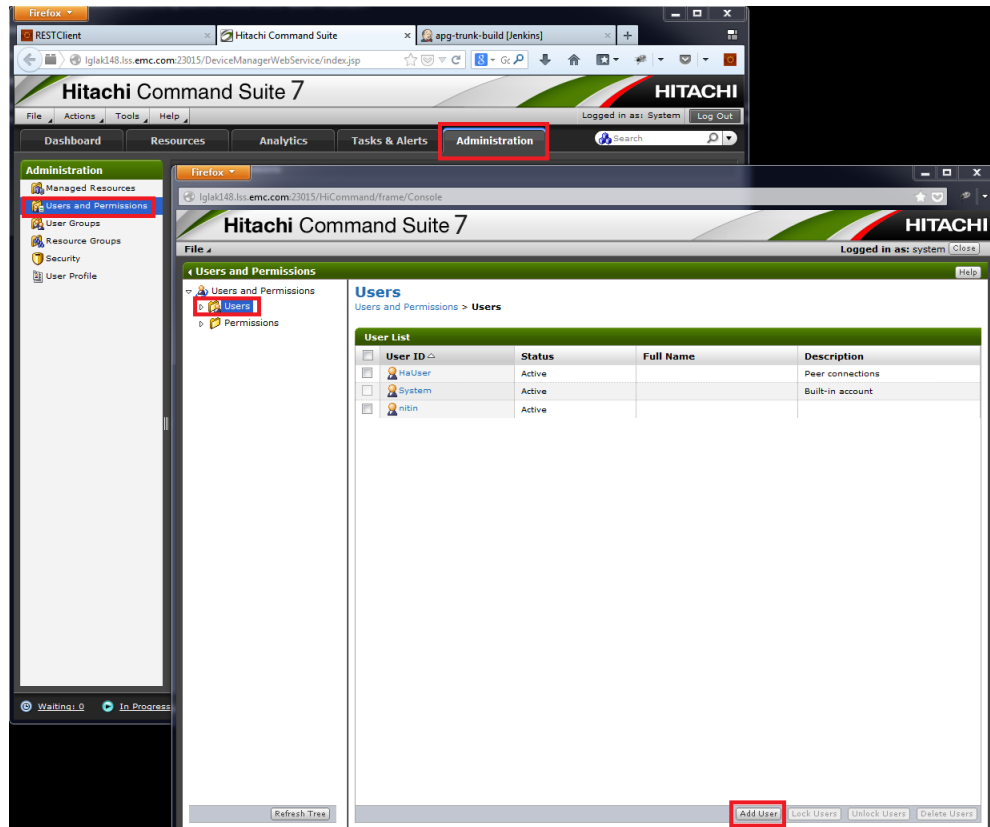


Hitachi Device Manager
Last update 05/26/2014

How to Create a Read Only User

1. Open the Hitachi Command Suite, click on the “Administrator” tab and then on the “Users and Permissions” tree node. A new window will open, click on “Users” and then on “Add User”:



2. A new user form will be displayed; fill all required fields and then click on “OK” button:

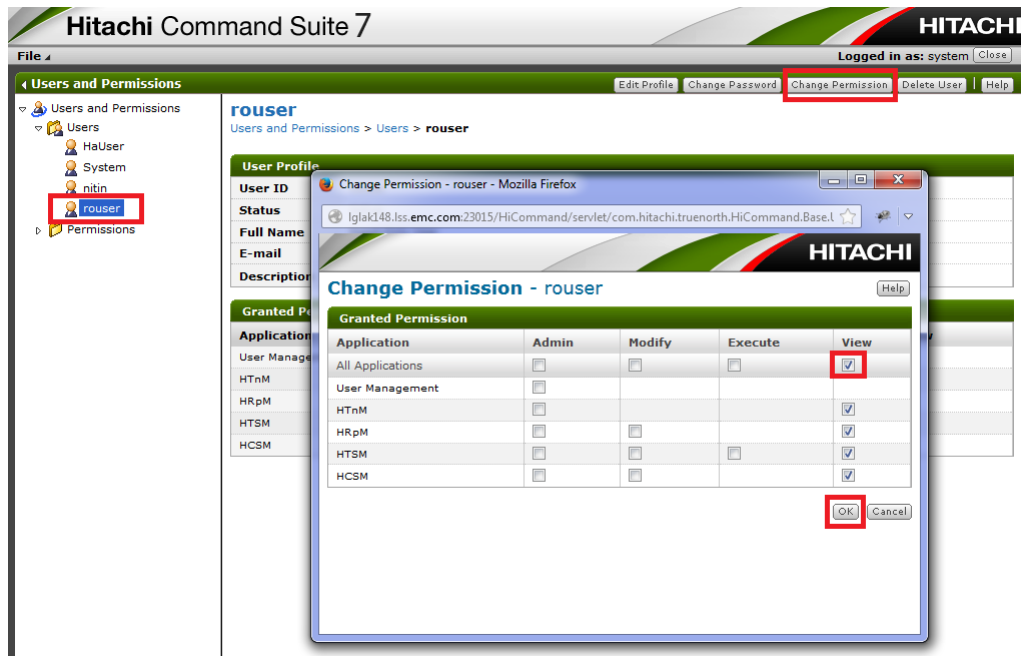
The 'Add User' form is displayed with the following fields:

