Step-By-Step Guide: Install D-View 6.0 Standard / Professional version and Perform Network Administration Operation in a Test Lab

D-Link Corporation
Published: August 2007

This document supports a beta release of D-Link NMS software, D-View 6.0, which may be changed substantially prior to final commercial release, and is the confidential and proprietary information of D-Link Corporation.

D-Link may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from D-Link, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

© 2007 D-Link Corporation. All rights reserved.

Step-By-Step Guide: Install D-View 6.0 Standard / Professional version and Perform Network Administration Operation in a Test Lab 1
Hardware and Software Requirements for D-View 6.0 Beta 2 3
Hardware requirements for Standard and Professional version 3
Software requirements: 3
File List for D-View 6.0 Beta 2 Installation 5
Steps for Installing D-View 6.0 Beta 2 5
Launch D-View 6.0 with Activation Wizard 7
Logging On D-View 6.0 NMS Platform 8
Initialize D-View Configuration with Startup Wizard 9
Enable Polling Function to Monitor the Network Devices 14
Create a Domain for Network Management Manually 17
Create a Netmap for NMS Topology Import Manually 19
Perform Topology Generator Manually to Discover Network Endpoints Automatically 21
Adding a Device to the Managed Netmap Manually 25
Perform Run Batch Function for One-To-Many Configuration 30
Firmware Upgrade for DES-3550 31
Enable Safeguard Engine for DES-3550 33
Event Viewer 35

Hardware and Software Requirements for D-View 6.0 Beta 2

Hardware requirements for Standard and Professional version

- CPU: 1.4GHz or above
- DRAM: 1G or above
- Hard drive available space: 200 MB
- Ethernet adapter
- Several network endpoints for the test lab. Below are the support list of network endpoints in D-View 6.0 Modules Beta 2:

  ➢ D-Link Switch:

  DES-3526, DES-3550, DES-3828, DES-3828DC, DES-3828P, DGS-3324SR, DGS-3426, DGS-3427, DGS-3450, DGS-3612G, DGS-3627, DGS-3627G, DGS-3650, DXS-3326GSR, DXS-3350SR

  ➢ D-Link Wireless AP:

  DWL-2100 AP, DWL-3200 AP, DWL-8200 AP

Software requirements:

The following are required software components on the D-View management workstation:

For D-View 6.0 Standard version

- Operating System (OS):
  - Microsoft Windows 2000 Professional or Server English Version with Service Pack 4, or
  - Microsoft Windows XP with Service Pack 2
- Microsoft Internet Explorer 6 with Service Pack 1 or latter
- Microsoft XML Parser and SDK

For D-View 6.0 Professional version

- Operating System (OS):
  - Microsoft Windows 2000 Server or Advanced Server English Version with Service Pack 4 or
  - Microsoft Windows Server 2003 with Service Pack 2

- Database Management System (DBMS):
  - Microsoft SQL Server 2000 English Version with Service Pack 3
- Microsoft Internet Explorer 6 with Service Pack 1 or latter
- Microsoft XML Parser and SDK

Note:

(1) The main difference between Standard and Professional version is Professional version allows to be implemented as client-server architecture for remote login and multiple user access via network.

(2) For better UI display, it is recommended to configure the screen resolution on the management workstation at 1024 x 768.

File List for D-View 6.0 Beta 2 Installation

For D-View 6.0 Standard version

- D-View 6.0 Beta 2 installation package (D-View (Access).exe)

For D-View 6.0 Professional version

- D-View 6.0 Beta 2 installation package (D-View (SQL).exe)
- D-View 6.0 database creation tool for Microsoft SQL Server 2000, including MakeDB.exe, Task.SQL and DBCreate.SQL within the folder “MakeDB” in this zip file.

Steps for Installing D-View 6.0 Beta 2

For D-View 6.0 Standard version

Perform D-View 6.0 Beta 2 installation by running **D-View (Access).exe** on your designated management workstation.

For D-View 6.0 Professional version

Before you start, please confirm the environment on your designated workstation compliant with the software requirements.

1. Ensure the authentication mode on MS SQL 2000 as Mixed Mode (SQL Server and Windows). The configuration can be modified via **Enterprise Manager**, click Microsoft SQL Servers > SQL Server Group > (Local) (Windows NT), right-click on “(Local) (Windows NT)”, select “**Security**” tab, and configure Authentication as “**SQL Server and Windows**”.

