system may be damaged. Be careful when you perform remote power control. Reconfirm the status of the managed component before power controls.
  - In case that the managed component does not support a force network-boot function which boots the component from network regardless of boot order, a force network-boot function cannot be executed. See “NEC ESMPRO Manager Ver.7 Setup Guide Appendix D. Managed Components Summary” whether the managed component supports function.
  - In the case of PowerBay, The power control is not performed to the powerbay. It is performed to the maintenance card integrated on the PowerBay.
- 

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*/p*

Force boot from network after reset.

## 2.2.38 powerCycle

### Syntax:

`dscli powerCycle Component [/p]`

### Description:

Forcibly turns off a specified managed component and then turns it on.

---

#### IMPORTANT:

- Since remote power control using NEC ESMPRO Manager is provided by hardware regardless of the condition of operating system on the managed component, the system may be damaged. Be careful when you perform remote power control. Reconfirm the status of the managed component before power controls.
  - In case that the managed component does not support a force network-boot function which boots the component from network regardless of boot order, a force network-boot function cannot be executed. See “NEC ESMPRO Manager Ver.7 Setup Guide Appendix D. Managed Components Summary” whether the managed component supports function.
  - In the case of PowerBay, The power control is not performed to the powerbay. It is performed to the maintenance card integrated on the PowerBay.
- 

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*/p*

Force boot from network after the power is turned on.

## 2.2.39 shutdownOs

### Syntax:

`dscli shutdownOs Component [/force]`

### Description:

Shut downs the operating system on a managed component.

This command via LAN instructs the NEC ESMPRO Agent Extension service to shutdown the operating system. The command via modem or with direct connection instructs the NEC ESMPRO Agent.

If you specify “/force” option, this command executes the forced shutdown OS function without communication to the NEC ESMPRO Agent Extension or the NEC ESMPRO Agent.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*/force*

If you specify “/force” option, this command executes the forced shutdown OS function. This shutdown may not work depending on the kind of OS or the OS settings.

## 2.2.40 dumpSwitch

### Syntax:

`dscli dumpSwitch Component`

### Description:

Pushes DUMP switch on a managed component.

---

#### IMPORTANT:

- Since remote power control using NEC ESMPRO Manager is provided by hardware regardless of the condition of operating system on the managed component, the system may be damaged. Be careful when you perform remote power control. Reconfirm the status of the managed component before power controls.
- 

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses or the GUID of the managed component.

## 2.2.41 clearSel

### Syntax:

```
dscli clearSel Component [/force]
```

### Description:

Clears the System Event Log (SEL) area on a managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*/force*

If you specify “/force” option, this command clears the SEL area even while the automatic backup service of NEC ESMPRO Agent is active on the managed component.

## 2.2.42 identifyChassis

### Syntax:

```
dscli identifyChassis Component Period
```

### Description:

Turns on the Unit ID lamp on a managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*Period*

Specify lamp-on period in seconds. You can specify 0 – 255.

## 2.2.43 getIpmiInfo

### Syntax:

```
dscli getIpmiInfo Component FileName [/x ModuleNo]
```

### Description:

Collects IPMI information and saves it as a specified file name.

If there is the type of information that is not read in but NEC ESMPRO Manager holds the previously read-in information, the information is also saved in the file.

.....  
**TIP:**

- You can display the IPMI information file on web browser interface of the NEC ESMPRO Manager. Log in the NEC ESMPRO Manager and click the “Tools” on the header menu.
- .....

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*FileName*

Specify the filename with path name for saving the IPMI information.

*/x ModuleNo*

Specify the CPU/IO module number (0 or 1) if the managed component is a fault tolerant server.

If you omit this parameter for the fault tolerant server, this command obtains the information of the CPU/IO module 0.

## 2.2.44 getSensorList

### Syntax:

```
dscli getSensorList Component [/x ModuleNo]
```

### Description:

Creates a sensor list from the previously collected SDR of IPMI information through 2.2.43 getIpmiInfo command and displays the list. The SDR record ID indicating each sensor is also displayed.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*/x ModuleNo*

Specify the CPU/IO module number (0 or 1) if the managed component is a fault tolerant server.

If you omit this parameter for the fault tolerant server, this command obtains the information of the CPU/IO module 0.