- *User ID: rouser
- *Password: *****
- *Verify Password: *****
- Full Name: Read-Only User
- E-mail: rouser@company.com
- Description:

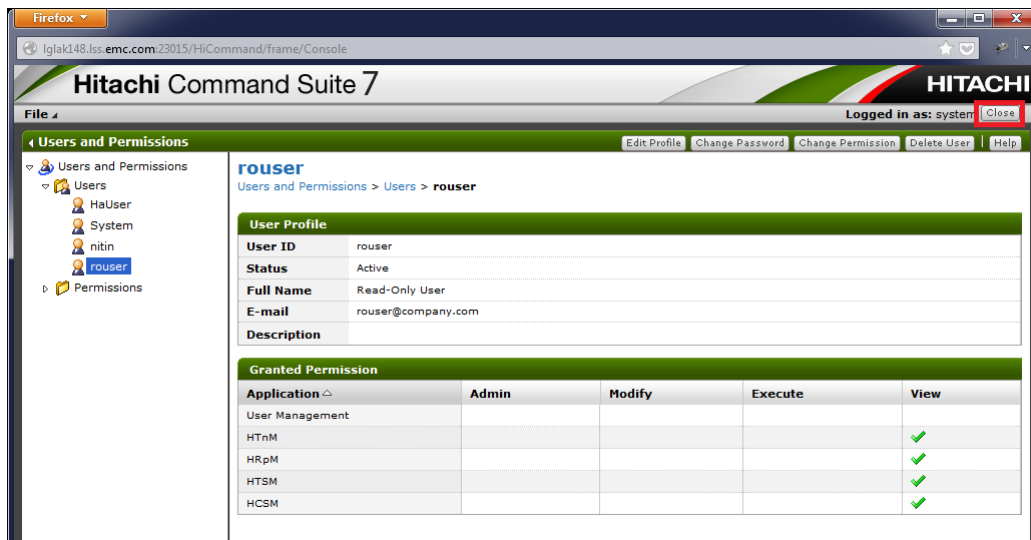
*Required field

OK Cancel

3. Expand the tree and click on the new user node. Click on “Change Permissions” tab. A Change Permission form will be displayed; select the checkbox “View / All Applications” and, then, click on the “OK” button:



4. Click on the “Close” button:



5. Go back to the Administration tab, click on the “User Groups” node and then on “ViewGroup” to see the built-in user groups:

The screenshot shows the Hitachi Command Suite 7 Administration interface. The left sidebar contains the following menu items: Managed Resources, Users and Permissions, **User Groups** (highlighted), Resource Groups, Security, and User Profile. The main content area is titled 'User Groups' and contains a table with the following data:

User Group	Description	No. of Users
AdminGroup	Built-in user group	0
ModifyGroup	Built-in user group	0
PeerGroup	Built-in user group	1
ViewGroup	Built-in user group	0

At the bottom of the interface, there is a status bar showing: Waiting: 0, In Progress: 0, Completed: 84, Failed: 71. Below the table, there are buttons for 'Create User Group', 'Edit User Group', 'Delete User Groups', and 'Export to CSV'.