2. Perform D-View 6.0 Beta 2 installation by running **D-View (SQL).exe** on your designated management workstation.

3. After D-View 6.0 Beta 2 installation completed, please copy the folder “MakeDB”, which includes the three files (MakeDB.exe / Task.SQL / DBCreate.SQL) to the default installation folder of D-View 6.0 Beta 2 (e.g. C:\Program Files\D-Link\D-View), then run “**MakeDB.exe**” on your designated management workstation for D-view NMS database creation.

4. Append the information as the example below in the “**hosts”** file. You may find the file in **C:\WINNT\system32\drivers\etc\hosts**. Below is the example:

   Assume that the host name and IP information of your management workstation is “**dview-test**” and “**10.90.90.101**”. Please append the 2nd and 3rd line into the list, and save the file.

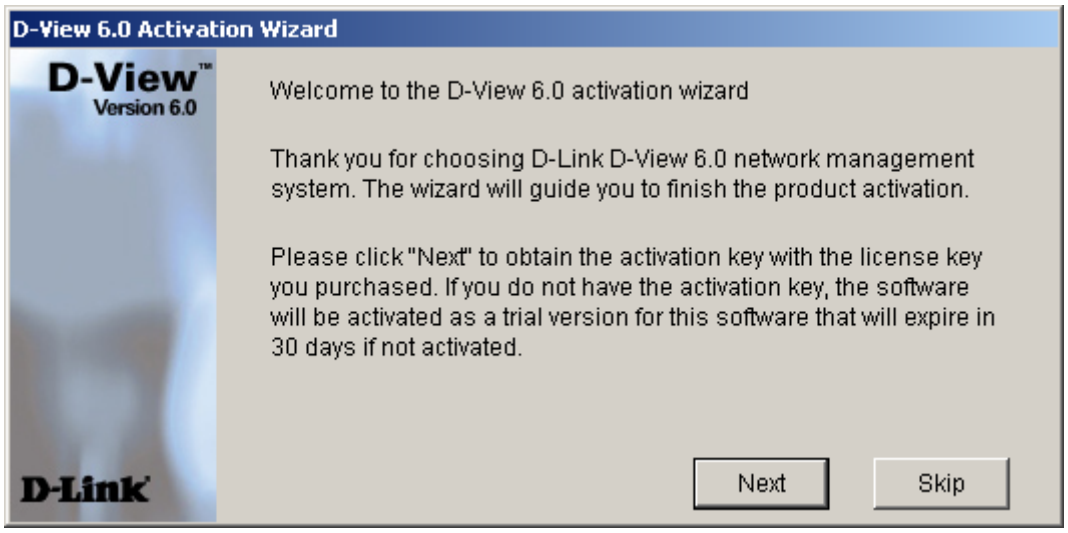
127.0.0.1	localhost
10.90.90.101	**dview-test**
10.90.90.101	**SQL-Server**

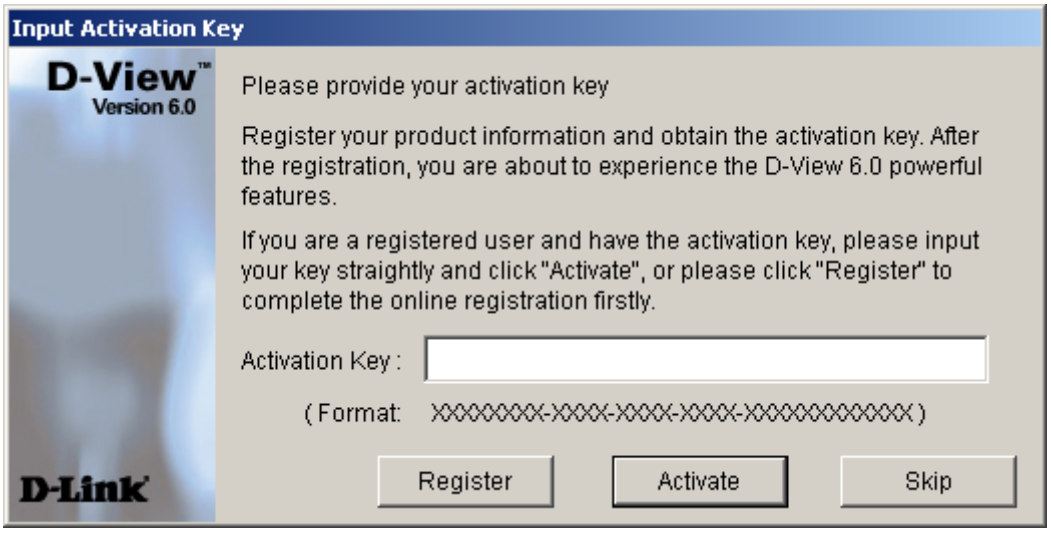
   Note: Please append the IP information in the “hosts” file according to your management workstation IP.