### Output:

Displays the list of the sensor names. The following shows an example.

```
0001h: Sensor Type=Temperature(Front Panel Temp), Owner=Basbrd Mgmt Ctlr
0002h: Sensor Type=Temperature(Baseboard Temp), Owner=Basbrd Mgmt Ctlr
0003h: Sensor Type=Temperature(Processor 1 Temp), Owner=Basbrd Mgmt Ctlr
0004h: Sensor Type=Temperature(Processor 2 Temp), Owner=Basbrd Mgmt Ctlr
0005h: Sensor Type=Temperature(PwrDstBd Temp), Owner=Basbrd Mgmt Ctlr
:
```

## 2.2.45 getSensorStatus

### Syntax:

```
dscli getSensorStatus Component RecordId [/x ModuleNo]
```

### Description:

Obtains the status of specified sensor on the managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*RecordId*

Specify the SDR record ID from the sensor list displayed by 2.2.44 getSensorList command.



*/x ModuleNo*

Specify the CPU/IO module number (0 or 1) if the managed component is a fault tolerant server.

If you omit this parameter for the fault tolerant server, this command obtains the status of the CPU/IO module 0.

**Output:**

Displays the status of the sensor. The following shows an example.

```
Current Value:
  30.00 degrees C
Current Status:
  Normal
Upper non-recoverable Threshold:
  ---
Upper critical Threshold:
  46.00 degrees C (Hysteresis:44.00 degrees C)
Upper non-critical Threshold:
  43.00 degrees C (Hysteresis:41.00 degrees C)
Lower non-critical Threshold:
  3.00 degrees C (Hysteresis:5.00 degrees C)
Lower critical Threshold:
  0.00 degrees C (Hysteresis:2.00 degrees C)
Lower non-recoverable Threshold:
  ---
```

## 2.2.46 getConsoleLog

**Syntax:**

`dscli getConsoleLog Component`

**Description:**

Displays the console log of a specified component.

**Options:**

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

**Output:**

Displays the console log of a specified component.

## 2.2.47 setBmcIpSync

### Syntax:

`dscli setBmcIpSync Component Value`

### Description:

Changes BMC IP Address Synchronization of NEC ESMPRO Agent Extension on a managed component. BMC IP Address Synchronization means the function that the NEC ESMPRO Agent Extension corrects the IP address in the BMC configuration information periodically to the IP address set on the operating system if the managed component contains the BMC that use standard LAN port.

This command can be used via LAN when NEC ESMPRO Agent Extension service is running on the managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*Value*

Specify a new value to be set.

0	Disable
1	Enable

### TIP:

- If this command is sent to NEC ESMPRO Agent Extension on the managed component that contains the BMC that uses an exclusive LAN port (Management LAN Port), the command end successfully, but nothing is set.

## 2.2.48 getBmcIpSync

### Syntax:

`dscli getBmcIpSync Component`

### Description:

Obtains BMC IP Address Synchronization of NEC ESMPRO Agent Extension on a managed component.

BMC IP Address Synchronization means the function that the NEC ESMPRO Agent Extension corrects the IP address in the BMC configuration information periodically to the IP address set on the operating system if the managed component contains the BMC that use standard LAN port.

This command can be used via LAN when NEC ESMPRO Agent Extension service is running on the managed component.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

Displays BMC IP Address Synchronization. The following shows an example.

Agent Config (BMC IP Sync) : Enable
-------------------------------------

## 2.2.49 getBladeSlotId

### Syntax:

`dscli getBladeSlotId Component`

### Description:

Execute 2.2.41 `getIpmiInfo` command previously.

Obtains enclosure ID and slot ID of a managed component if the managed server is a blade. The enclosure ID is for identifying the blade assembly unit where the blade is installed. The slot ID shows the installation position inside the blade assembly unit where the slot is installed.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

Displays enclosure ID and slot ID. The following shows an example.

Enclosure ID: 0040000000
Slot ID: 2

## 2.2.50 deleteBmcUser

### Syntax:

`dscli deleteBmcUser Component UserId`

### Description:

Deletes the user account that is set in the BMC configuration of components

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*UserId*

Specify the number allocated to the BMC user.

## 2.2.51 getBmcUserList

### Syntax:

`dscli getBmcUserList Component`

### Description:

Displays a list of user accounts that is set in the BMC configuration of components

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

The following shows an example.

No.1	User	: Enable
	User Name	: USERNAME1
	Privilege	: Administrator
No.2	User	: Enable
	User Name	: USERNAME2
	Privilege	: Operator
No.3	User	: Disable
	User Name	: USERNAME3
	Privilege	: User

## 2.2.52 setBmcUserInfo

### Syntax:

`dscli setBmcUserInfo Component UserId KeyName Values`

### Description:

Changes the user account information for the BMC configuration

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*UserId*

Specify the number being allocated by user that uses BMC(1 – 12).

*KeyBane*

Specify the key name of BMC configuration. See the list below.

*Value*

Specify a new value to be set. See the list below.

