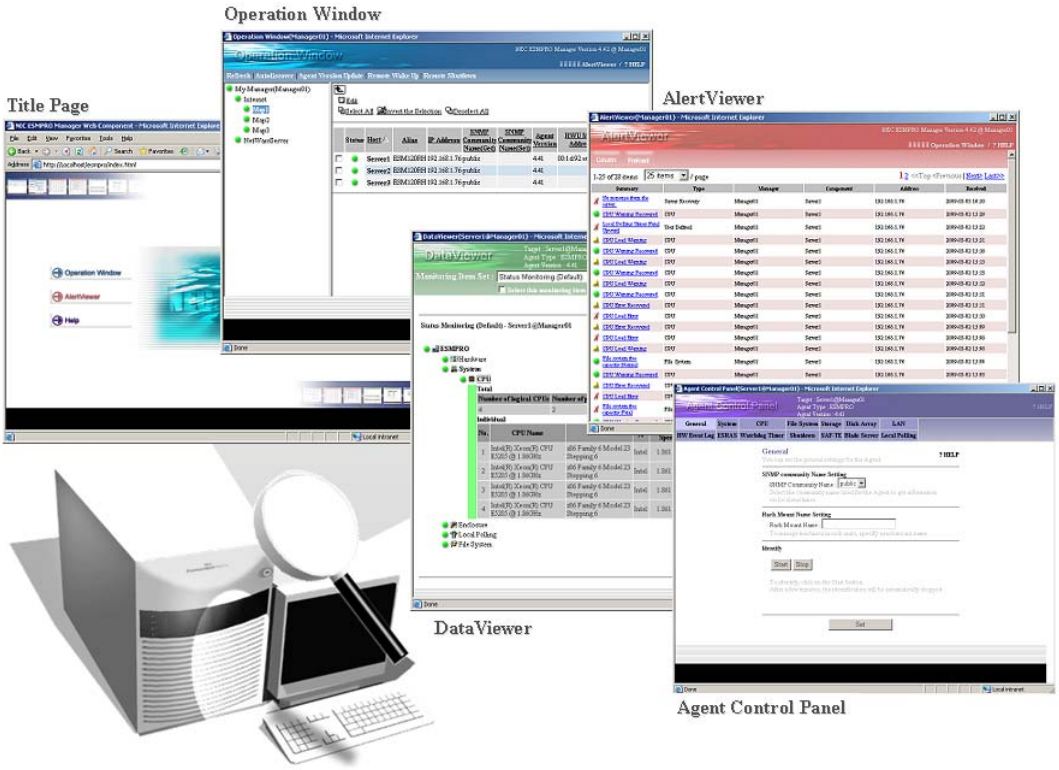
Chap. 4

Server Management by Web Browser (Web Component)

4.1 About Web Component
4.2 Display a list of Management Server (Operation Window)
4.3 Display of Configuration Information of Server in Table Form (DataViewer)
4.4 Reference of Server Failure Information (AlertViewer)
4.5 Remote Setup of Server Monitoring (Agent Control Panel)
4.6 Remote Start-up of Server (Remote Wake Up)
4.7 Remote Shutdown of Server (Remote Shutdown)

4.1 About Web Component

By using Web Component, you can utilize main function of NEC ESMPRO Manager from Web Brower through Web server.



4.1-1 Configuration of Web Component

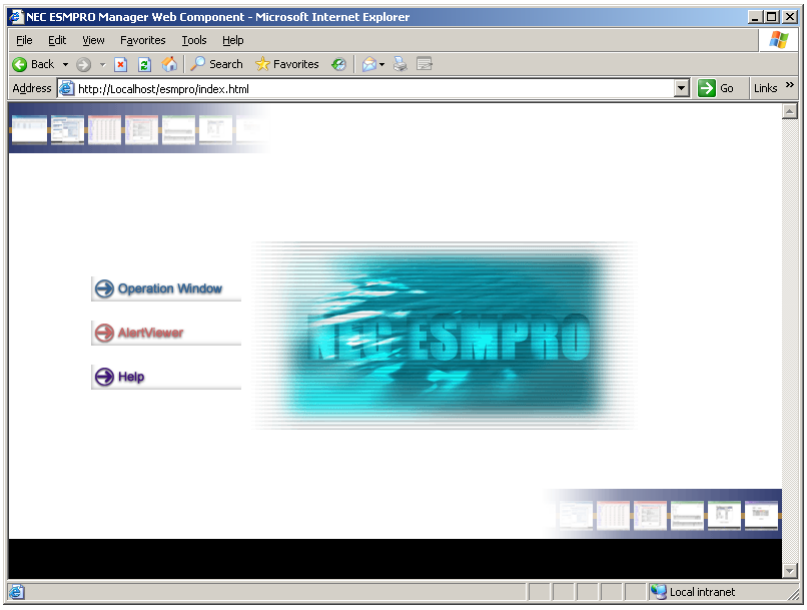
Web Component consists of the following tools:

- Operation Window
  Displays a list of Register/Edit/Delete of server for management, tree view of map and component under map and activates each tool.
- DataViewer
  Displays a list of various detailed information of NEC ESMPRO Agent Ver. 3.7 or later.
- AlertViewer
  Refers to alert sent from server for management.
- Agent Control Panel
  Sets operation of NEC ESMPRO Agent (Windows Ver. 4.0 or later and Linux Ver. 4.2 or later).

4.1-2 How to access Web Component

1. Procedures

1. To access Web Component, move to URL mentioned below using Web Browser.
   http://*Web server name*/esmpro/index.html
2. Title page of Web Component is displayed.



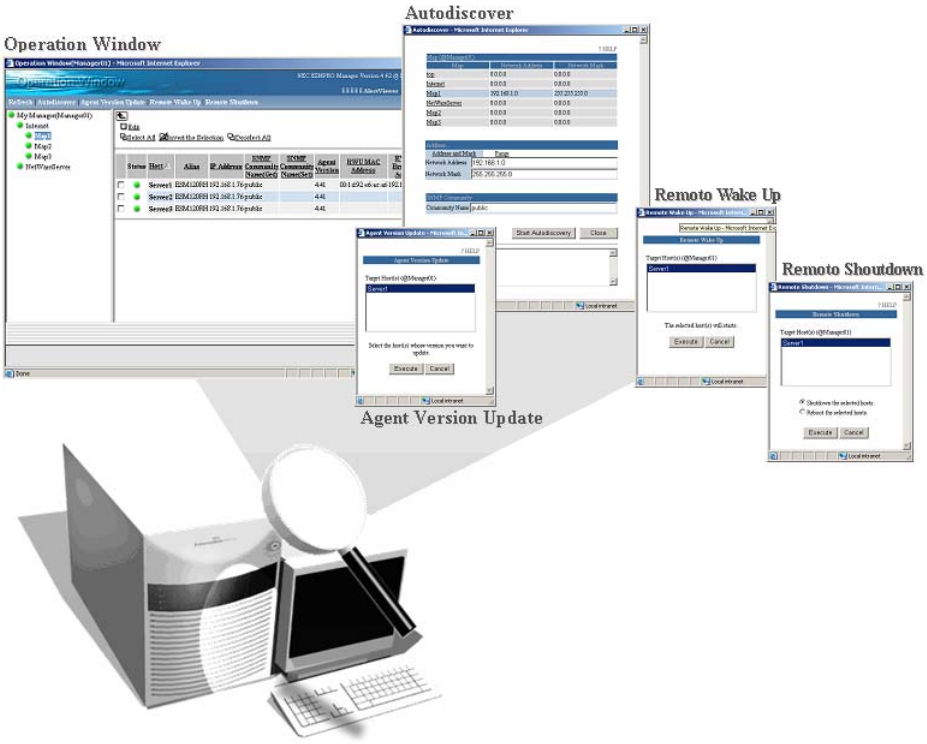
Title Page of Web Component

CAUTION

In Web Component, you can do user authorization by using function of IIS. When you use it, set IIS with care, taking security into account.

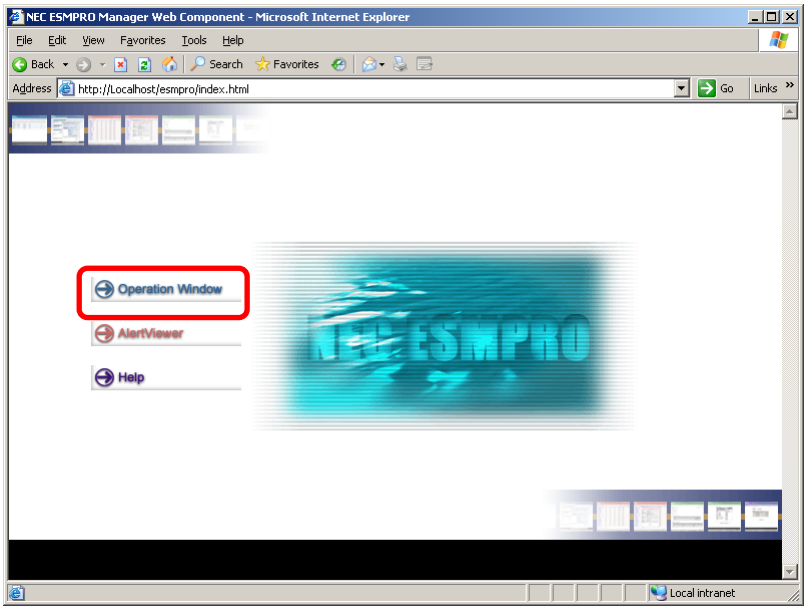
4.2 Display a list of Management Server (Operation Window)

Operation Window can display a list of host for management on network in map unit and perform property information/setting and status monitoring as well as activate various tools.



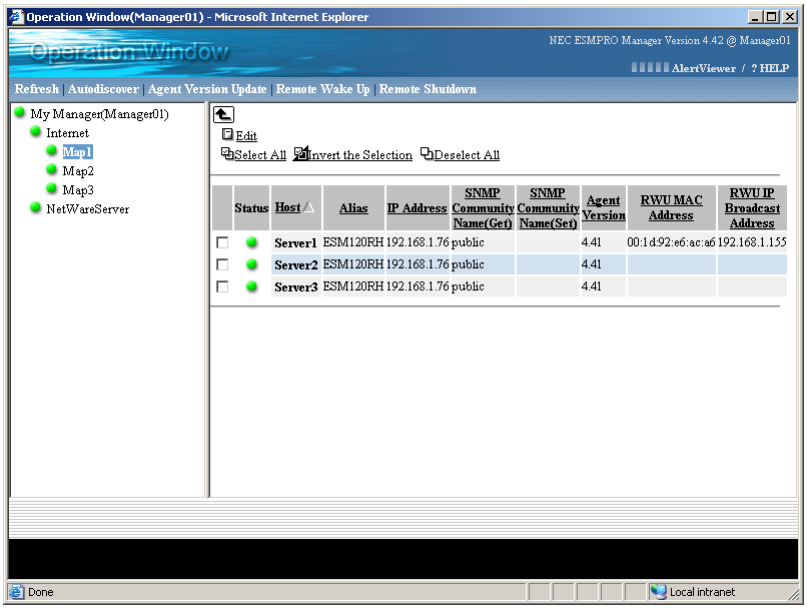
1. To start up Operation Window

1. Click [Operation Window] in title page of Web Component.



Title Page of Web Component

2. Operation Window activates.



Operation Window

POINT

Web Component uses the same Management information as NEC ESMPRO Manager itself. In case map and host have already registered in NEC ESMPRO Manager itself, they are displayed.