5. Restart your management workstation to comprehend the installation.

Launch D-View 6.0 with Activation Wizard

Launch **D-View** via double clicking the D-View icon on your desktop. At the very first time the user runs D-View 6.0, the Activation Wizard will be launched to guide the user complete the activation procedure. Without the license activation, by default D-View 6.0 is 30-Day Trial version. Please follow the guidance of Activation Wizard to complete the procedure or click "**Skip**" to enter the 30-Day Trial mode.





Logging On D-View 6.0 NMS Platform

1. Log on D-View NMS platform by providing the following default account and password:

   Account: **admin**
   Password: **111111**

Note:

(1) You may click the **Option** button to review the IP information of your management workstation. By default, the Managed IP address should be identical as the IP address you specify; otherwise, please update the Managed IP address, e.g. "**10.90.90.101**" in this field.

(2) You may modify the default password of "Admin" via the **Menu Bar > System > Change Password** after you log on D-View NMS platform.

Initialize D-View Configuration with Startup Wizard

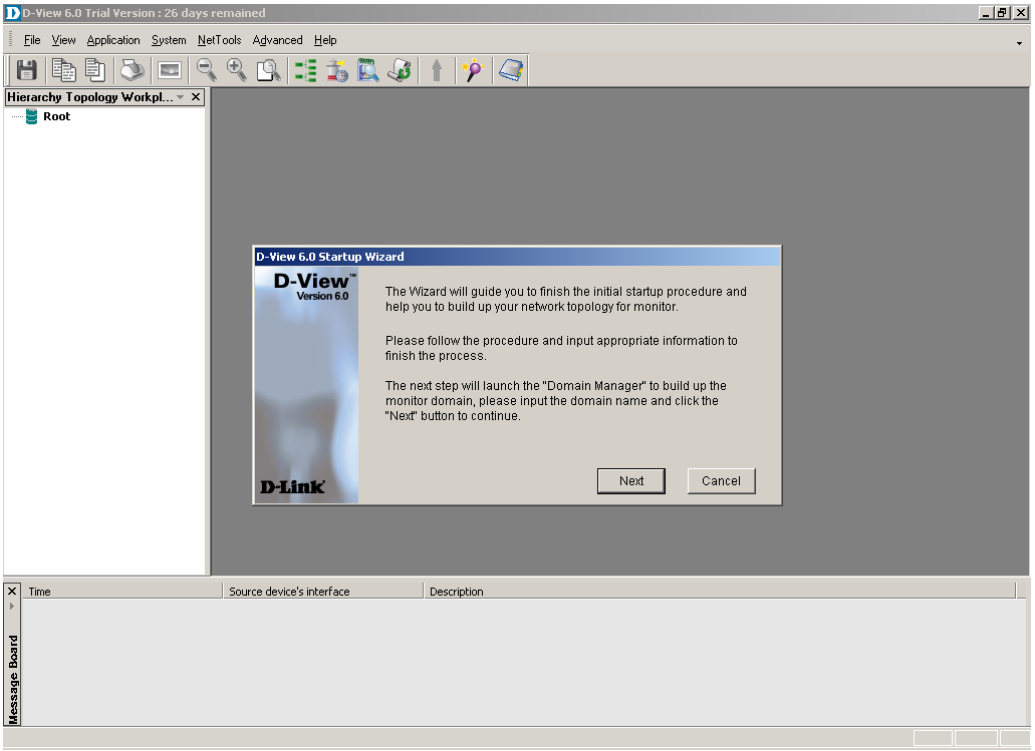
While the user initializes D-View 6.0, the Startup Wizard will be launched to guide the user complete the initial configuration.