KeyName	Value
USER	0: Disabled 1: Enabled
USER_NAME	Up to 15 characters(*1)
USER_PASSWORD	Up to 19 characters(*2)
USER_PRIVILEGE	0: User 1: Operator 2: Administrator

(\*1) Must be specified with half-size alphanumeric characters, '-'(minus sign) and '\_'(underscore).

(\*2) Only ASCII character string that excludes ' '(blank)', '"'(quotation marks)' and '=' can be used.

## 2.2.53 getBmcUserInfo

### Syntax:

`dscli getBmcUserInfo Component UserId`

### Description:

Gets the user account information for the BMC configuration

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*UserId*

Specify the number being allocated by user that uses BMC(1 – 12).

### Output:

The following shows an example.

```
USER           : true
USER NAME      : USERNAME2
USER PRIVILEGE : Operator
```

## 2.2.54 setPowerRestorePolicy

### Syntax:

```
dscli setPowerRestorePolicy Component Policy
```

### Description:

Changes AC-Link policy that specifies working of a managed component when it is turned AC ON.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

*Policy*

Set AC-Link policy. There are 3 types of the policy.

STAY\_OFF The managed component remains OFF when AC power is restored.

LAST\_STATE If the managed component is OFF when AC power is lost, the managed component remains OFF when AC power is restored.

If the managed component is turned AC OFF during it is in DC ON, the managed component is turned DC ON after the delay time when it is turned AC ON.

POWER\_ON The managed component is turned DC ON after the delay time when it is turned AC ON.

## 2.2.55 getPowerRestorePolicy

### Syntax:

```
dscli getPowerRestorePolicy Component
```

### Description:

Obtains AC-Link policy that specifies working of a managed component when it is turned AC ON.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

The following shows an example.

Policy	: STAY OFF
--------	------------

## 2.2.56 getSystemFtLamp

### Syntax:

`dscli getSystemFtLamp Component`

### Description:

Obtains the state of System FT LED if the managed component is a fault tolerant server.

### Options:

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### Output:

There are the following states of the System FT LED.

OFF	Power off or simplex
GREEN_ON	Duplex
GREEN_BLINK	Split mode.

## 2.3 EM Card Management Commands

The following component management commands can be used for an EM card. However, the MAC address cannot be specified for the option "Server".

```
getServerNameByGuid  
findNewServer  
findNewServerNetAddr  
createServer  
deleteServer  
checkConnection  
setServerProperty  
getServerProperty  
getServerInfo  
getDeviceId  
getGuid  
getServerStatus
```

### 2.3.1 getEmCardList

**Syntax:**

```
dscli getEmCardList [/d]
```

**Description:**

Displays the name list of all EM cards registered on NEC ESMPRO Manager.

**Options:**

/d

If you specify "/d" option, the EM cards list indicates EM card name and GUID.

**Output:**

The following shows an example.

If "/d" option is not specified:

```
EM0001  
EM0002
```

If "/d" option is specified:

```
EM0001  
GUID 01b21dd2:1dd2:11b2:2fa4:003013630cc5  
EM0002  
GUID 01b21dd2:1dd2:11b2:49bd:003013630cc0
```



### 2.3.2 getEmActiveState

**Syntax:**

```
dscli getEmActiveState EmCard
```

**Description:**

Displays state of active/standby of the specified EM card.

**Options:**

*EmCard*

Specify the name of EM card.

**Output:**

There are the following states of EM card

Active	active
Standby	standby

### 2.3.3 identifyEm

**Syntax:**

```
dscli identifyEm EmCard [/x SwmSlotNumber]
```

**Description:**

Turns on the Unit ID lamp of specified EM card or the switch module that is managed by the EM card for 15 seconds. Only when the EM card is active, this command is available.

**Options:**

*EmCard*

Specify the name of the EM card.

/x *SwmSlotNumber*

Specify the slot number of the switch module, when you want to turn on Unit ID lamp of the switch module that is managed by the EM card.

### 2.3.4 getEmStatusLamp

**Syntax:**

```
dscli getEmStatusLamp EmCard [/x SwmSlotNumber]
```

**Description:**

Obtains the state of a specified EM card or the switch module that is managed by the EM card. Only when the EM card is active, this command is available.

**Options:**

*EmCard*

Specify the name of the EM card.

*/x SwmSlotNumber*

Specify the slot number of the switch module, when you want to obtain Status lamp of switch module that is managed by the EM card.

**Output:**

There are the following states of the STATUS lamp

GREEN_ON	Turn on green.
GREEN_BLINK	Blink green.
AMBER_BLINK	Blink amber.
RED_BLINK	Blink red.