CAUTION

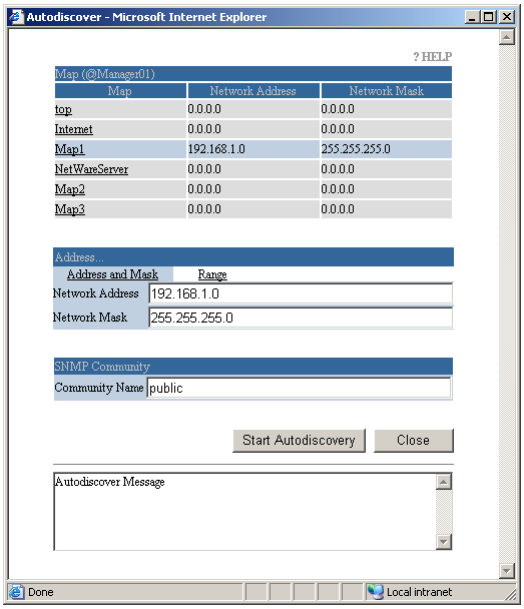
Web Component does not support Inter-Manager Communication. Even in case you set Inter-Manager Communication by NEC ESMPRO Manager itself, Web Component does not display the information of Neighbor Manager.

4.2-1 How to Register Server as Management Item

In order to register server to Operation Window, use Autodiscover function of Operation Window. In case the various information for management is specified, you can register host name and map name as well as necessary information manually.
However, in order to activate various tools from Operation Window, it is required to properly set Agent Version Property for registered managed server.

1. To execute Autodiscover

1. Activate Operation Window and select [Autodiscover] menu of menu bar.
2. Select map to register server for Autodiscover by [Map].
3. Select [Address and Mask] by [Address]. Either input the value meeting network in [Network Address] and [Network Mask] or select [Range] and input range of address.
4. Input proper community name in [SNMP Community].
5. Click [Start Autodiscovery] button.



[Autodiscover] Dialog

POINT

In case of opening Autodiscover Dialog, the map selected by left tree frame of Operation Window becomes the one for default.

CAUTION

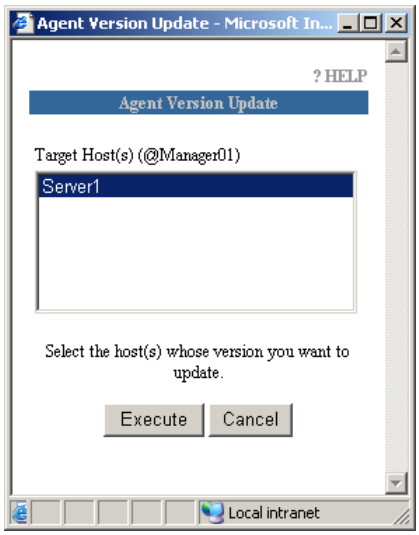
While you execute Autodiscover from NEC ESMPRO Manager itself or other Browser, please be noted that Autodiscover can not be executed.

PLUS 1

In case you want to edit map configuration flexibly, it is recommended you to operate by NEC ESMPRO Manager itself in advance. For the operation method, refer to "2.2 Easy Registration of Server for Management (Operation Window)".

2. How to update Agent version property

1. Check the checkbox of map including target host for Operation Window or target host and select [Agent Version Update] menu of menu bar.

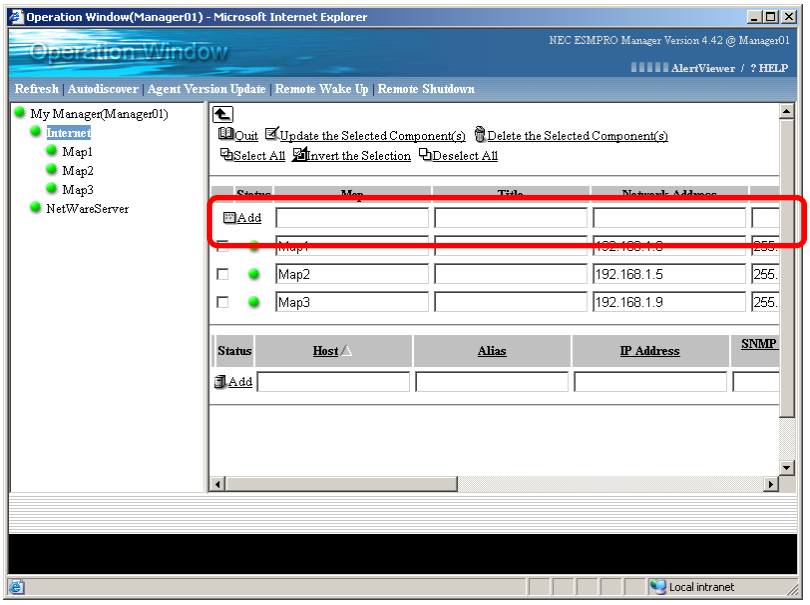


[Agent Version Update] Dialog

2. Select the host of a list of target host and click [Execute] button.

3. How to add map manually.

1. Select map to add.
2. Click "Edit" on the upper part of the list of map.
3. Input value in each item of input region to add map.

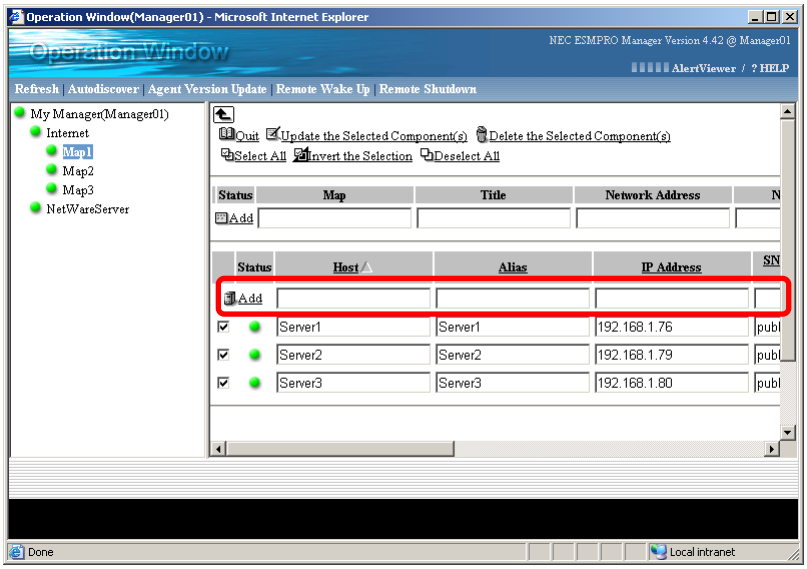


Edit Screen of Operation Window

4. Click "Add" of map list

4. How to add host manually

1. Select map to add.
2. Click "Edit" on the upper part of host list.
3. Input value for each item of input region to add host.

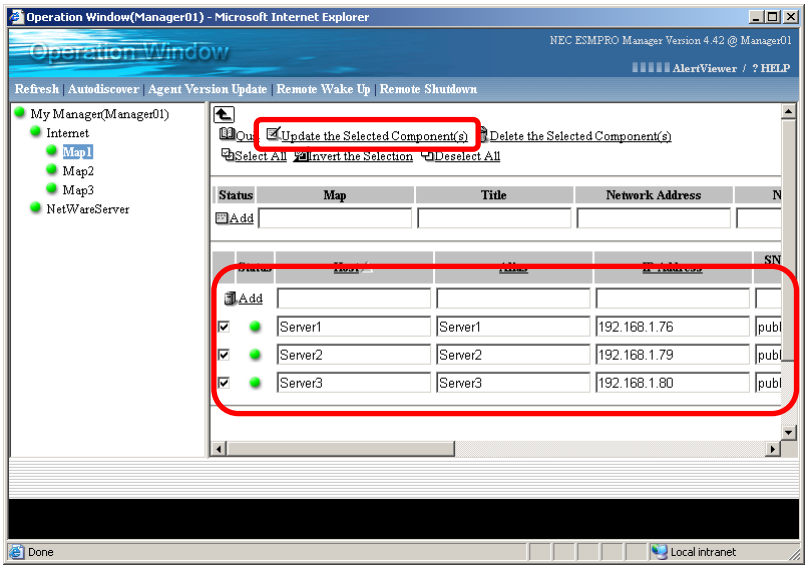


Edit Screen of Operation Window

4. Click "Add" of host list.

5. How to edit property of map and host

1. Click map to which map and host belong to edit.
2. Click "Edit" on the list of map and host.
3. Change Property of map and host to edit.
4. Click "Update the Selected Component(s)" on the list of map and host.



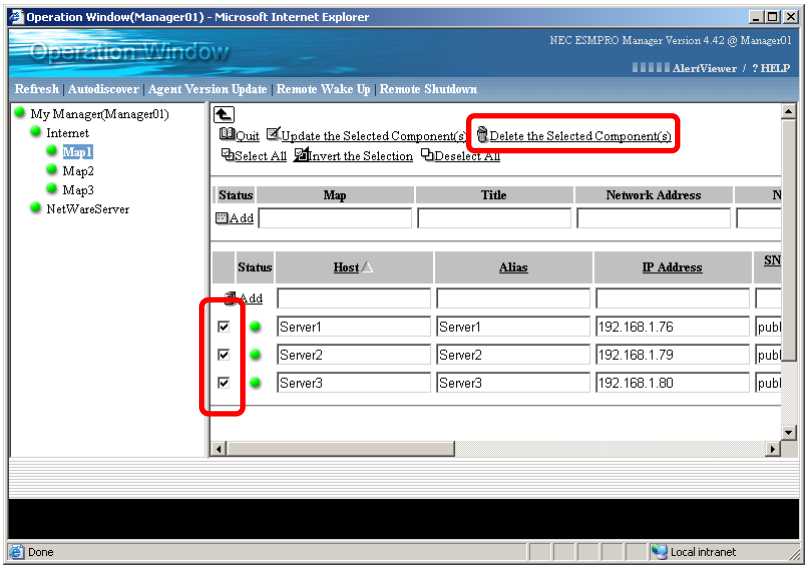
Edit Screen of Operation Window

POINT

After change of Property, when you move input focus to other part, relevant checkbox is automatically checked.