The Setup Wizard helps for the following:

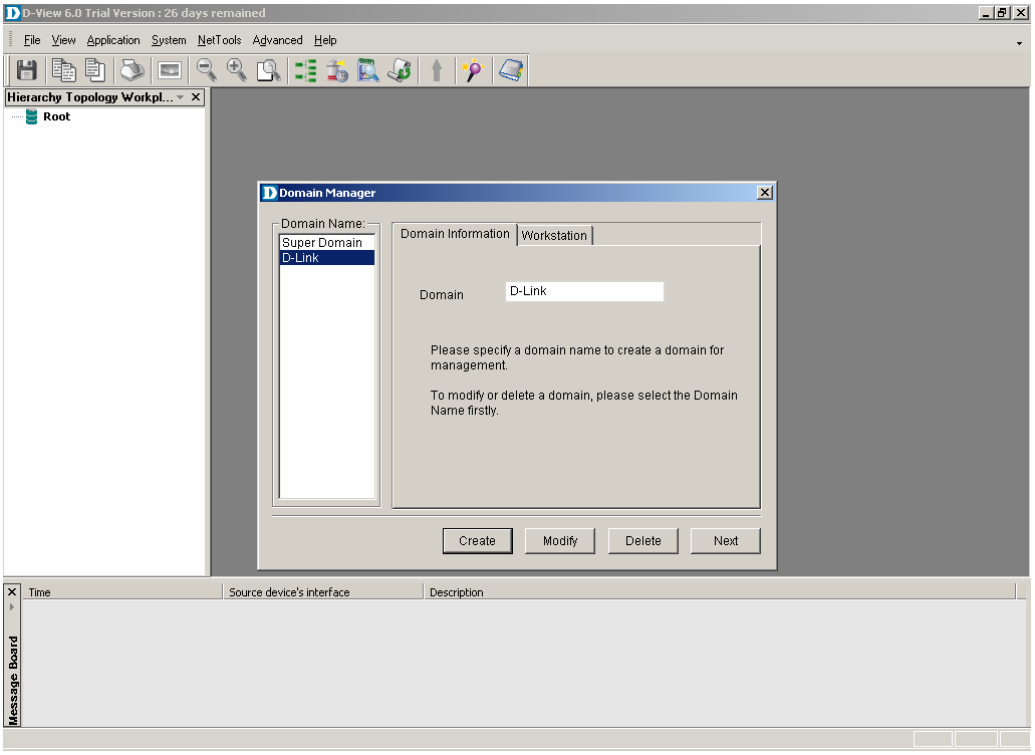
- To create a Domain for management
- To create a Netmap for management
- To perform Topology Auto-Discovery
- To export the generated topology to the NMS platform
- Ready for Polling and Monitoring or any further operations

Steps:

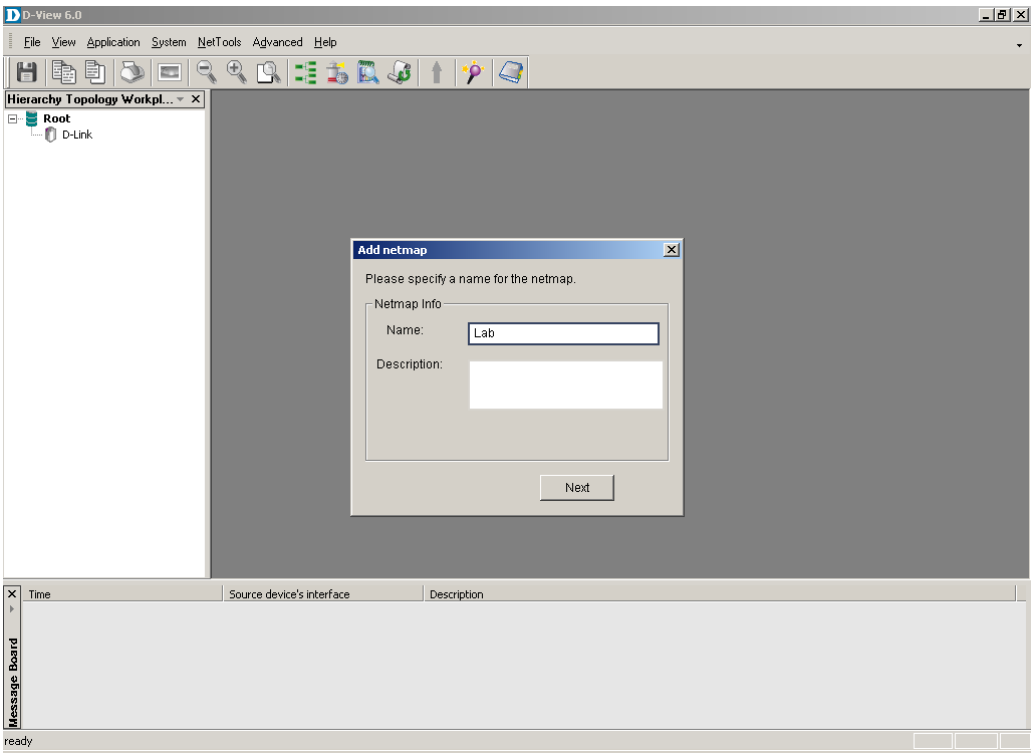
1. If the user initializes D-View 6.0 at the very first time or there is no Domain configuration in D-View, the Startup Wizard will be launched automatically. Click "**Next**" to continue.