6. Click on the “Add Users” button, select the user you just created, and then, click on the “OK” button.

The screenshot shows the Hitachi Command Suite 7 Administration console. The left sidebar contains the 'Administration' menu with options: Managed Resources, Users and Permissions, User Groups, Resource Groups, Security, and User Profile. The main area displays the 'User Groups' page, specifically the 'ViewGroup' tab. A 'Summary' table shows 'User Group: ViewGroup' and 'No. of Users: 0'. Below this, the 'Users' tab is active, showing a table with columns: User ID, Full Name, Description, and User Group. The table lists three users: 'HaUser', 'nitin', and 'rouser'. The 'rouser' user is highlighted with a blue row. Below the table, it says 'Selected: 1 of 3'. At the bottom right of the dialog, there are 'OK', 'Cancel', and 'Help' buttons. The 'OK' button is highlighted with a red box. Below the dialog, there is an 'Add Users' button, also highlighted with a red box. The status bar at the bottom shows: 'Waiting: 0', 'In Progress: 0', 'Completed: 84', and 'Failed: 71'.

Hitachi Command Suite 7

Administration

User Groups > ViewGroup

Summary

User Group	Description
ViewGroup	Built-in user group
No. of Users	0

Users

User ID	Full Name	Description	User Group
HaUser			PeerGroup
nitin			
rouser	Read-Only User		

Selected: 1 of 3

OK Cancel Help

Add Users Remove Users

Waiting: 0 In Progress: 0 Completed: 84 Failed: 71

How to enable performance collection

Requirements:

To collect performance information from the Universal Storage Platform V/VM or Hitachi USP you must first install the Device Manager Agent, version 5.9 or later. The host where the agent resides will pull this information in-band from the SAN network where the array is located.

Proper zoning must be in place. For more information, please refer to Hitachi Device Manager Software Installation Guide MK-96HC138-06, section 1-19 to 1-24.

A LUN must be provided on the array that will be used as a Command Device which will be used to acquire the performance data. As a network requirement, make sure that the port 2001 on the Device Manager host is not blocked by any firewall rules as this port will be used by the Device Manager Agent.

Configuring the HTTP server on the Device Manager Host:

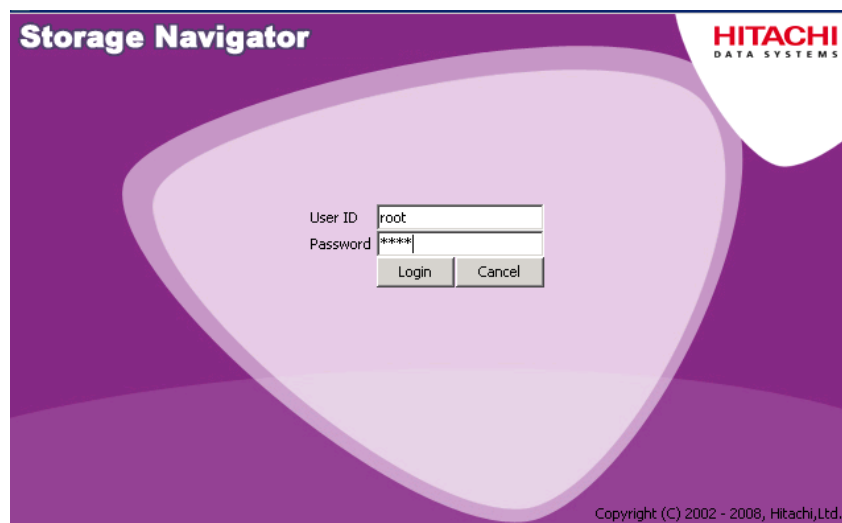
1. On the Device Manager server, open the file server.properties under "C:\Program Files (x86)\HiCommand\DeviceManager\HiCommandServer\config"
2. Edit the option `server.cim.agent` and point this to the machine where the new installed agent is located

```
# host name for the CIM agent
server.cim.agent=AGENT-SERVER
```