6. How to delete map and host

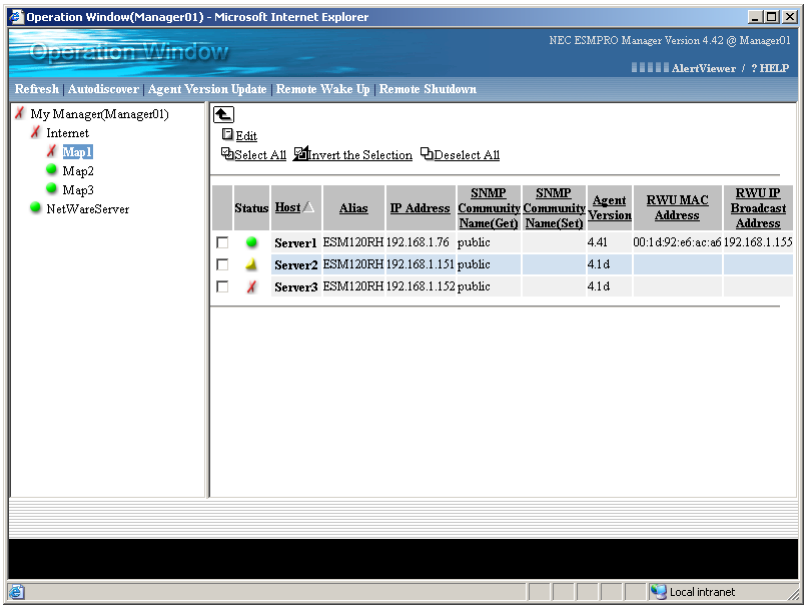
1. Select map to which map and host to be deleted belong.
2. Click "Edit" on the upper part of list of map and host.
3. Check the leftmost checkbox of map and host to delete.
4. Click "Delete the Selected Component(s)" on the upper part of list of map and host.



Edit Screen Operation Window

4.2-2 How to monitor status of server

For the server registered in 4.2-1, the status is automatically monitored and icon of Operation Window changes according to the status.



The icon of Operation Window is displayed according to status as follows:

Status	Icon
Normal	
Warning	
Abnormal	
Unknown	

POINT

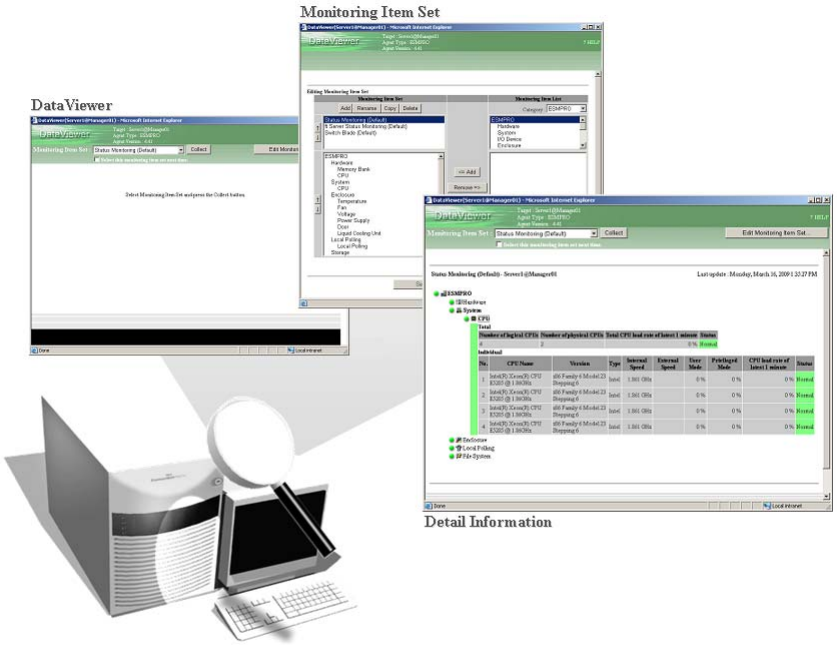
The list of management and status color is automatically updated per minute. However, each property information must be manually updated by "Refresh" function.

CAUTION

In case the managed server stops or in sleep status and some failure happens on network, the status becomes unknown.

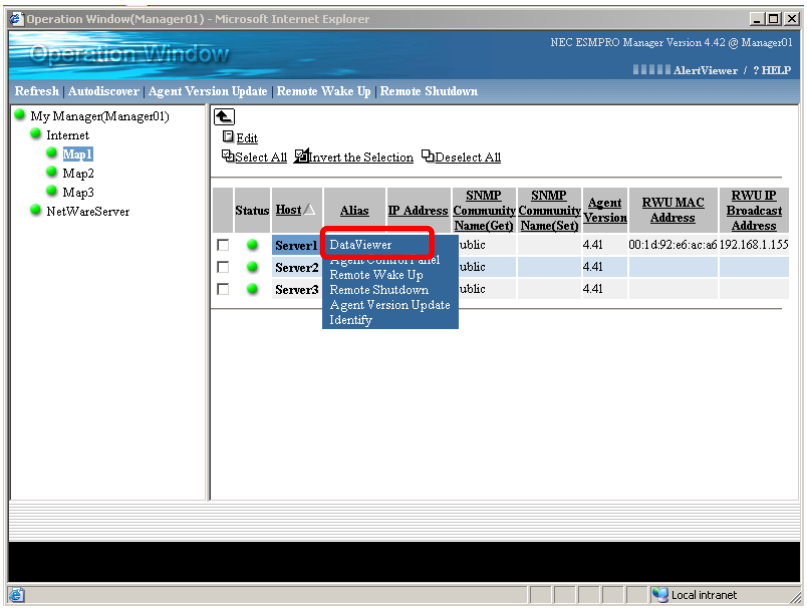
4.3 Display of Configuration Information of Server in Table Form (DataViewer)

DataViewer collects configuration information from the server installed NEC ESMPRO Agent and displays it in table form.



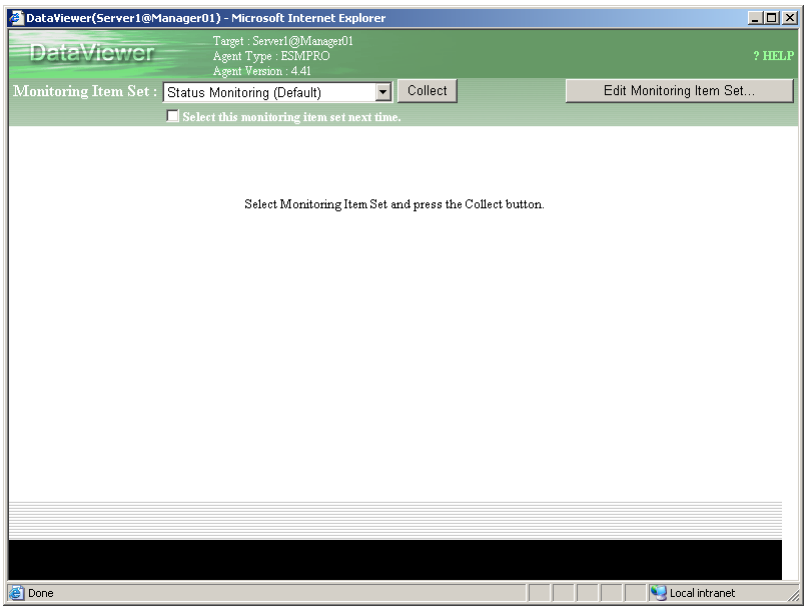
1. How to display configuration information of server

1. Move mouse cursor to how on Operation Window and click [DataViewer] of displayed menu.



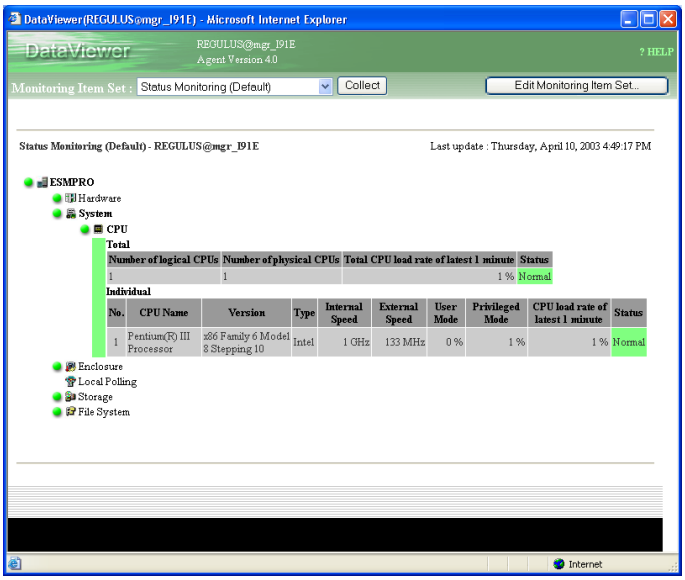
Menu of Operation Window

2. DataViewer activates.



DataViewer

3. Select Monitoring Item Set to monitor the list [Monitoring Item Set] of DataViewer and click [Collect] button.
4. The information of selected Monitoring Item Set is displayed.



Display of Server Information

CAUTION DataViewer of Web Component supports NEC ESMPRO Agent Ver. 3.7 or later. Please be noted that for other than these versions, of NEC ESMPRO Agent, DataViewer can not display information.

CAUTION To activate DataViewer, Property "Agent Version" of target host is required to be set correctly. For details, refer to "4.2-1 2. How to update agent version property".

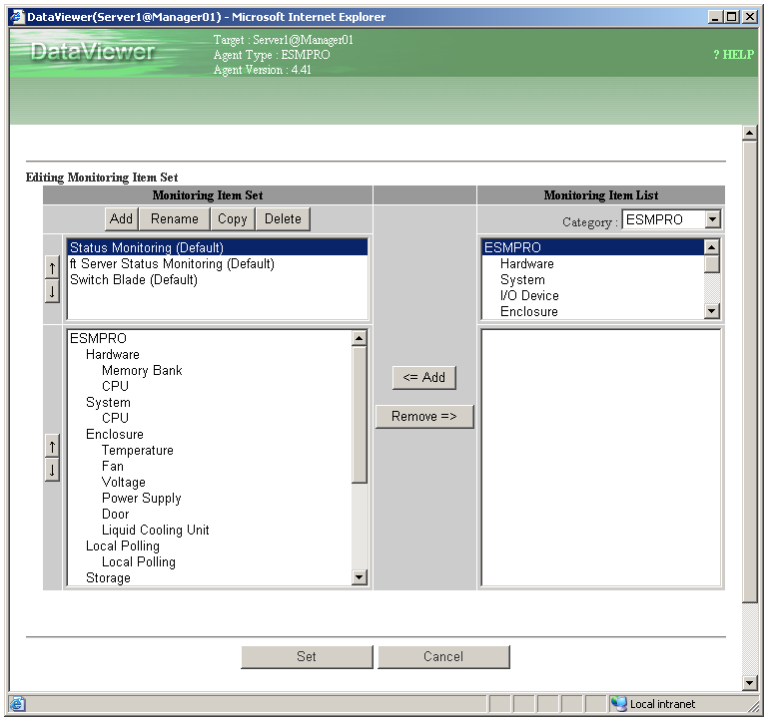
CAUTION It does not update to latest information regularly.
To refer to the latest information, click [Collect] button and collect the information.