## 2.4 Chassis Management Commands

### 2.4.1 getBladeEnclosureList

**Syntax:**

```
dscli getBladeEnclosureList
```

**Description:**

Displays the list of the blade enclosure in which the managed component or the EM card registered on NEC ESMPRO Manager is installed.

The list includes the system that has one or more components in a chassis.

**Output:**

Displays the list of the blade enclosure with the component or the EM card registered on NEC ESMPRO Manager.

### 2.4.2 getChassisSlotState

**Syntax:**

```
dscli getChassisSlotState ChassisName
```

**Description:**

Displays the state of blade slots when the specified chassis is a blade enclosure. The list of the EM card and the switch module are displayed if the EM card and the switch module are installed in chassis.

The list includes the system that has one or more components in a chassis.

**Options:**

*ChassisName*

Specify the chassis name.

**Output:**

Following information is shown for each slot.

Contents	Explanation	
slot number	Displays the slot number. Displays two slot numbers when the installed blade has double wide or full height.	
slot state	component name	Displays the component name when the component is installed in the slot and it is registered on NEC ESMPRO Manager. For double wide blade, displays “(Double-wide)” following the component name. For full height blade, displays “(Full-height)” following the component name.
	Installed	Displays “Installed” when the switch module is installed in the slot.
	Not registered	Displays “Not registered” when the component is installed in the slot and it is not registered on NEC ESMPRO Manager.
	Not installed	Display “Not Installed” when nothing is installed in the slot.
	(blank)	Displays nothing if “Installed” and “Not Registered” cannot be distinguished.

The following shows an example.

```
CPU Blade:
1: SERVER_0001
2: SERVER_0002
3,4: SERVER_0003 (Double-wide)
5: Not installed
6: Not registered
7: Not installed
8: Not registered

EM Card:
1.EM0001
2.EM0002

Switch Module:
1: Installed
2: Installed
3: Not installed
4: Not installed
5: Not installed
6: Not installed
```

### 2.4.3 getChassisInfo

**Syntax:**

```
dscli getChassisInfo ChassisName
```

**Description:**

Displays information on the specified chassis.

**Options:**

*ChassisName*

Specify the chassis name.

**Output:**

Display information on the specified chassis.

Item Name	Contents
Chassis Name	Name of the chassis.
Comments	Comments of the chassis
Rack Name	Displays the rack name which is set on the EM card.
Rack ID	Displays the rack id which is set on the EM card.
Unit Name	Displays the unit name which is set on the EM card.
Serial Number	Displays the chassis serial number of the blade enclosure.

## 2.4.4 setChassisProperty

### Syntax:

```
dscli setChassisProperty ChassisName PropertyName Value
```

### Description:

Sets the chassis property of a chassis.

### Options:

*ChassisName*

Specify the chassis name.

*PropertyName*

Specify the name of the chassis property. See the list below.

*Value*

Specify a new value to be set. See the list below.

PropertyName	Contents	Value
CHASSIS_NAME	Specify the name of the chassis.	Up to 32 characters.
CHASSIS COMMENT	Enter the comments of the chassis.	Up to 100 characters.

.....  
**TIP:**

- The name of chassis that is already registered cannot be specified to *ChassisName*.
- .....

## 2.4.5 getChassisProperty

### Syntax:

```
dscli getChassisProperty ChassisName PropertyName
```

### Description:

Displays the property of the specified chassis.

### Options:

*ChassisName*

Specify the chassis name.

*PropertyName*

Specify the name of chassis property. For the list of chassis properties, see the 2.4.4 setChassisProperty command.

### Output:

Display the property of a chassis.

## 2.4.6 setBladeAutoSetting

### Syntax:

`dscli setBladeAutoSetting ChassisName SlotNumber PropertyName Value`

### Description:

This command is effective only to the chassis in which EM card can be installed.

If NEC ESMPRO Manager detects new CPU blade installed on the chassis, NEC ESMPRO Manager configures BMC on the CPU blade (managed component) through the EM card to control the managed component remotely.

Set information to perform the configuration of BMC on CPU blade and the component registration automatically.

### Options:

*ChassisName*

Specify the chassis name.

*SlotNumber*

Specify the slot number of CPU blade. When a common value to all slots is set, "all" is specified.

*PropertyName*

Specify the name of the chassis property. See the list below.

*Value*

Specify a new value to be set. See the list below.

