

Title: Change in RAID monitoring and reporting method

If a VMware ESXi environment uses the RAID controller and also 480GB SSD adapter board for OS boot described in the list in "IMPORTANT" below, the RAID monitoring report method will be changed to SNMP trap reporting. In that case, WBEM provider will not be used. Read "How to decide if WBEM provider needs to be uninstalled" described later, and if you find the WBEM provider uninstallation is necessary, uninstall WBEM provider in the ESXi environment.

- For SNMP Trap monitoring, use ver. 3.7 or later for the Express Report Service (MG) and ver.1.6.1 or later for the SNMP Trap notification table (ilo_jp.mtb) for NEC ESMPRO Manager iLO-equipped devices.

IMPORTANT

- Applicable RAID controllers
 - RAID controllers with firmware of revision 4.11 or later: N8103-189/190/191/192/193/194/195/196/201
 - RAID controllers regardless of firmware revision: N8103-238
- Applicable 480GB SSD adapter board for OS boot
 - 480GB SSD adapter board for OS boot regardless of firmware revision: N8103-239

How to check the firmware revision of the RAID controller

- To check under the NEC ESMPRO Manager,
 - go to its Constitution Information -> Storage -> Controller -> General
- To check under the iLO Web interface,
 - go to its Firmware & OS Software -> Firmware
 - or
 - go to its System Information -> Storage -> Storage Information -> Controller Details -> Details -> FirmwareRevision

How to check if WBEM provider has already been installed

- Execute the following command:
 - In the case of ESXi 6.5 and 6.7

```
# esxcli software vib list | grep -i smx-provider
```
 - In the case of ESXi 7.0

```
# esxcli software component get -n smxProvider
```

How to decide if WBEM provider needs to be uninstalled

- WBEM provider must be uninstalled
 - If Starter Pack version is S8.10-010.01 or later.
 - If RAID controller firmware is 4.11 or later.
- WBEM provider do not have to be uninstalled
 - If the clean installation of ESXi 7.0u3 or later has been performed, WBEM provider is not installed. In that case, starting up WBEM service is necessary. Perform the steps except Steps 3 and 4 described in "How to uninstall WBEM provider".
 - Use WBEM provider if ESXi 6.5, 6.7, 7.0, 7.0u1, or 7.0u2 are installed, Starter Pack version is less than S8.10-010.01, and RAID controller firmware is less than 4.11.

How to uninstall WBEM provider

1. Start VMware Host Client. Connect to ESXi as a user with the administrator privilege, and enter its maintenance mode.
To switch ESXi into the maintenance mode, connect to ESXi with VMware Host Client, right-click [Host] in [Navigator], and select [Enter Maintenance Mode].

2. From the direct console, select [Troubleshooting Options]. Enable access to ESXi Shell via SSH or the direct console, and log into ESXi Shell as a user with the administrator privilege. (In order to log into ESXi shell from the direct console, press [Alt] + [F1].)
3. Execute the following command to uninstall WBEM provider and Smart Storage Administrator CLI for VMware ESXi:

```
# esxcli software vib remove -n smx-provider
```
4. Execute the reboot command to restart the server.
5. Execute the following command to start WBEM Service:

```
# esxcli system wbem set --enable true
```
6. Select [Troubleshooting Options] from the direct console, and then return the ESXi Shell access settings to their original values. In addition, connect to ESXi from VMware Host Client, and then exit the maintenance mode.

Notes

- Express Report Service (MG) on iLO-equipped devices allows you to choose between SNMP trap monitoring and IML monitoring, which are prepared in the iLO.zip file as below:

Downloads - Express5800 Server Series

<http://www.58support.nec.co.jp/global/download/>

ESMPRO Tab

-> Express Report Service (MG) (Windows) Receiving Information

-> iLO.zip

Although SNMP Trap is more responsive than IML monitoring, IML monitoring is generally recommended because the events to be reported are limited in SNMP Trap.

If IML monitoring is selected, the failure report on the RAID controller and 480GB SSD adapter board for OS boot is not sent to EXPRESS report service (MG). Therefore, if failure such as a startup failure occurs, the failure report needs to be checked manually using the iLO5 WebUI (IML log). Note that the failure report is sent to NEC ESMPRO Manager (Alert Viewer).

If such failures require to be reported to Express Report Service (MG), choose SNMP trap monitoring.

On the NEC ESMPRO Manager managed server (Windows or Linux), if not only Express Report Service, but also the notification by the Express Report Service (MG) by SNMP Trap monitoring is enabled, both notifications are sent to the monitoring center.

- If you uninstall WBEM provider on an ESXi server, the RAID system management function of NEC ESMPRO Manager will not work. Therefore, when registering an ESXi server with the WBEM provider uninstalled under NEC ESMPRO Manager, set the RAID system management function to "Disabled".

- After the WBEM provider is uninstalled, the vSphere Client no longer displays the "Storage Sensor" information in "Hardware Health". Instead, the following warning will be displayed:

The Small Footprint CIM Broker Daemon (SFCBD) is running, but no data has been reported.
You may need to install a CIM provider for your storage adapter.

- For storage health, see the following information:

- Storage Information (System Information -> Storage) on the iLO Web interface
- As for the server registered for iLO monitoring under NEC ESMPRO Manager, see the information under the subtree "storage " of the configuration information in NEC ESMPRO Manager.