CAUTION A part or all the detailed information may not be displayed, depending on server or version of NEC ESMPRO Agent..
Light-colored displayed item and the blank item in detailed information table, on account of the reason that they are not supported and for any other reasons, are those NEC ESMPRO Agent did not return the information.

2. How to customize monitoring item set

Monitoring Item Set can be customized. By defining Monitoring Item Set for your purpose, you can manage it flexibly.

1. Click [Edit Monitoring Item Set] button in upper right portion of DataViewer.
2. Edit Screen of Monitoring Item Set is displayed.



Edit of Monitoring Item Set

3. Click [Add] button of Monitoring Item Set.
4. As Input Dialog of Monitoring Item Set Name to add is displayed, input Monitoring Item Set Name and click [OK] button.
5. Select the item to monitor from right-hand side of Monitoring Item List and click [<= Add] button. Then it is added to left-hand Monitoring Item Set.
6. Add all the items you want to monitor to Monitoring Item Set and click [Set] button.

POINT

Monitoring Item Set can register up to 100 items.

POINT

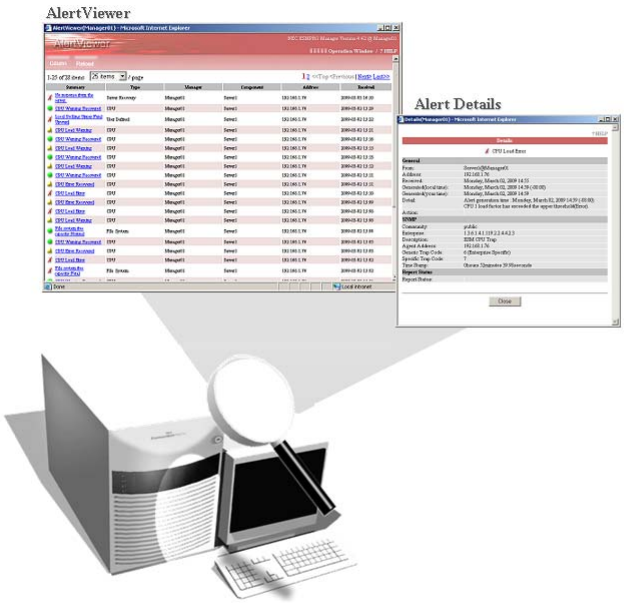
Default defines the following three, [Status Monitoring (Default)] which includes all the items of status information, [ft Server Status Monitoring (Default)] and [Switch Blade (Default)].

PLUS 1

When you create new monitoring item set, by using [Copy] button, you can edit monitoring item set based on existing one.

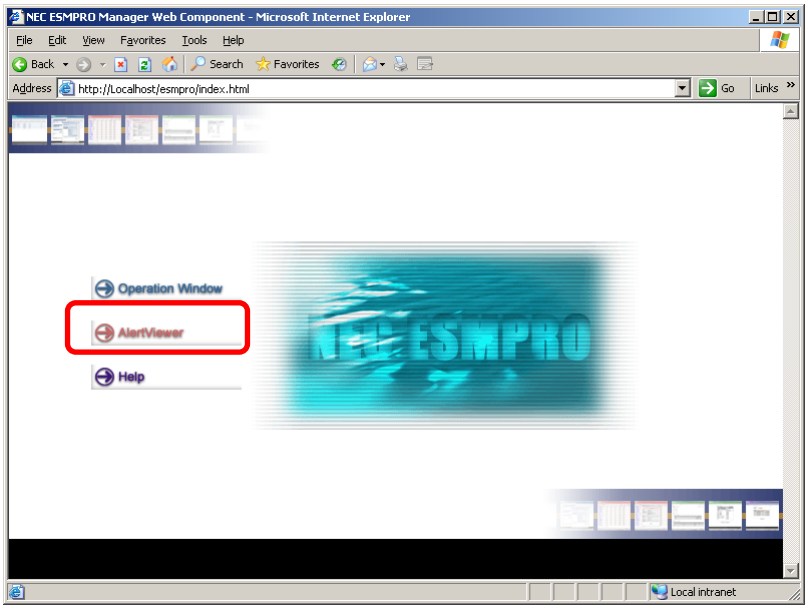
4.4 Reference of Failure Information of Server (AlertViewer)

You can check alert sent to NEC ESMPRO Manager by AlertViewer on Web Browser.



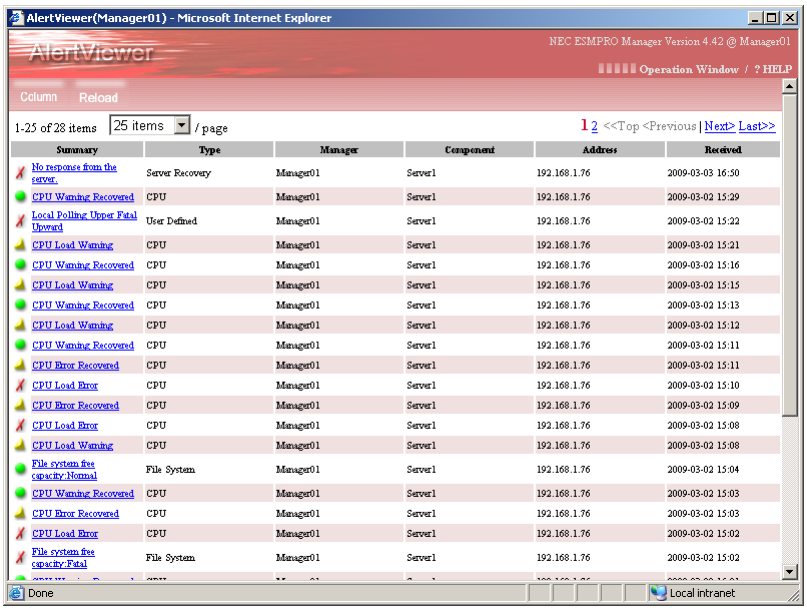
1. How to activate AlertViewer

1. Click AlertViewer of title page of Web Component.



Title Page of Web Component

2. AlertViewer activates and alert received is displayed.

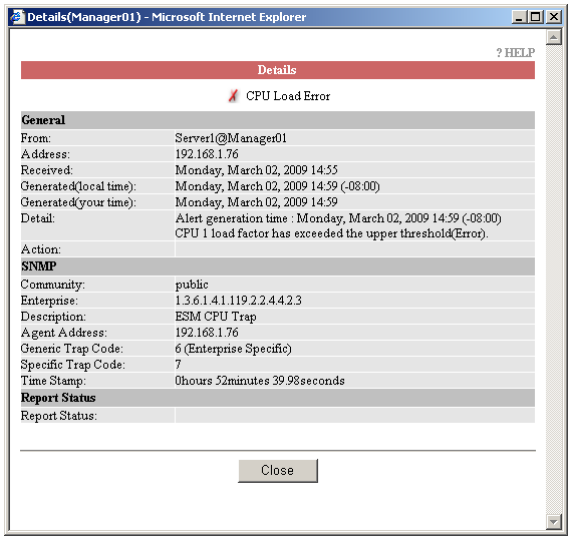


AlertViewer

There is no function for newly arriving alert. In case you want to refer to the latest alert, click [Reload] button and reload alert information.

2. How to refer to detailed information of alert

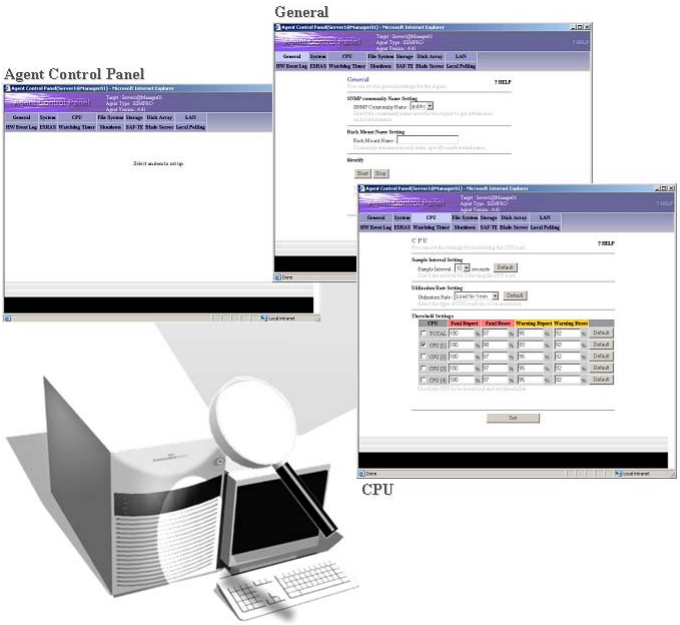
1. Click [Summary] of alert you want to refer to details.
2. The Window of details of alert are opened and the detailed information of alert is displayed.



[Details] Dialog

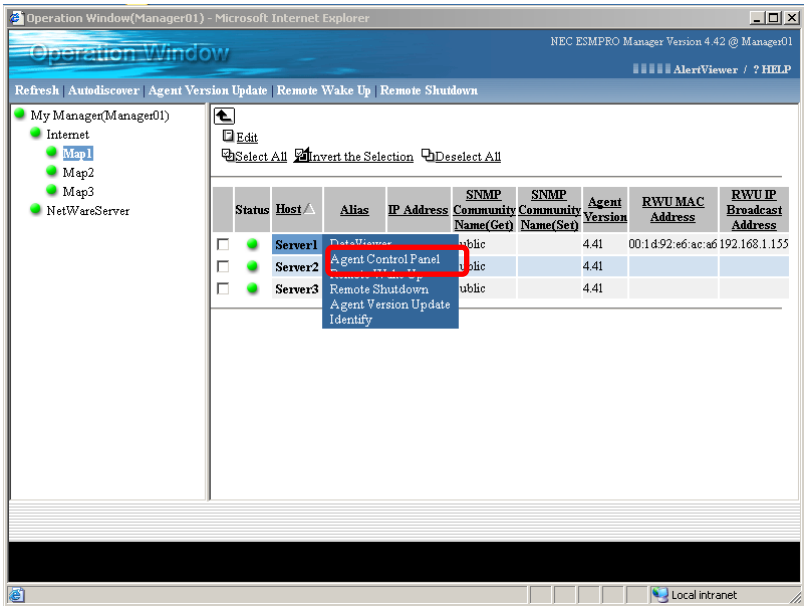
4.5 Remote Setup of Server Monitoring (Agent Control Panel)

By using Agent Control Panel, you can change the setting about NEC ESMPRO Agent.