PropertyName	Contents	Value
AUTH_KEY	Specify the authentication key that is configured on BMC.	Up to 16 characters
RECONFIGURE_BMC	"Enabled" means that NEC ESMPEO Manager executes BMC configuration not only new installed CPU blade but also all CPU blade. "Disabled" means that NEC ESMPRO Manager executes BMC configuration only if BMC on new installed CPU blade has not been configured.	0: Disabled 1: Enabled
REWRITE_IP_ADDRESS	IP address of the BMC on the CPU blade may be obtained by DHCP even through the BMC configuration has not been executed. If this option is set "Enable", NEC ESMPRO Manager always update the IP address when BMC configuration is executed.	0: Disabled 1: Enabled
DHCP	BMC automatically acquires IP address from DHCP.	0: Disabled 1: Enabled
IP_ADDRESS	Specify IP address set to CPU blade. When you specify "all" for "SlotNumber" option, IP address consecutive from specified IP address is sequentially set from the first slot.	IP Address form
SUBNET_MASK	Specify the subnet mask.	IP Address form
DEFAULT_GATEWAY	Specify the default gateway.	IP Address form
ALERT_RECEIVER_IP_ADDRESS	Specify the alert receiver(1)/IP address of PC for management.	IP Address form

## 2.4.7 getBladeAutoSetting

### Syntax:

`dscli getBladeAutoSetting ChassisName SlotNumber`

### Description:

This command is effective only to the chassis that can install the EM card.

Display information to perform configuration of BMC of a CPU blade and component registration automatically when NEC ESMPRO Manager detects new CPU blade installed on the chassis.

See 2.4.6 setBladeAutoSetting for each information details.

### Options:

*ChassisName*

Specify the chassis name.

*SlotNumber*

Specify the slot number of CPU blade.

### Output:

The following shows an example.

```
RECONFIGURE_BMC:Disable
REWRITE_IP_ADDRESS:Diasable
DHCP:Enable
ALERT_RECEIVER_IP_ADDRESS:192.168.14.18
```

## 2.5 Communication Management Commands

### 2.5.1 connect

**Syntax:**

```
dscli connect Component
```

**Description:**

Connects to a managed component with via modem or with direct connection according to the connection type of the component property.

**Options:**

*Component*

Specify the name, the MAC address of LAN port that BMC uses, or the GUID of the managed component.

### 2.5.2 disconnect

**Syntax:**

```
dscli disconnect
```

**Description:**

Disconnects the currently connected line.

### 2.5.3 getConnectionStatus

**Syntax:**

```
dscli getConnectionStatus
```

**Description:**

Displays the status of the serial connection (via modem or with direct connection).

**Output:**

Displays the status of the serial connection. There are following status:

CONNECTING	Now connecting.
CONNECTED	Connection is complete.
DISCONNECTING	Now disconnecting.
DISCONNECTED	Disconnection is complete.
CONNECTION_FAILURE	Failed to connect.
NO_CARRIER	Line is disconnected.
BUSY	Now talking.
NO_DIALTONE	Cannot detect dialtone.



## 2.6 Environment Setting Commands

### 2.6.1 setOption

**Syntax:**

```
dscli setOption OptionName Value
```

**Description:**

Sets an option of the NEC ESMPRO Manager.

**Options:**

*OptionName*

Specify a name of the NEC ESMPRO Manager option. See the list below.

*Value*

Specify new value to be set. See the list below.

OptionName	Contents	Value	Default
BMC_RETRY_COUNT	Specify Retry count for communicating to BMC on a managed component.	0-10	5
BMC_TIMEOUT	Communication Timeout (in seconds) to BMC on a managed component.	1-15	5
BMC_SOURCE_PORT	Specify a UDP port number for communicating to BMC on a managed component.	1025-65535	47117
CUI_NO_RESPONSE_TIMEOUT	Specify times (in seconds) until the remote console is disconnected due to a communication timeout.	20-1800	60
CUI_SYS_RQ_KEY	Specify alias for SysRq key on CUI remote console.	"": Not specified "Q": Ctrl+Alt+Q "X": Ctrl+Alt+X	""
HISTORY_LOG_NUMBER_OF_RECORDS	Specify maximum number of application logs.	2000-10000	2000
MODEM_PORT_NUMBER	Specify a serial port on NEC ESMPRO Manager component. The serial port is used for communicating to the managed component via modem or with direct connection.	1-8	1
MONITORING_ENABLE	Determine whether to enable/disable the component monitoring function that monitors the power status and the STATUS lamp on each managed component.	0: Disabled 1: Enabled	1
MONITORING_AUTO_UPDATE_INTERVAL	Specify interval times (in seconds) to update automatically the displays of component status.	1-60	5
RC_POWER_CONTROL_INTERVAL_MILLIS	Specify interval times (in milliseconds) at which power control is performed continuously for multiple components.	0-5000	500
RMI_PORT	Specify a TCP port number for RMI.	1024 - 65535	1099

## 2.6.2 getOption

**Syntax:**

`dscli getOption OptionName`

**Description:**

Displays an option of the NEC ESMPRO Manager.

