Installing the XP Command View Advanced Edition Device Manager server

This guide assumes that Windows is the OS on the management server. Be sure that the requirements for the CPU, memory, disk capacity, and Windows OS are already satisfied. For Windows system requirements, see the HP StorageWorks XP Command View Advanced Edition software Device Manager server installation and configuration guide.

Preparing for installation

Before starting the installation, do the following:

Check the port settings

Be sure that no other application is using the following ports:
162, 2001, 23015 to 23018, 23032, 45001 to 49000

Check security programs

If any security monitoring or process monitoring program has been installed, stop the program, or change the settings of the program so the program does not interfere with the installation of XP Command View Advanced Edition Device Manager server.

If a virus detection program has been installed, stop the program.

Close the Services window

Close the Services window. If the Services window is still open after starting the installation, an attempt to register services might be failed.

Disable the Data Execution Prevention function

For Windows Server 2003 SP1 or later, or Windows XP SP2 or later, you must register the installation program as an exception to Data Execution Prevention:

1. Log on to the system as a user with Administrator permissions.
2. Insert the CD.
3. From Control Panel, choose System.
4. On the Advanced tab, select the Settings under Performance.
5. On the Data Execution Prevention tab, select the option Turn on DEP for all programs and services except those I select.
6. Click Add.
7. Select setup.exe in the root folder of the CD drive, and then click Open.
8. Click OK.

Performing a new installation

1. Log on to the system as a user with Administrator permissions.
2. Insert the CD.
3. Execute setup.exe to start the wizard.
   Install the XP Command View Advanced Edition Device Manager server using the default settings, but specify the host name or IP address of the Device Manager server.
   When you specify a host name, specify a fully qualified domain name (FQDN).
4. After the Install Complete window is displayed, click Finish.
Performing an upgrade installation

1. Log on to the system as a user with Administrator permissions.
   For details, see the *HP StorageWorks XP Command View Advanced Edition software Device Manager server installation and configuration guide*.
3. Insert the CD.
4. Execute `setup.exe` to start the wizard.
   In the Do you want to export the database? window, select **Yes** and proceed to the next step.
5. After the installation finishes, refresh all storage subsystems from the web client or CLI.

Adding resources

After installing the XP Command View Advanced Edition Device Manager server, perform the following steps to add the resources you want to manage. For details on these steps, see the *HP StorageWorks XP Command View Advanced Edition software Device Manager user guide*.

1. Enter the URL for XP Command View Advanced Edition Device Manager from the browser as follows:
   
   `http://host-name-or-IP-address-of-the-Device-Manager-server:23015/DeviceManager/`

2. Register the license for XP Command View Advanced Edition software.
3. Log in as the System user.
4. For security, change the password for the System user.
5. Register the storage subsystem to be managed by XP Command View Advanced Edition software.
6. Register the hosts to be managed by XP Command View Advanced Edition software.
   To register hosts, use one of the following methods:
   ○ Install the Device Manager agent on the host
   ○ Manually add the host
7. Create a logical group and allocate a path for the logical group (optional).
8. Create resource groups and other users (optional).
   The preparation for using Device Manager is now completed.

Installing the XP Command View Advanced Edition Device Manager agent

This section explains how to install the Device Manager agent. For specific requirements of the OS, memory, disk capacity, and patches that must be preinstalled on the host where the agent is to be installed, see the *HP StorageWorks XP Command View Advanced Edition software Device Manager agent installation and configuration guide*.

1. Log on to the system as a user with Administrator permissions or as a root user.
2. Log in to Device Manager web client.
3. Download the installer for the Device Manager agent.
   In the global tasks bar area, select **GO**, and then **Download**. Use the dialog box to download the appropriate file for the installation host OS.
4. Extract the downloaded file.
5. Execute `install.exe` or `install.sh` to start the wizard.
Install the Device Manager agent using the default settings. On the Windows host, if a dialog box prompts you to register the Device Manager agent as an exception to the Windows firewall, select Yes.

After the installation finishes, a dialog box asks whether you want to continue the setup. Select Yes.