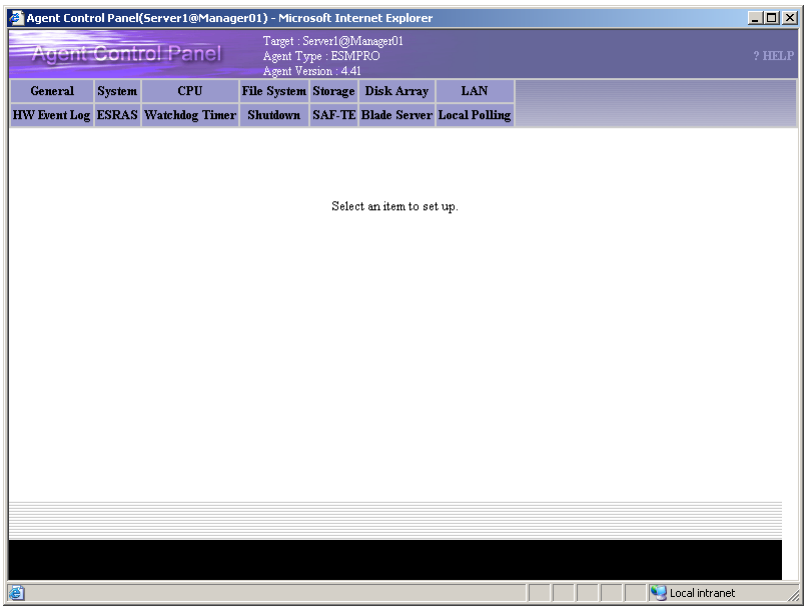
1. How to start up Agent Control Panel

1. Move mouse cursor to component on Operation Window and click "Agent Control Panel" of displayed menu.



Menu of Operation Window

2. Agent Control Panel activates.



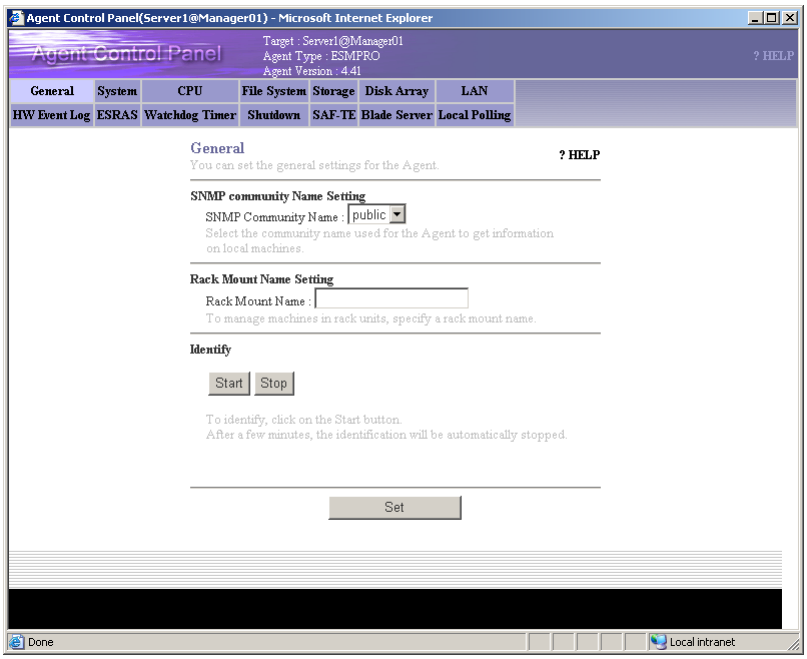
Agent Control Panel

CAUTION

To activate Agent Control Panel, Property of Target Host [Agent Version] is required to be set properly For details, refer to "4.2-1 2. How to update agent version property".

4.5-1 How to change setting

1. To change setting, click the item you want to change by setting item tab at the top of Agent Control Panel.



2. As the setting screen about the setting item you selected is displayed, select setting item or input.
3. Click [Set] button.

CAUTION

It does not update to latest information regularly.
In case you want to refer to latest information, click the tab of the item you want to refer to again and collect information.

CAUTION

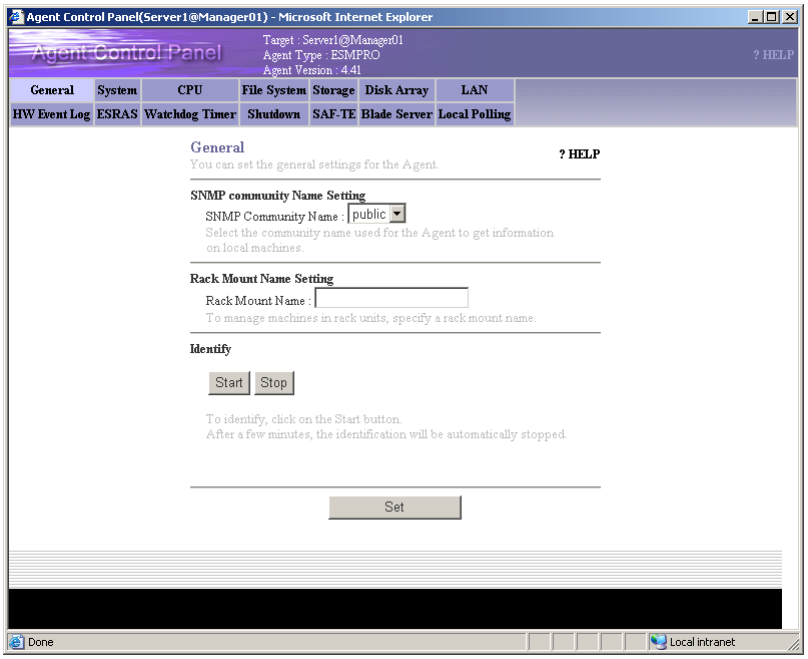
Depending on server, a part of information may not be displayed or set
The items display light-color are those that NEC ESMPRO Agent does not return information on account of the reason that it is not supported and for any other reasons.

POINT

Depending on server, tem tab may not be displayed or may not be able to be selected. Moreover, on the displayed setting screen, a part of or the entire item may not be displayed or may not be able to be set.

1. General setting of NEC ESMPRO Agent

Sets the general setting such as SNMP necessary for collecting information.



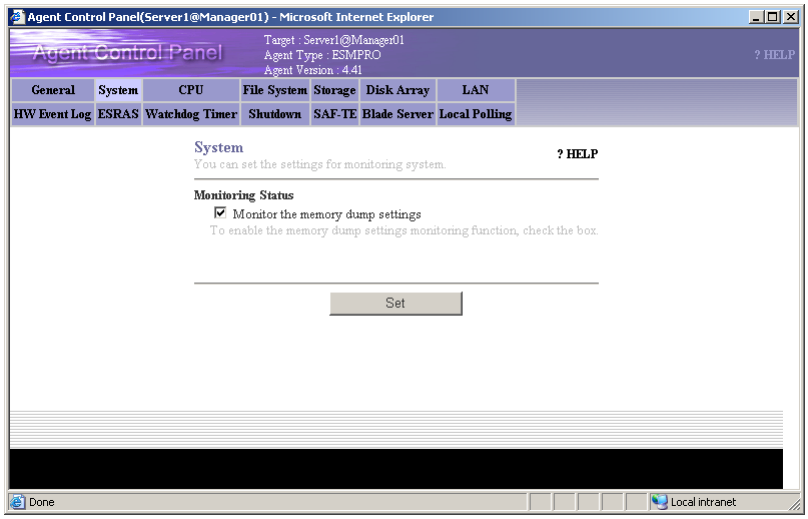
General Setting Screen

CAUTION

For Identify function, refer to "3.21 Chassis Identify Function".

2. Dump setting monitoring

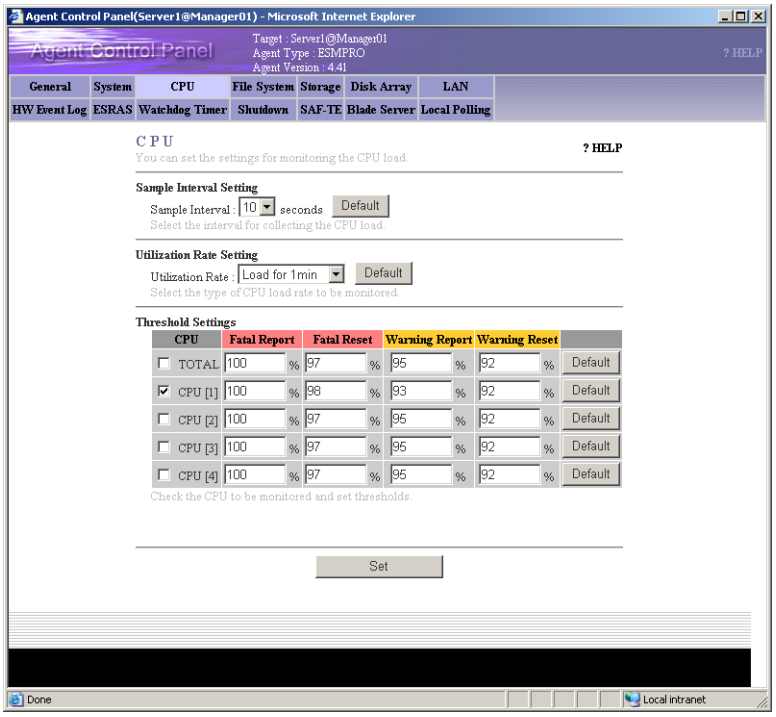
Monitors dump setting of memory dump to be collected at the time of failure. Memory By monitoring the setting of system about dump, you can prevent the problem that you can not collect memory dump necessary to investigate the cause of failure.
As for dump setting that memory dump can not be collected normally, you can confirm it by alert report to NEC ESMPRO Manager.



System Setting Screen

3. Setting of CPU monitoring

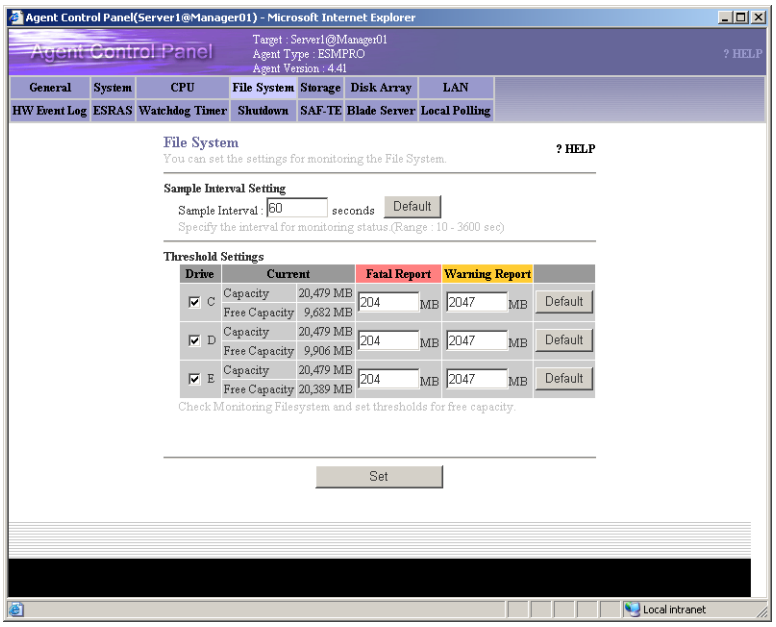
Monitors rate of CPU load. By monitoring, you can detect high load state of CPU at an early stage. You can confirm the status of CPU load by status color of DataViewer or alert report to NEC ESMPRO Manager.