**Options:**

*OptionName*

Specify a name of the NEC ESMPRO Manager option. See 2.6.1 setOption for option list.

**Output:**

Display the value of the specified option.

## 2.6.3 getPermitIpAddrList

**Syntax:**

`dscli getPermitIpAddrList`

**Description:**

Displays the IP address ranges in which login to NEC ESMPRO Manager is permitted.

Only the Web clients in this IP address ranges are possible to login to NEC ESMPRO Manager.

**Output:**

Displays the list of IP address ranges. The following shows an example.

```
No.1: 192.168.0.1 - 192.168.0.254
No.2: 192.168.1.10
No.3: 192.168.2.10
```

## 2.6.4 isPermitIpAddress

### Syntax:

```
dscli isPermitIpAddress CheckIpAddress
```

### Description:

Checks whether a specified IP address is permitted for login from a Web client and displays the check result.

### Options:

*CheckIpAddress*

Specify IP address.

### Output:

Displays the result of IP address check.

OK	means this IP address is permitted
NG	means this IP address is not permitted.

## 2.6.5 addPermitIpAddress

### Syntax:

```
dscli addPermitIpAddress StartIpAddress [EndIpAddress]
```

### Description:

Adds an IP address range in which login to NEC ESMPRO Manager is permitted.

Only the Web clients in this IP address ranges are possible to login to NEC ESMPRO Manager.

---

### TIP:

- You can login to NEC ESMPRO Manager from a web browser on the component that NEC ESMPRO Manager is installed even if the IP address is not permitted using this command.
- 

### Options:

*StartIpAddress*

Specify the start IP address of IP address range to permit login.

*EndIpAddress*

Specify the end IP address of IP address range. If this option is omitted, it will be permitted the single IP address that is specified in the *StartIAddr* option.

## 2.6.6 removePermitIpAddress

### Syntax:

```
dscli removePermitIpAddress StartIpAddress [EndIpAddress]
```

### Description:

Removes IP address range in which login from a Web client is permitted.

### Options:

*StartIpAddress*

Specify the start IP address of IP address range.

*EndIpAddress*

Specify the end IP address of IP address range.

## 2.6.7 clearPermitIpAddr

**Syntax:**

```
dscli clearPermitIpAddr
```

**Description:**

Removes all IP address ranges in which login from a Web client is permitted.

## 2.7 User Management Commands

### 2.7.1 createUser

**Syntax:**

```
dscli createUser UserName Password
```

**Description:**

Registers a new user that can login to the NEC ESMPRO Manager from web browser. The user level of the user to be registered is “operator”. Up to 30 users can be created.

**Options:**

*UserName*

Specify a new user name. Up to 16 characters.

*Password*

Specify a login password for the new user. You can input the password with 6 - 16 letters.

.....  
**TIP:**

- The name of user that is already registered cannot be specified to *UserName*.
- .....

### 2.7.2 deleteUser

**Syntax:**

```
dscli deleteUser UserName
```

**Description:**

Deletes a user that can login to the NEC ESMPRO Manager from web browser.

**Options:**

*UserName*

Specify a name of the user.

### 2.7.3 getUserList

**Syntax:**

```
dscli getUserList
```

**Description:**

Displays the list of registered user names and levels. “Administrator” or “Operator” is displayed as the user level.

**Output:**

The following shows an example.

Admin	Administrator
User1	Operator
User2	Operator
:	
:	

## 2.7.4 setUserProperty

### Syntax:

`dscli setUserProperty UserName PropertyName Value`

### Description:

Sets a property of a specified user.

### Options:

*UserName*

Specify a user name.

*PropertyName*

Specify a property name. See the list below.

It is valid for “Operator” level user to change the executable authority.

OK : Enable to change, NG : Disable to change

*Value*

Specify new value to be set. See the list below.