6. Specify the following:
   - Host name or IP address of the Device Manager server
     Using the default settings, specify the user ID and password that are used for accessing Device Manager.
   - HiScan execution schedule
   - Installation destination of XP Raid Manager (if necessary)

7. In the dialog box indicating that the setup has been completed, click OK to finish the setup.

## Installing and setting up plug-in software

As necessary, install XP Tiered Storage Manager software and XP Replication Monitor software on the management server. XP Provisioning Manager software is installed when you install XP Command View Advanced Edition software. After installing XP Command View Advanced Edition software, register the license, so that you can use XP Provisioning Manager software.

1. Log on to the system as a user with Administrator permissions.
   For backup procedures, see the installation guides for the respective products.
3. Insert the CD.
4. Execute `setup.exe` to start the wizard.
   Install the plug-in software using the default settings. If the version of XP Tiered Storage Manager software or XP Replication Monitor software is earlier than 5.9, during the installation specify the user who will access XP Command View Advanced Edition software. Specify this user as the System user.
5. After the plug-in installations are finished, log in to XP Command View Advanced Edition software as the System user.
6. From the Dashboard menu, start all plug-in software.
   The first time you start XP Tiered Storage Manager software and XP Replication Monitor software, the Login window is displayed so you can register the licenses for each product.
7. Register the license for the plug-in software.

To use XP Replication Monitor software, you must install the XP Replication Monitor agent on the host that manages copy pairs. Download the agent from XP Replication Monitor web client, and then install the agent.

## Tips on XP Command View Advanced Edition operations

### Registering licenses

You can register licenses for XP Command View Advanced Edition software and plug-in software from the first Login window after installation. To update a license after logging in, perform the following operation:

In the **Explorer** menu, choose **Settings**, and then **License Info**. Then, click **Edit License**.

You must register a license for plug-in software separately from the license of XP Command View Advanced Edition software. If plug-in software whose license has not been registered is started from
an XP Command View Advanced Edition web client, the Login window for the plug-in software opens. Register the license from the Login window.

Note the following when you register a license:

- You cannot register a license for plug-in software from the license information window in Device Manager.
- You cannot delete a registered license.
- If a temporary license has been registered, you cannot register another temporary license. You must register a permanent license.
- If a permanent license has been registered, you cannot register a temporary license.

Adding a host

To register a host as a management target of Device Manager, use one of the following methods:

- Install the Device Manager agent on the host.
  After the Device Manager agent is installed, information about the host is automatically sent to the Device Manager server and displayed by the web client.
- Manually add the host.
  In the Explorer menu, select Resources and then Hosts. Select Add Host in the method area.

Performing a LUN Scan operation

When you perform a LUN Scan operation, Device Manager automatically creates (for LDEVs to which paths have already been assigned) a logical group according to their port connections and security settings. Device Manager stores the path information. After you perform a LUN Scan operation, if necessary, change the name of the created logical group and the hierarchical relationship.

Before you perform a LUN Scan operation, make sure that the following conditions exist on all WWNs displayed in the list of LDEVs of the target storage subsystem:

- A host that has the WWN actually exists.
- A host that has the WWN has been registered as a management target of Device Manager.

If you perform a LUN Scan operation while these conditions do not exist, each WWN that has not been registered as a host to be managed by Device Manager is automatically registered as a host by using a temporary host name. Therefore, you need to change the host name to match the actual host, or you need to consolidate the WWNs for a host that has multiple WWNs. When you install the Device Manager agent on a host, operations for changing host names and consolidating WWNs are automatically performed, but information about hosts that do not have a WWN might remain. Therefore, HP recommends that you make sure that the above conditions exist, and then perform a LUN Scan operation.

Changing the password of the System user on Device Manager

To change the password of the System user, perform the following: In the Explorer menu, select Administration and then Users and Permissions. In the navigation area, expand the Users object tree and select System. Click Change Password.

If you have registered the user for XP Tiered Storage Manager software and XP Replication Monitor software to access Device Manager, follow the procedure below to use XP Tiered Storage Manager software or XP Replication Monitor software to update the user information.