CPU Setting Screen

4. Setting of file system monitoring

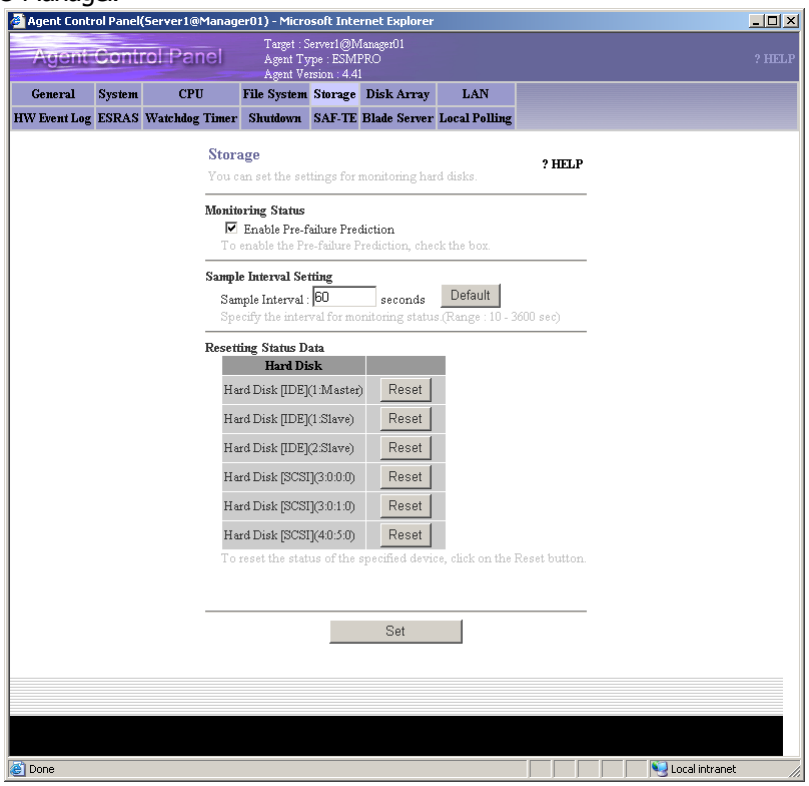
Monitors free space of file system. By monitoring, you can detect lack of free space at an early stage. You can confirm the lack of free space by status color of DataViewer or alert report to NEC ESMPRO Manager.



File System Setting Screen

5. Setting of storage/disk array monitoring

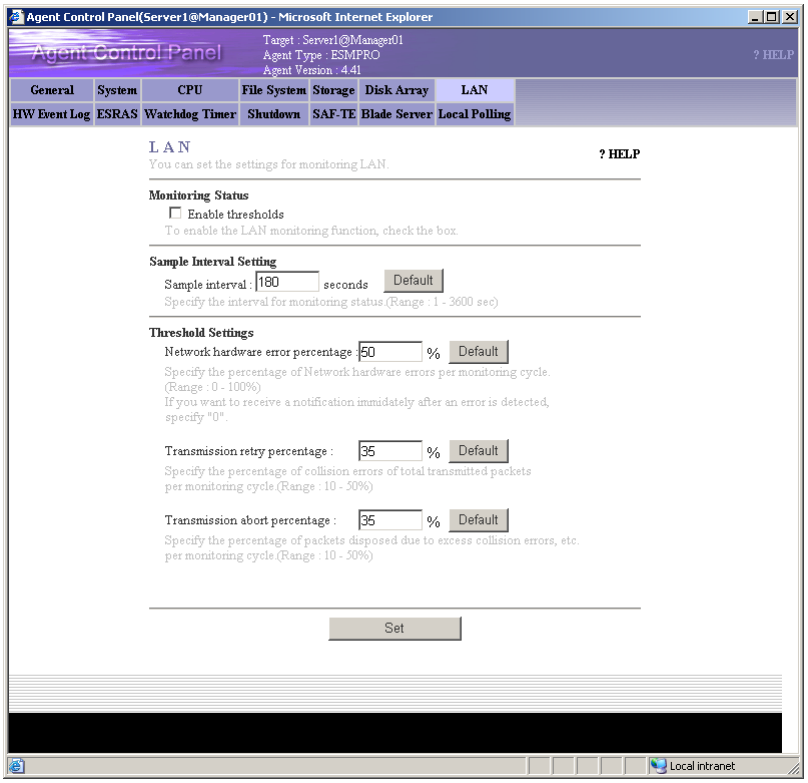
By preventive maintenance function for hard disk, you can monitor failure of hard disk. As you can recognize it before hard disk actually fails, "Preventive exchange before hard disk fails" can be used. You can confirm the failure status of hard disk by status color of DataViewer or alert report to NEC ESMPRO Manager.



Storage Setting Screen

6. Setting of network (LAN) monitoring

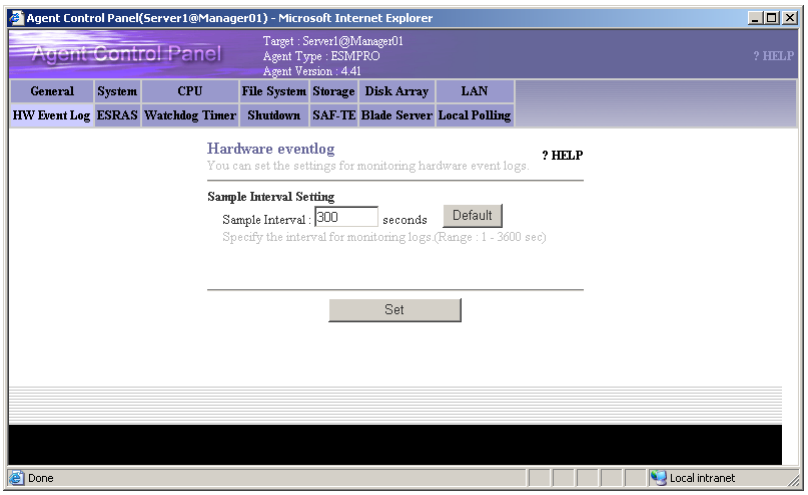
Monitors packet which server sends and receives. By monitoring of packet, you can detect network trouble, high load of network and lack of server resource.
As for failure about LAN, you can confirm alert report to NEC ESMPRO Manager or Event Log of system.



LAN Setting Screen

7. Setting of hardware Event Log monitoring

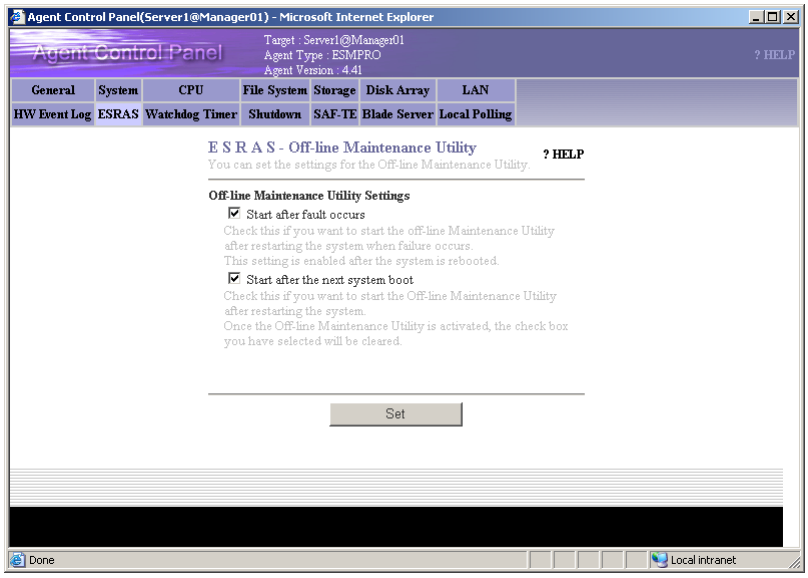
Set Event Log detected by hardware Level.



HW Event Log Setting Screen

8. Setting of ESRAS – Off-line maintenance utility

Set start-up of Off-line Maintenance Utility. You can determine preventive maintenance of hardware and failure by Off-line Maintenance Utility, referring to various Event detected by hardware.

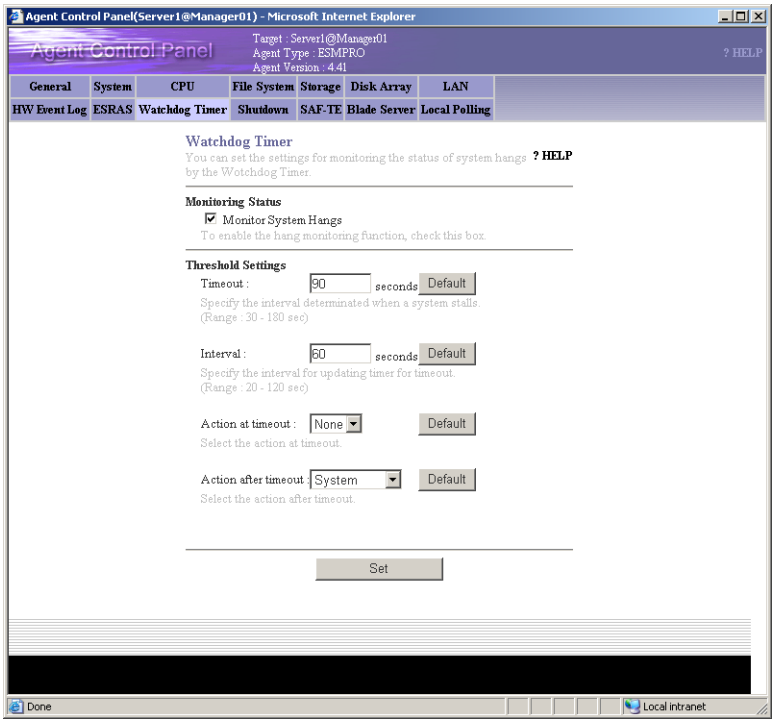


ESRAS Setting Screen

9. Setting of Watchdog Timer

This monitors system stall. For the system operating automatically and unmanned by alert monitoring, you can minimize the effect to shutdown time and operation of server at the time of system alert occurrence server.