PropertyName	Contents	Value	Default	Admini- strator	Ope- rator
USER_NAME	Specify the user name	Up to 16 characters.	(Blank)	OK	OK
USER_PASSWORD	Specify the login password.	6-16 characters.	(Blank)	OK	OK
USER_COMMENT	Specify the comment about the user.	Up to 100 characters.	(Blank)	OK	OK
UL_POWER_ON	Specify the enable/disable of Power ON.	0: Disabled 1: Enabled	0	NG	OK
UL_POWER_OFF	Specify the enable/disable of Power OFF function.	0: Disabled 1: Enabled	0	NG	OK
UL_RESET	Specify the enable/disable of Reset function.	0: Disabled 1: Enabled	0	NG	OK
UL_POWER_CYCLE	Specify the enable/disable of Power Cycle function.	0: Disabled 1: Enabled	0	NG	OK
UL_SHUTDOWN	Specify the enable/disable of Shutdown OS function.	0: Disabled 1: Enabled	0	NG	OK
UL_DUMP	Specify the enable/disable of DUMP switch function.	0: Disabled 1: Enabled	0	NG	OK
UL_SEL_CLEAR	Specify the enable/disable of Clear System Event Log function.	0: Disabled 1: Enabled	0	NG	OK
UL_BMC_REMOTE	Specify the enable/disable of Change BMC Configuration function.	0: Disabled 1: Enabled	0	NG	OK
UL_CONFIG_CREATE	Specify the enable/disable of Add Component function.	0: Disabled 1: Enabled	0	NG	OK
UL_CONFIG_CHANGE_DELETE	Specify the enable/disable of Set Component Property function and Delete Component function.	0: Disabled 1: Enabled	0	NG	OK
UL_REMOTE_CONSOLE	Specify the enable/disable of Remote Console function.	0: Disabled 1: Enabled	0	NG	OK
UL_SCHEDULE	Specify the enable/disable of Set Schedule function.	0: Disabled 1: Enabled	0	NG	OK

PropertyName	Contents	Value	Default	Admini- strator	Ope- rator
UL_REMOTE_BATCH	Specify the enable/disable of Remote Batch function.	0: Disabled 1: Enabled	0	NG	OK
UL_SET_POWER_REST ORE_DELAY	Specify the enable/disable of Change Power Option Setting.	0: Disabled 1: Enabled	0	NG	OK
UL_SET_AGENT_SETTI NG	Specify the enable/disable of Change Agent Setting.	0: Disabled 1: Enabled	0	NG	OK
UL_SET_CONSOLE_LO G	Specify the enable/disable of Change Console log Setting.	0: Disabled 1: Enabled	0	NG	OK
UL_SET_ENVIRONMEN T_OPTION	Specify the enable/disable of Change Environment Setting.	0: Disabled 1: Enabled	0	NG	OK
UL_SET_BLADE_AUTO_ SETTING	Specify the enable/disable of Change CPU Blade Auto Setting.	0: Disabled 1: Enabled	0	NG	OK
UL_ELECTRIC_POWER _MONITORING	Specify the enable/disable of Start or Stop Read Power Value.	0: Disabled 1: Enabled	0	NG	OK
UL_SET_SERVER_DOW N_MONITORING	Specify the enable/disable of Change Component Monitoring function.	0: Disabled 1: Enabled	0	NG	OK
UL_MODULE_UPDATE_ MAINTENANCE	Specify the enable/disable of Change maintenance and update of CPU/PCI module.	0: Disabled 1: Enabled	0	NG	OK

.....  
**TIP:**

- The name of user that is already registered cannot be specified to USER\_NAME.
- .....

## 2.7.5 getUserProperty

**Syntax:**

`dscli getUserProperty PropertyName`

**Description:**

Displays a property of a specified user.

**Options:**

*UserName*

Specify a user name.

*PropertyNameName*

Specify a property name. See 2.7.4 setUserProperty. But “USER\_PASSWORD” property is not displayed.

**Output:**

Displays a property of a specified user.

## 2.8 Other Commands

### 2.8.1 getApplicationLog

**Syntax:**

```
dscli getApplicationLog [Number]
```

**Description:**

Displays the latest application logs up to the number that is specified by *Number* option.

**Options:**

*Number*

Specify the number of logs to be displayed. If this option is omitted, the latest 10 logs are displayed.

**Output:**

Displays the application logs. Each log includes date, a managed component name, OS IP address of the managed component, BMC IP address, user name and event.

### 2.8.2 about

**Syntax:**

```
dscli about
```

**Description:**

Displays version information of NEC ESMPRO Manager.

**Output:**

Displays version information of NEC ESMPRO Manager.

### 2.8.3 help

**Syntax:**

```
dscli help [CommandName]
```

**Description:**

Displays help information. If no options are specified, a command list will be displayed. If an option is specified, the help information of the specified command will be displayed.

**Options:**

*CommandName*

Specify a command name.

**Output:**

Display the command list or the help information of the specified command.



## Appendix A. List of Support Commands for BMC (Other) or iLO component

A user can execute the following command set against BMC (Other) or iLO components via command line interface of NEC ESMPro Manager.

See "NEC ESMPro Manager Ver.7 Setup Guide" for more information about BMC (Other) or iLO components.

### IMPORTANT:

- If Redfish is selected as the access mode in BMC (Other), other commands in the table except 2.1.1 to 2.1.7 are not supported.