For XP Tiered Storage Manager software:

Execute the following command:

```bash
> cd C:\Program Files\CVXPAE\TieredStorageManager\bin
> htsmmodhdvmuser userID password
```
For XP Replication Monitor software:

Perform the following procedure on XP Replication Monitor web client:

1. In the Explorer menu, select **Settings**, and then **Information Source**.
2. In the navigation area, select **Device Manager**.
3. In the displayed list of Device Manager servers, click the **Edit** icon of the target Device Manager server.
4. In the displayed dialog box, change the user ID and password that are used to connect to Device Manager.

**Maintaining and migrating the database**

Use the backup/restore and export/import functions to maintain and migrate the database. The following describes the differences between these functions. For details about the procedures, see the *HP StorageWorks XP Command View Advanced Edition software Device Manager server installation and configuration guide*.

**Backup/restore**

Use this function for the following:

- Backing up the database during normal operation
- Saving the contents of the database immediately before and after installation

The database can be restored only in the same environment in which the database was backed up. The database cannot be restored in a different environment: for example, when the versions of XP Command View Advanced Edition software and plug-in software or the installation folders differ. To back up the database, use the `hcmdsbackups` command. To restore the data, use the `hcmdsdbo` command.

**Export/import**

Use this function for the following:

- Migrating the database to a machine on which the versions of XP Command View Advanced Edition and plug-in software are later than those on the source machine
- Migrating the database to a machine that uses a different platform
- Migrating the database to a machine on which the installation folders for XP Command View Advanced Edition software and plug-in software differ from those on the source machine

You can import data to an environment different from the environment from which the data was exported. To export or import data, use the `hcmdsdbrans` command.

**Updating all information of the XP Command View Advanced Edition system**

To update information for the entire system:

1. Refresh each storage subsystem.
   
   In the Explorer menu, choose **Resources** and then **Subsystems**. Then, in the navigation area, select the target storage subsystem, and then select **Refresh**.

2. If there is a host (WWN) that has not been registered to Device Manager, add that host to Device Manager.
   
   Check the LDEV list of the Open-Allocated group in the All Storage subwindow. If there is a host (WWN) that has not been registered as a management target host of Device Manager, add that host to Device Manager.

3. Refresh each host.
   
   In the Explorer menu, select **Resources** and then **Hosts**. Then, in the navigation area, select the target host, and click **Refresh**.
NOTE: You can only refresh hosts on which the Device Manager agent is installed.

Troubleshooting
This section gives you solutions to several common problems.

Physical View is not displayed
If Physical View is not displayed, make sure of the following:

- The OS of the web client that uses Physical View and the Java execution environment are correct.
  For details about the requirements for using Physical View, see the HP StorageWorks XP Command View Advanced Edition software Device Manager user guide.
- The SSL settings have not been specified on the Device Manager server.
  If the SSL settings have been specified on the Device Manager server, Physical View might not be able to be displayed. For details about the action to be taken, see the HP StorageWorks XP Command View Advanced Edition software Device Manager user guide.
- The network settings have been specified so that the web client and the storage subsystem can communicate with each other.
  For details about network settings, see the HP StorageWorks XP Command View Advanced Edition software Device Manager server installation and configuration guide.

Information of the host to be managed is not displayed
For details about the requirements for displaying information of a host to be managed, see the HP StorageWorks XP Command View Advanced Edition software Device Manager user guide.

Results of the configuration change made on XP Remote Web Console are not displayed in Device Manager
If you use XP Remote Web Console to change the configuration of the storage subsystem managed by Device Manager, an inconsistency occurs between information in the Device Manager database and the actual configuration information. If this inconsistency occurs, refresh the storage subsystem. To change the configuration of the storage subsystem, use Physical View of Device Manager.

Out of memory error occurs
Change the memory heap size for the Device Manager server and Device Manager agent. For details about how to change the memory heap size, see the HP StorageWorks XP Command View Advanced Edition software Device Manager server installation and configuration guide and HP StorageWorks XP Command View Advanced Edition software Device Manager agent installation and configuration guide.