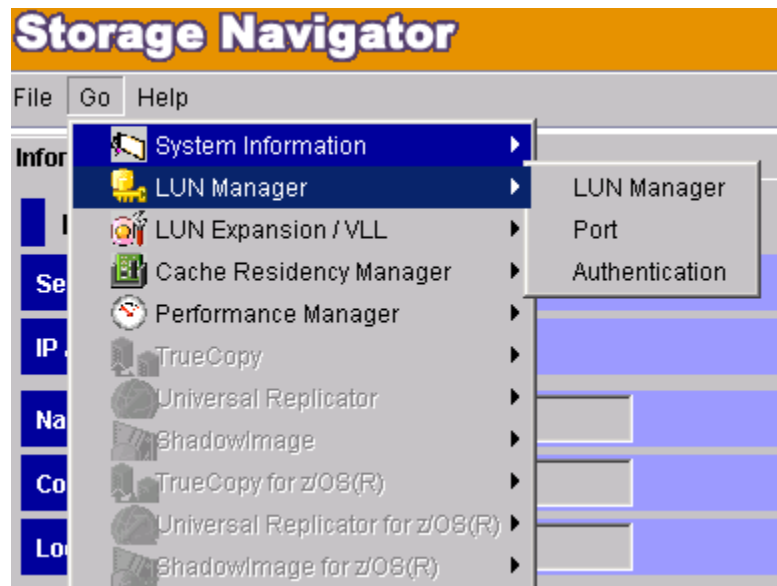
3. Restart the Device Manager Server

Configuring a command device on the USP/VSP array:

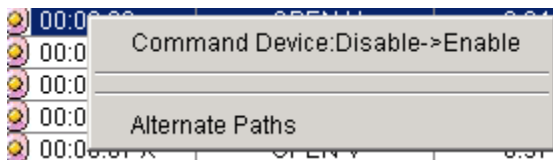
1. Point your browser directly to the array. This will be the Storage Navigator interface. The default login credentials are root/root.



2. Navigate to Go->LUN Manager->LUN Manager



3. Enable writing mode by clicking on the pen icon. 
4. Select a LUN and right click on it.
5. Enable the Command Device.



6. Click on Apply.
7. Disable writing mode.
8. Logout of the interface.

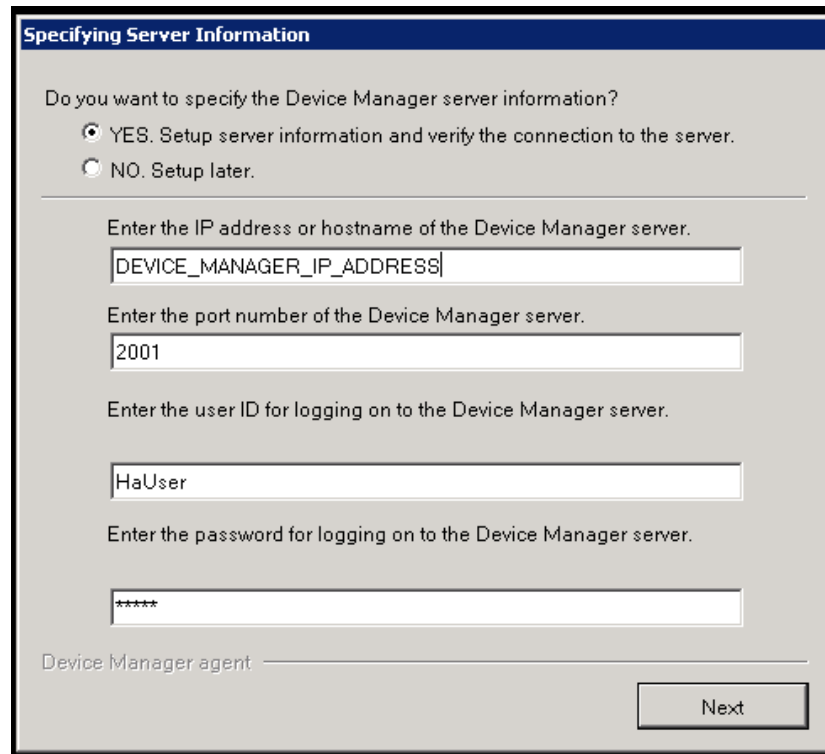
Installing the Device Manager Agent:

The Device Manager Agent must be installed on a host with SAN visibility to the VSP/USP array. Remember, for AMS/SMS arrays this information will be collected though a LAN connection but for VSP/USP arrays this information will come via an in-band fibre channel connection to the arrays.

A copy of the Device Manager Agent is available from the Device Manager, under Windows the folder is located at "C:\Program Files (x86)\HiCommand\DeviceManager\HiCommandTools\agent". In this example, we will oversee the installation process on Windows.