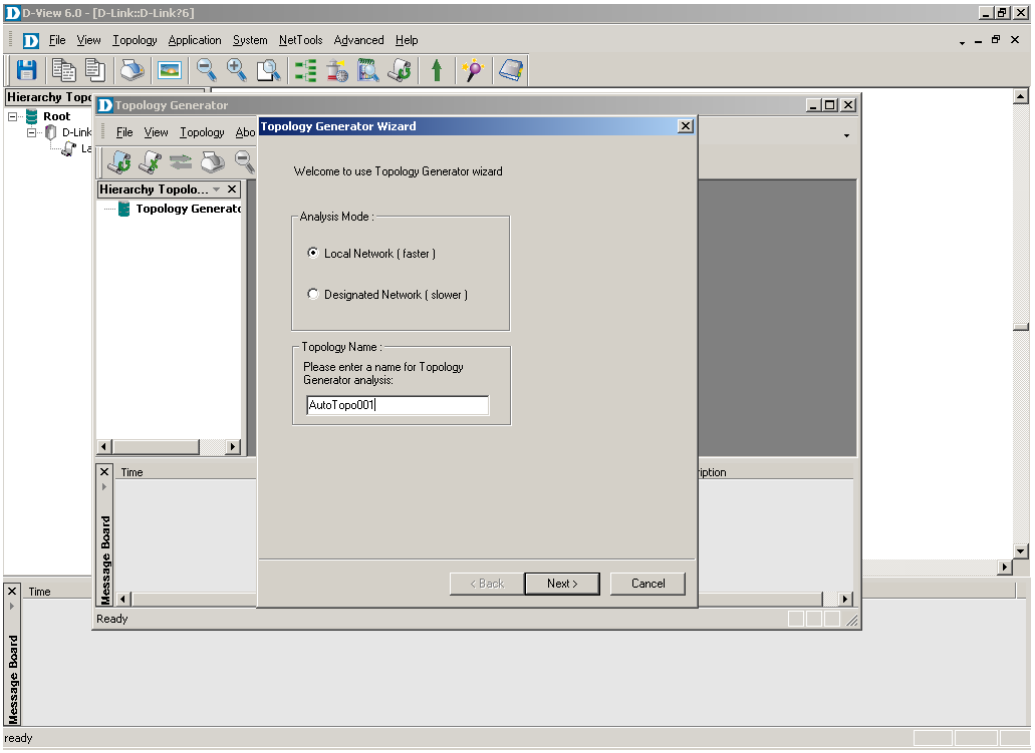
2. The Startup Wizard requests you to specify a domain name in the "**Domain**" field. Please provide a name, press the "**Create**" button to add a new management domain, and then click "**Next**" to continue.