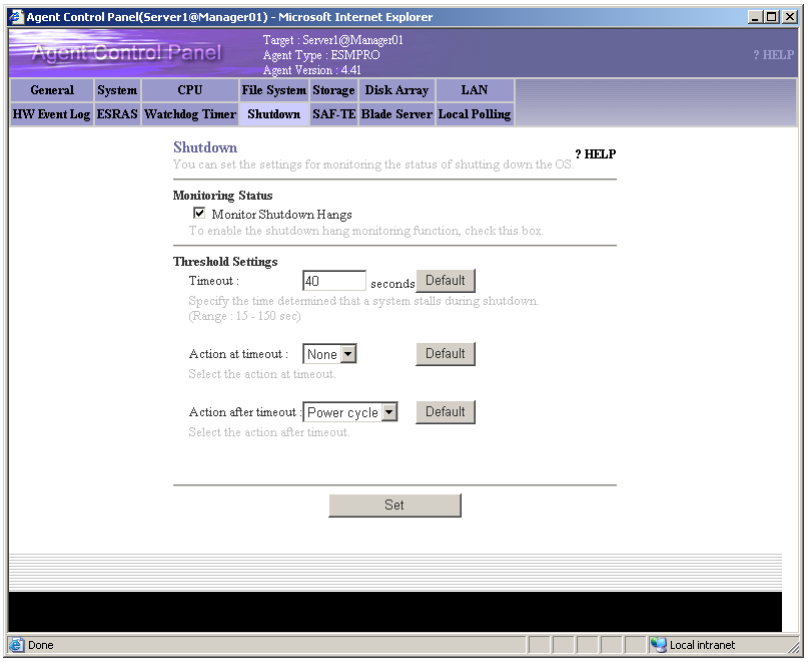
System Alert can be confirmed by alert report to NEC ESMPRO Manager.



Watchdog Timer Setting Screen

10. Setting of shutdown

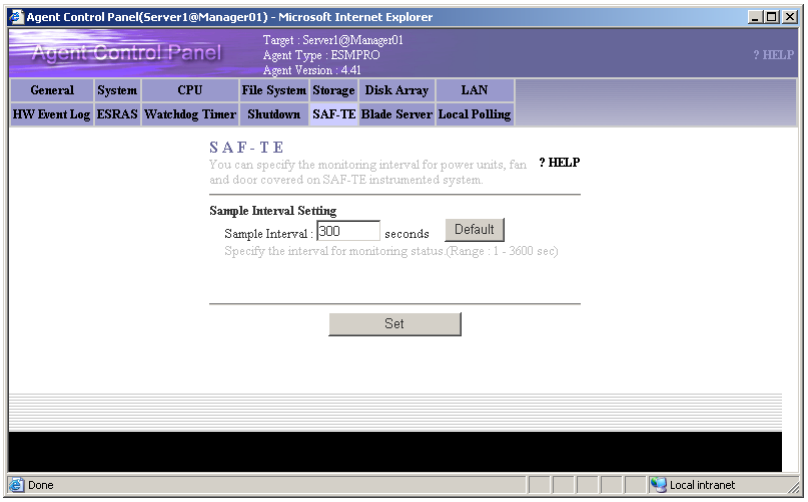
This monitors shutdown process of OS.
You can monitor whether alert process of OS is normally finished.
Stall of alert can be checked by alert report to NEC ESMPRO Manager.



Setting Screen of Shutdown

11. Setting of SAF-TE

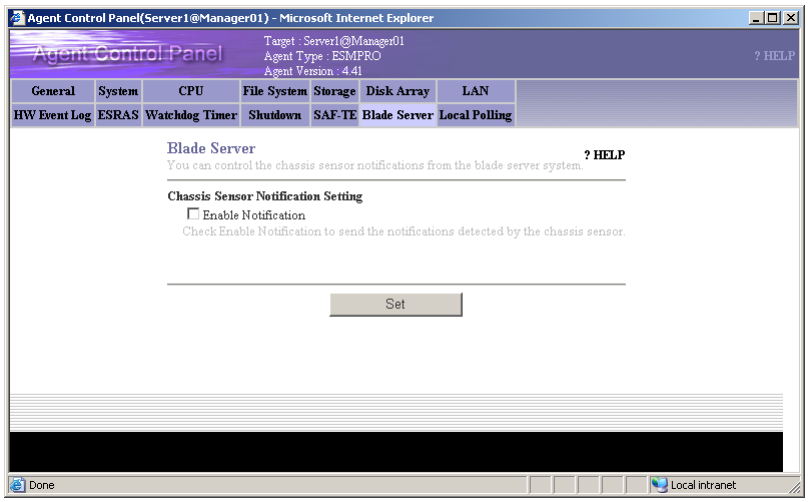
Here you set the monitoring concerning power, fan and door to be monitored by SAF-TE.



SAF-TE Setting Screen

12. Setting of alert suppression of blade server

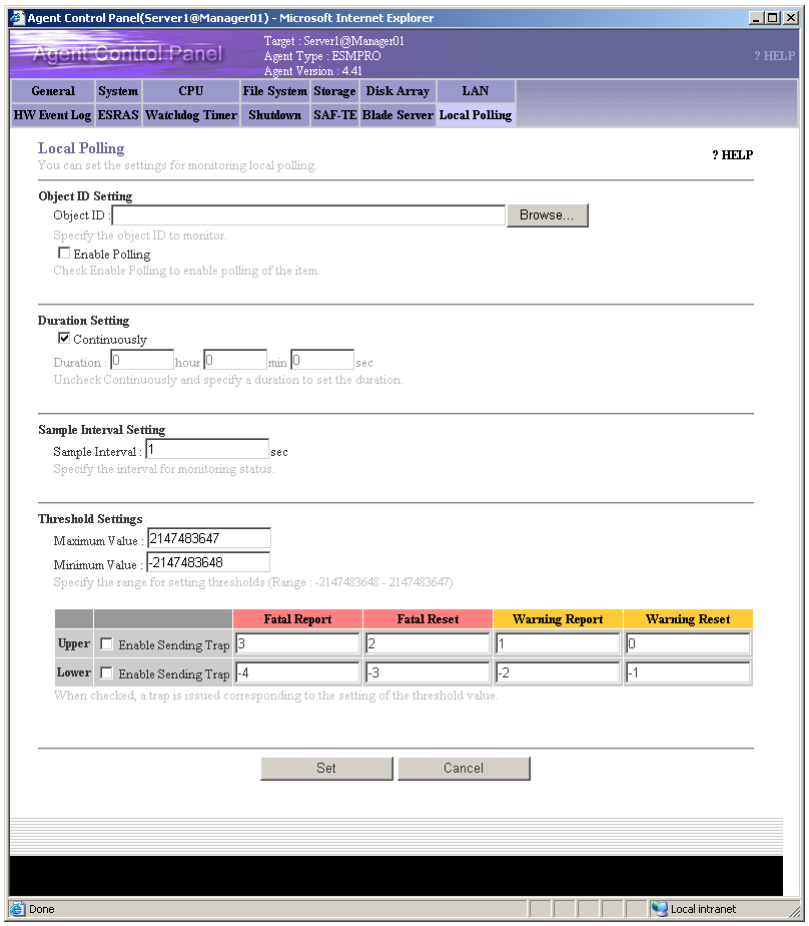
Sets alert of blade server.
Blade server has sensor (Chassis Sensor) which is common to all the blade chassis as alert of Event for sensor is reported from each NEC ESMPRO Agent, alert of Event is made in duplicate.
By setting alert, you can restrain these alerts.



Blade Server Setting Screen

13. Setting of local polling

Monitor items for monitoring set by local polling.
By using Local Polling function, setting threshold, threshold monitoring, and alert report can be made for even items which do not have threshold setting button.
You can confirm the status of item for monitoring by status color and alert report to NEC ESMPRO Manager of DataViewer.



Local Polling Setting Screen

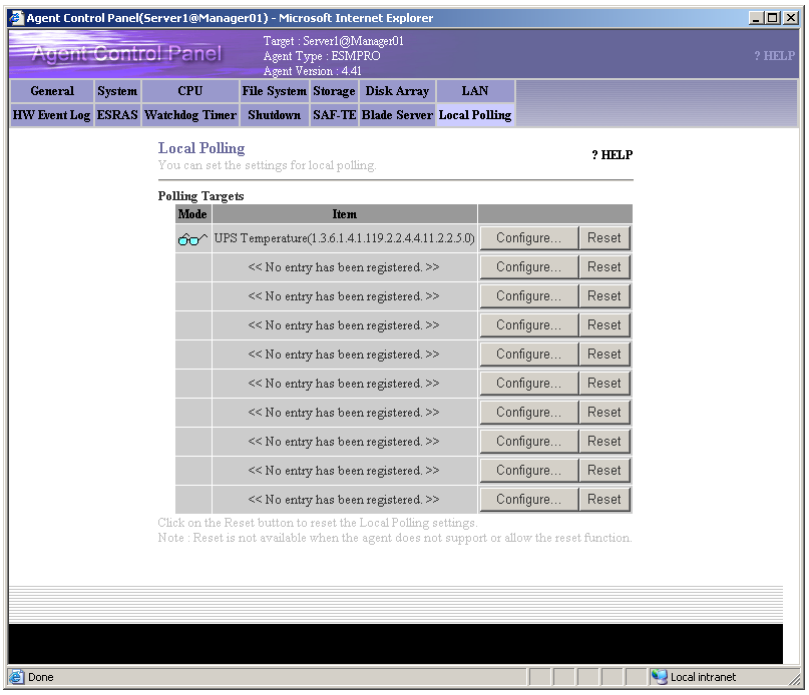
KEYWORD

Local Polling

Local Polling means function to monitor optional Item (integer value only) not supporting GUI of DataViewer. This is called "Local Polling" because it monitors by agent (Local) according to the set information. It can set threshold and have server status color reflected and generate agent, meeting system environment.
However, special knowledge and MIB information of Polling Target Item is required for this setting.