1. Double click the **DVMAgent_win** file. This will extract the necessary install files into a directory of your choice.
2. Navigate to the directory that contains the extracted DVMAgent files and double click on **setup**.

3. Enter the IP address or hostname of the Device Manager server. Leave the other options as their default values. Click on Next.



Specifying Server Information

Do you want to specify the Device Manager server information?

☒ YES. Setup server information and verify the connection to the server.
☐ NO. Setup later.

Enter the IP address or hostname of the Device Manager server.

Enter the port number of the Device Manager server.

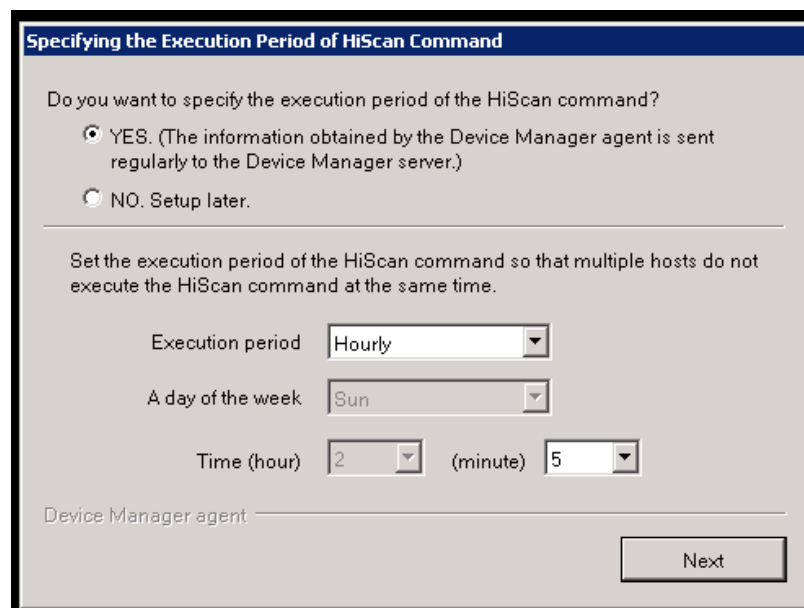
Enter the user ID for logging on to the Device Manager server.

Enter the password for logging on to the Device Manager server.

Device Manager agent

Next

4. Select the period for which the HiScan Command will execute. Change the **Execution period** for **Hourly** and the **(minute)** to **5**. Click on Next.



Specifying the Execution Period of HiScan Command

Do you want to specify the execution period of the HiScan command?

☒ YES. (The information obtained by the Device Manager agent is sent regularly to the Device Manager server.)
☐ NO. Setup later.

Set the execution period of the HiScan command so that multiple hosts do not execute the HiScan command at the same time.

Execution period

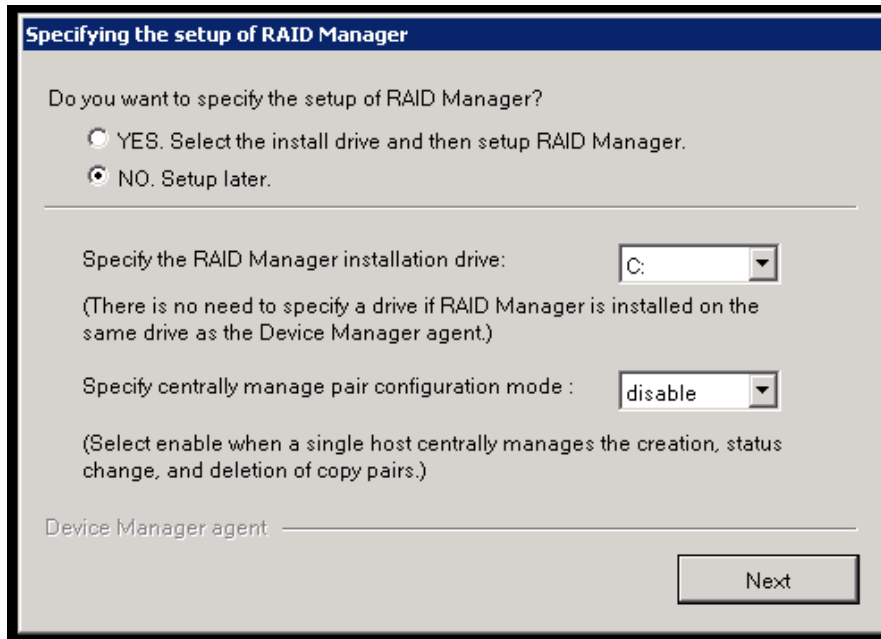
A day of the week

Time (hour) (minute)