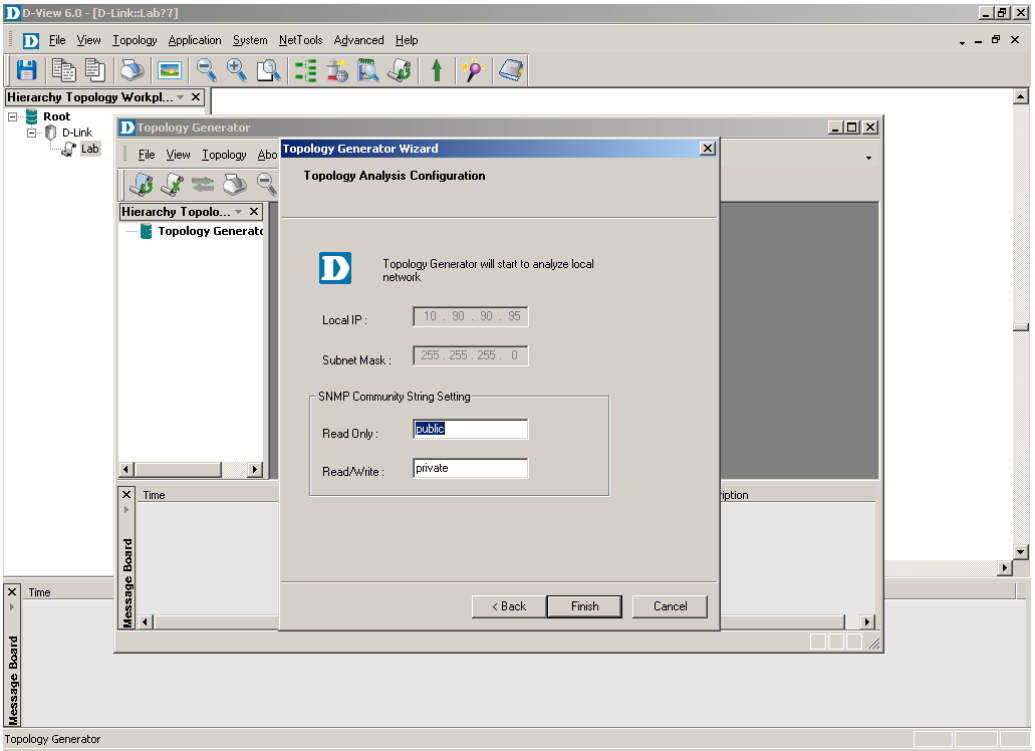
3. In the 3rd step, the Startup Wizard requests you to specify a Netmap name in the "**Name**" field. Here the Netmap "**Lab**" is the example. Click the "**Next**" button to continue.



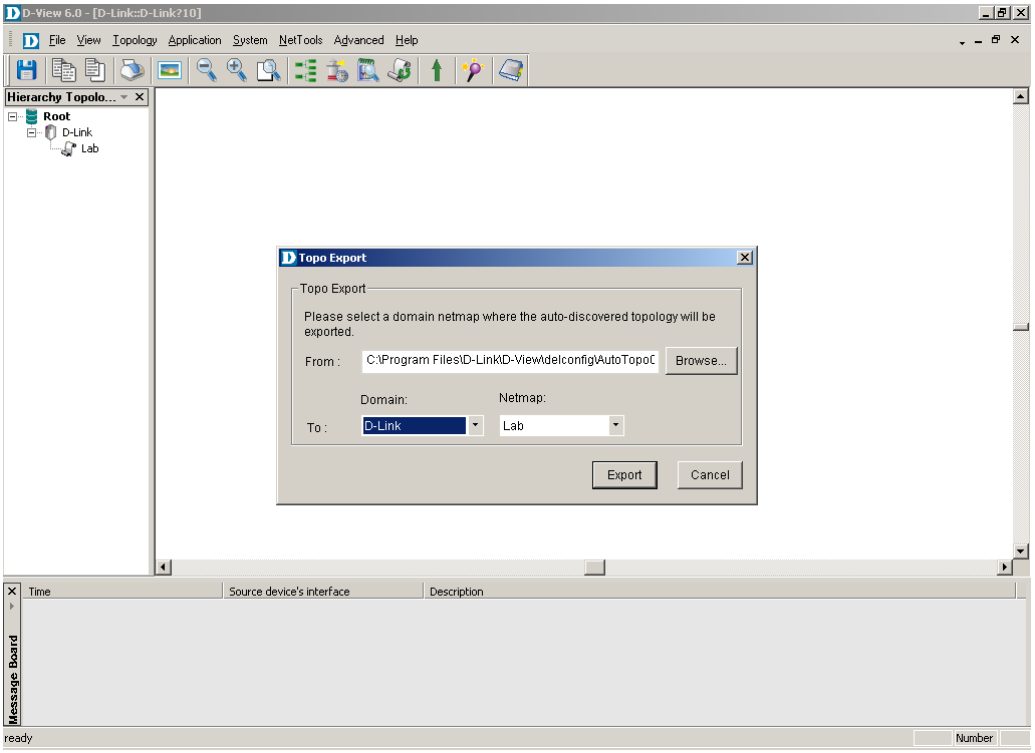
4. The Startup Wizard will then trigger the **Topology Generator Wizard** to help you discover the network topology automatically. Please select the Analysis Mode as "**Local Network**" and provide a topology name for auto discovery, then click "**Next**" to continue.