- : NOT SUPPORT

Command	BMC (Other)		iLO
	BMC	CMC	
2.1.1 getList	supported	supported	supported
2.1.2 createGroup	supported	supported	supported
2.1.3 deleteGroup	supported	supported	supported
2.1.4 moveGroup	supported	supported	supported
2.1.5 setGroupProperty	supported	supported	supported
2.1.6 getGroupProperty	supported	supported	supported
2.1.7 getGroupStatus	supported	supported	supported
2.1.8 groupPowerOn	supported	-	-
2.1.9 groupPowerOff	supported	-	-
2.1.10 groupReset	supported	-	-
2.1.11 groupPowerCycle	supported	-	-
2.1.12 groupShutdownOs	supported (*1)	-	-
2.1.13 groupSetPowerRestoreDelay	-	-	-
2.1.14 groupGetRemoteKvmLicense	-	-	-
2.2.1 getServerList	supported	supported	supported
2.2.2 getServerNameByMacAddr	supported	supported	-
2.2.3 getServerNameByGuid	supported	supported	supported
2.2.4 findNewServer	-	-	-
2.2.5 findNewServerNetAddr	-	-	-
2.2.6 createServer	-	-	-
2.2.7 deleteServer	supported	supported	supported
2.2.8 checkConnection	supported	supported	-
2.2.9 setServerProperty	supported	supported	supported
2.2.10 moveServer	supported	supported	supported
2.2.11 getServerGroup	supported	supported	supported
2.2.12 setCurrentPort	supported	supported	supported
2.2.13 getServerProperty	supported	supported	supported
2.2.14 getServerInfo	supported	supported	-
2.2.15 getDeviceId	supported	supported	-
2.2.16 getGuid	supported	supported	supported
2.2.17 getProductName	supported	supported	-
2.2.18 getSoftwareInfo	-	-	-
2.2.19 setShutdownPolicy	-	-	-
2.2.20 getShutdownPolicy	-	-	-
2.2.21 setPowerRestoreDelay	-	-	-
2.2.22 getPowerRestoreDelay	-	-	-
2.2.23 setBmcInfo	-	-	-

Command	BMC (Other)		iLO
	BMC	CMC	
2.2.24 getBmcInfo	-	-	-
2.2.25 setAuthKey	-	-	-
2.2.26 setSensorLevel	-	-	-
2.2.27 getSensorLevel	-	-	-
2.2.28 getAgentExtensionLog	-	-	-
2.2.29 testAlert	-	-	-
2.2.30 getTestAlertStatus	-	-	-
2.2.31 getServerStatus	supported	supported	-
2.2.32 getPowerStatus	supported	-	-
2.2.33 getStatusLamp	supported	supported	-
2.2.34 getPanelInfo	supported	supported	-
2.2.35 powerOn	supported	-	-
2.2.36 powerOff	supported	-	-
2.2.37 reset	supported	-	-
2.2.38 powerCycle	supported	-	-
2.2.39 shutdownOs	Supported (*1)	-	-
2.2.40 dumpSwitch	supported	-	-
2.2.41 clearSel	supported	supported	-
2.2.42 identifyChassis	supported	-	-
2.2.43 getIpmiInfo	supported	supported	-
2.2.44 getSensorList	supported	supported	-
2.2.45 getSensorStatus	supported	supported	-
2.2.46 getConsoleLog	supported	-	-
2.2.47 setBmcIpSync	-	-	-
2.2.48 getBmcIpSync	-	-	-
2.2.49 getBladeSlotId	-	-	-
2.2.50 deleteBmcUser	-	-	-
2.2.51 getBmcUserList	-	-	-
2.2.52 setBmcUserInfo	-	-	-
2.2.53 getBmcUserInfo	-	-	-
2.2.54 setPowerRestorePolicy	supported	-	-
2.2.55 getPowerRestorePolicy	supported	-	-
2.2.56 getSystemFtLamp	-	-	-
2.3.1 getEmCardList	-	-	-
2.3.2 getEmActiveState	-	-	-
2.3.3 identifyEm	-	-	-
2.3.4 getEmStatusLamp	-	-	-
2.4.1 getBladeEnclosureList	supported	supported	-
2.4.2 getChassisSlotState	supported	supported	-
2.4.3 getChassisInfo	supported	supported	-
2.4.4 setChassisProperty	supported	supported	-
2.4.5 getChassisProperty	supported	supported	-
2.4.6 setBladeAutoSetting	-	-	-
2.4.7 getBladeAutoSetting	-	-	-
2.5.1 connect	-	-	-
2.5.2 disconnect	-	-	-
2.5.3 getConnectionStatus	-	-	-

(\*1) Supports only forced shutdown.

**TIP:**

- If you execute the Group management Commands which is not supported for BMC (other) components, execute commands using “/exs” option in order to exclude those components.
-