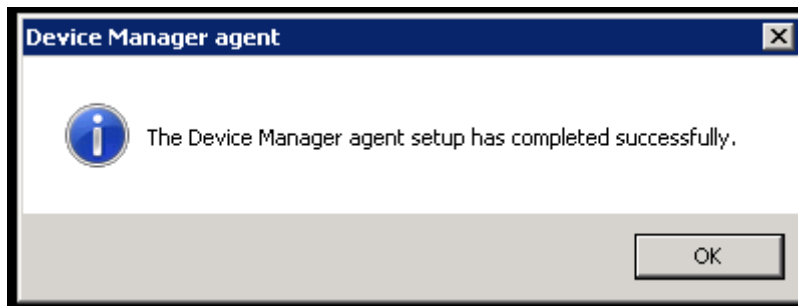
Device Manager agent

Next

5. Specify **NO** for the RAID Manager and click on Next.



6. If the setup completes without any issues the following dialog should appear.



Attaching the Command Device to the Device Manager Agent host:

1. Verify if the disk is being presented to the host by running the command *hldutil* found under:

```
C:\Program Files (x86)\HITACHI\HDVM\HBaseAgent\util\bin\hldutil
```

2. Once you confirm that the disk is present, please run the following command to generate the file *perf_cmddev.properties* needed by the agent:

```
C:\Program Files (x86)\HITACHI\HDVM\HBaseAgent\bin>perf_findcmddev.exe write
The setup using the definition of the command device has finished successfully.
```

3. To view and verify that the configuration is correct use the following commands:

```
C:\Program Files (x86)\HITACHI\HDVM\HBaseAgent\bin>perf_findcmddev.exe verify
The definition of the command device is valid.
```

- a. To view the configuration:

```
C:\Program Files (x86)\HITACHI\HDVM\HBaseAgent\bin>perf_findcmddev.exe view
Raid ID      Serial#    SLPR#     LDEV#     Device file name
R600         12345     0         1         \\.\PhysicalDrive1
```

4. Restart the agent process:

```
C:\Program Files (x86)\HITACHI\HDVM\HBaseAgent\bin>hbsasrv.exe stop
C:\Program Files (x86)\HITACHI\HDVM\HBaseAgent\bin>hbsasrv.exe start
```

5. Check *service.log* for entries of the HiCommandAgent/Hiscan under “C:\Program Files (x86)\HiCommand\DeviceManager\HiCommandServer\logs”:

```
27/03/2014:15:08:25 -0400 - HiScan: created message #586357113,
user=HaUser@192.168.1.32/Hitachi:HiCommandAgent:20140327150604776, cmd=SetHostVolume
27/03/2014:15:08:25 -0400 - HiScan: invoking SetHostVolume.execute() for message
#586357113
27/03/2014:15:08:25 -0400 - HiScan: successfully expired in COMPLETED
XmlMsg#586357113,usr=HaUser,cmd=SetHostVolume
27/03/2014:15:08:25 -0400 - HiScan: response sent for message #586357113 SetHostVolume
completed
```

Known issues:

1. If there's a user logged into the Storage Navigator with the writing mode enabled, the Device Manager Agent will not be able to collect any data. Unless the user demands more time from the Storage Navigator, he will be logged out after a period of time.
2. Upgrading the SolutionPack directly from a release prior to 3.5 is not supported. The underlying collect mechanism as well as the data model used by the new SolutionPack surpasses the previous old one, hence a migration path is not possible. The new Hitachi Device Manager SolutionPack can coexist with previously installed versions as long as they are kept on a different instance.
3. Due the way Hitachi Device Manager API represents Logical Groups, Host Logical Groups have the following limitations:
 - If a host has no allocated volume, it will be not displayed in the Logical Group
 - If a host inside a Logical Group share a LUN with a another host, this host may appear inside the Logical Group