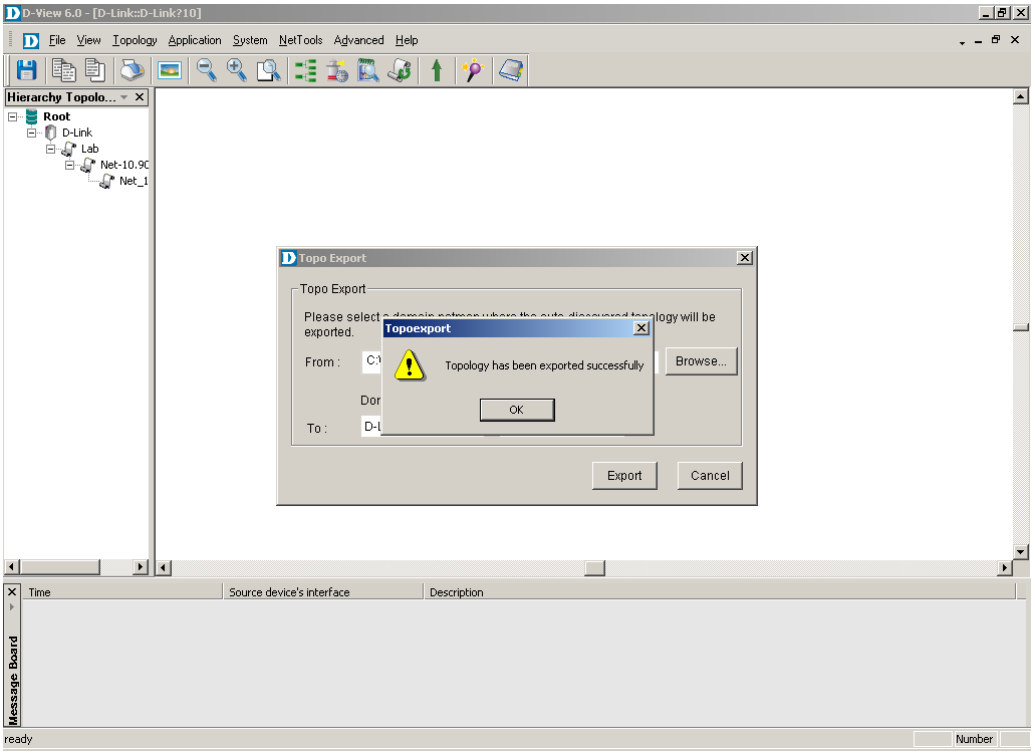


5. Please click "**Finish**" to start the network analysis procedure.

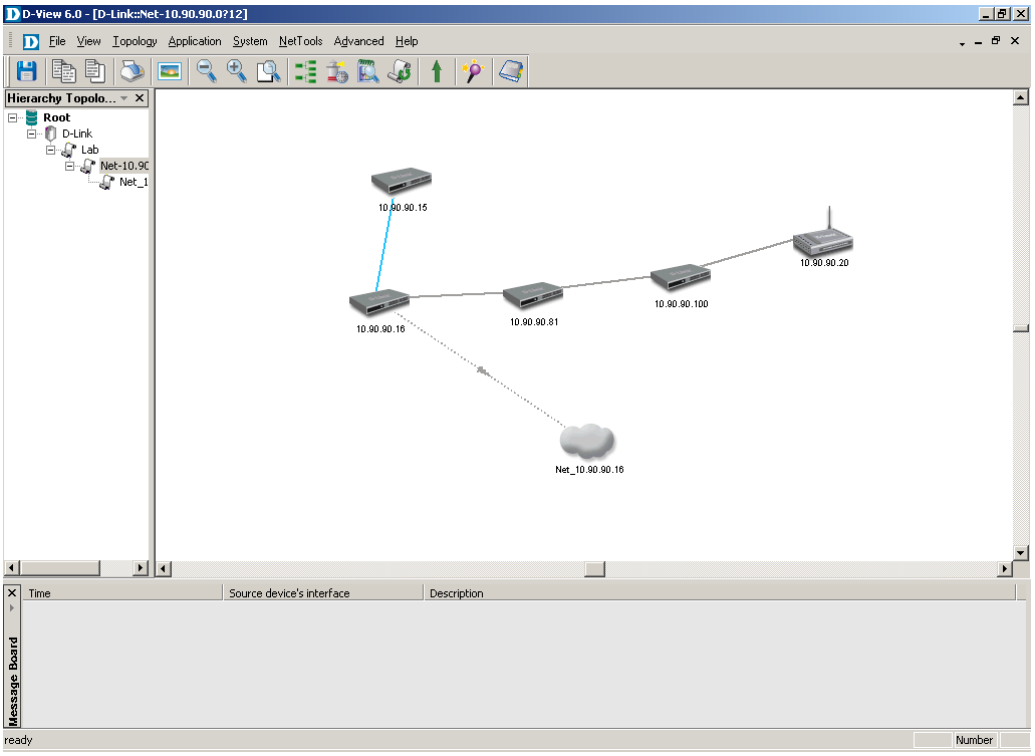


6. After the analysis is completed, the Wizard will request you to Export the discovered topology. Please click "**Export**" to