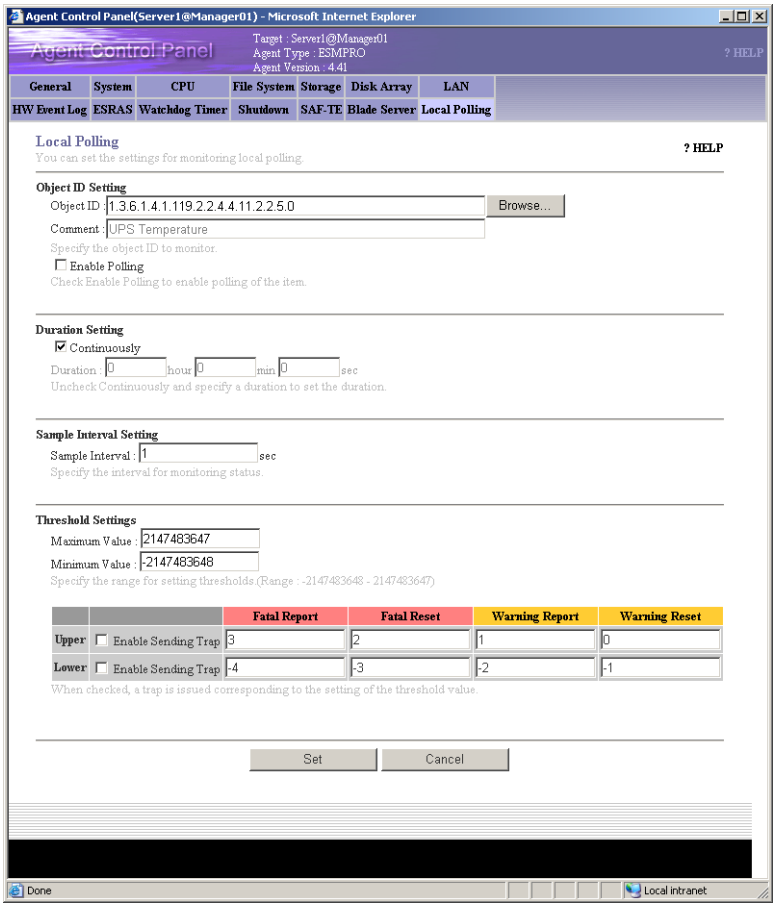
13.1 How to use local polling function

1. Click [Local Polling] of item tab.



Screen of Polling Target

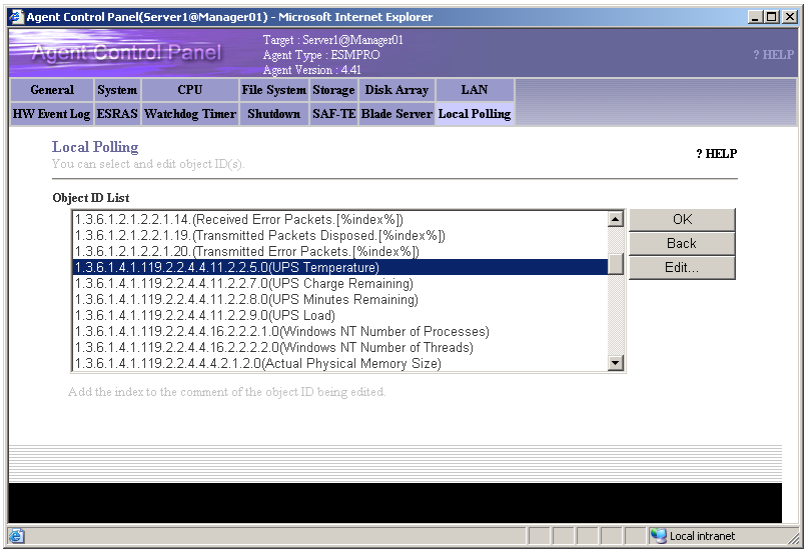
2. Click [Configure…] button of Polling Target field you want to register or change.



Local Polling Setting Screen

3. Input Object ID of MIB in [Object ID] entry field and click [Browse…] button. You can also select

from the MIB list set beforehand.



4. Set [Duration], [Sample Interval], [Maximum Value] and [Minimum Value].
5. Set threshold value.
6. For Local Polling, value of Upper and Lower respectively for monitoring item can be set. For instance, as temperature needs right range of value, you need to set values for Upper and Lower. Meanwhile, for CPU load and others, you need to set Upper value only because it can be regarded as malfunction when it exceeds any rate of load.
   * When monitored item value exceeds (falls below) Upper (Lower) value, it is determined as malfunction and warning and the status changes. Upper (Lower) Reset value restores the result of determination of malfunction and warning when it exceeds (falls below) this value.
7. You can set whether you execute polling to this MIB by [Enable Polling]. Only when you checked here, the value set by [Sample Interval] becomes valid.

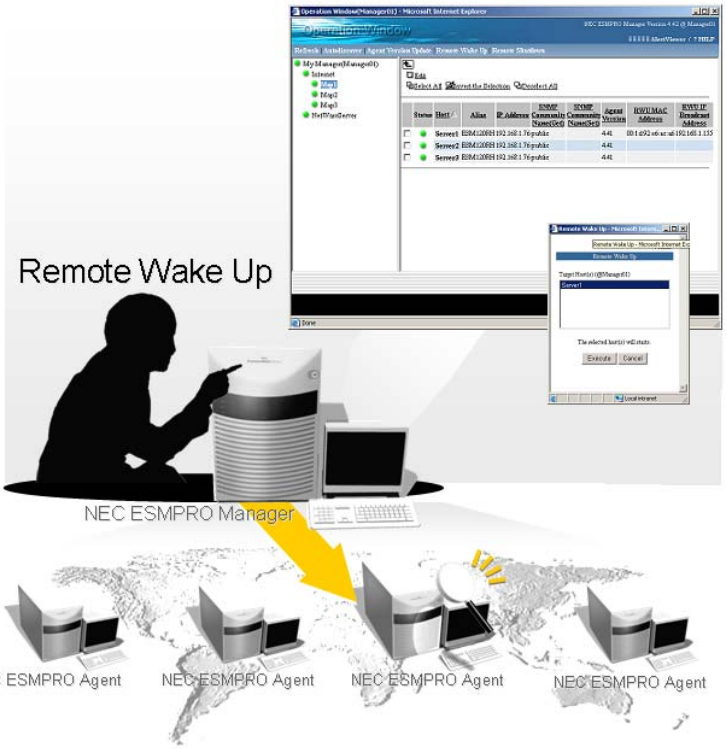
POINT

In case other SNMP related product (SNMP Agent) is installed in server, you can monitor MIB defined by the product in the same manner mentioned above.
However, in order to designate object ID on Local Polling Setting Screen, special knowledge is required because it is necessary to investigate what kind of MIB is defined on the product.

Ex. : Monitors database engine having SNMP Agent function by NEC ESMPRO Manager.

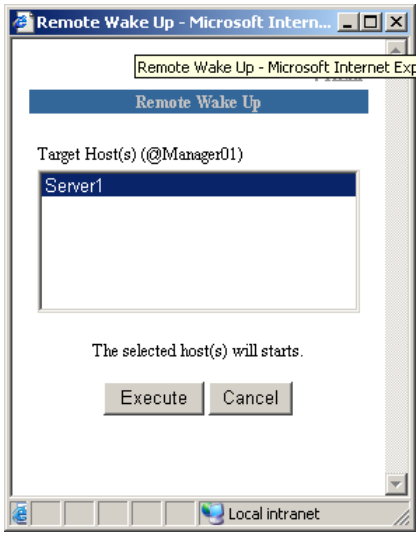
4.6 Remote Start-up of Server (Remote Wake Up)

System stops on network can be remotely started up.



1. To start up server by remote wake up function

1. Check the checkbox of Target Host or map including Target Host on Operation Window and select [Remote Wake Up] menu of menu bar.



[Remote Wake Up] Dialog

2. Select host of the list of Target Host and click [Execute] button.

CAUTION

To use Remote Wake Up function,[RWU MAC Address]of property of Target Host and [RWU IP Broadcast Address] are required to be set adequately. For setting method of property, refer to ”4.2-1 5. How to edit property of map and host”.

CAUTION

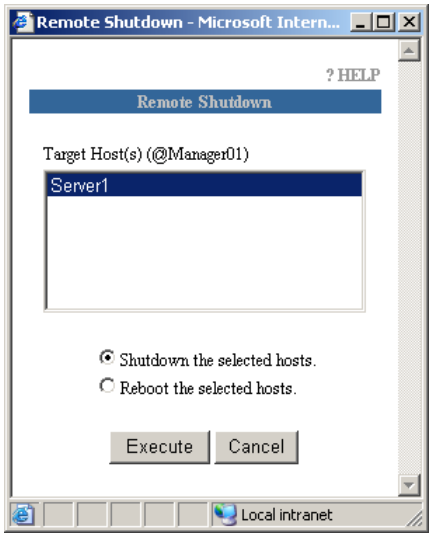
To use Remote Wake Up function, it is necessary to set so that Target Host accepts Remote Wake Up. For setting method, refer to instructions of each equipment.
Moreover, when you want to start up over router. direct broadcast is required to be set for router. For details, refer to instructions of the router.

4.7 Remote Shutdown of Server (Remote Shutdown)

You can shutdown system operating on network remotely.

1. How to shutdown server by remote operation

1. Check the checkbox of target host of Operation Window or target map including host and select [Remote Shutdown] menu of menu bar.



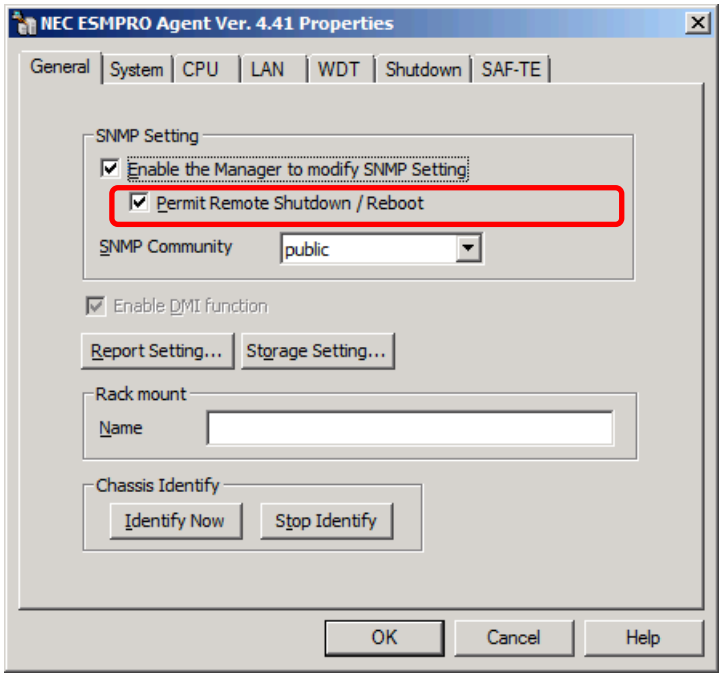
[Remote Shutdown] Dialog

2. Select host of the list of Target Host and click [Execute] button.

2. Preparation of server

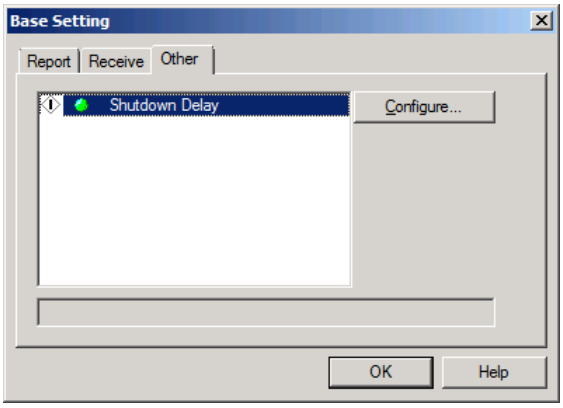
NEC ESMPRO Agent of server which is Target Host is required to be set for Remote Shutdown

1. Select NEC ESMPRO Agent of control panel.
2. Check [Permit Remote Shutdown / Reboot] in the setting field of [General] Tab.



Control Panel of Agent [General]

3. Press [Report Setting…] button of [General] tab and open screen of AlertManager.
4. Select [Base Setting…] from [Setting] menu and open Base Setting Screen. Confirm that [Shutdown Delay] Item is green icon as below. In case it is red, click icon and change it to green.



[Base Setting] Dialog Box

5. Close the screen pressing [OK] button.