export the topology to the D-View NMS platform for latter polling and monitoring.





7. Now the discovered topology is ready for polling and monitoring in D-View NMS platform.

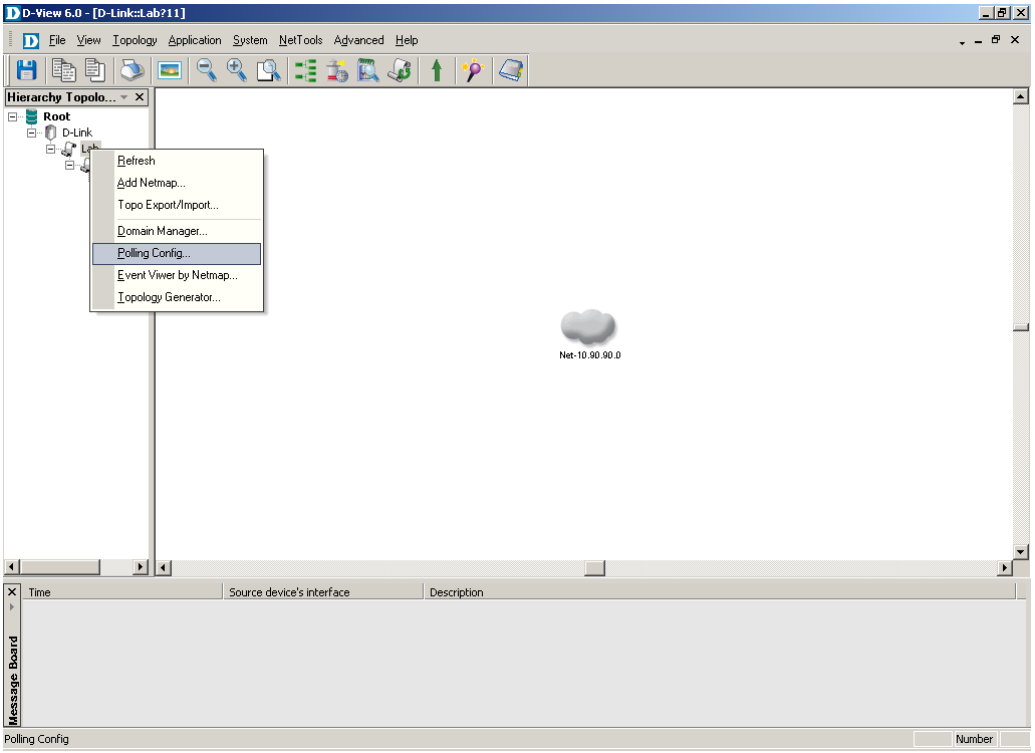


Enable Polling Function to Monitor the Network Devices

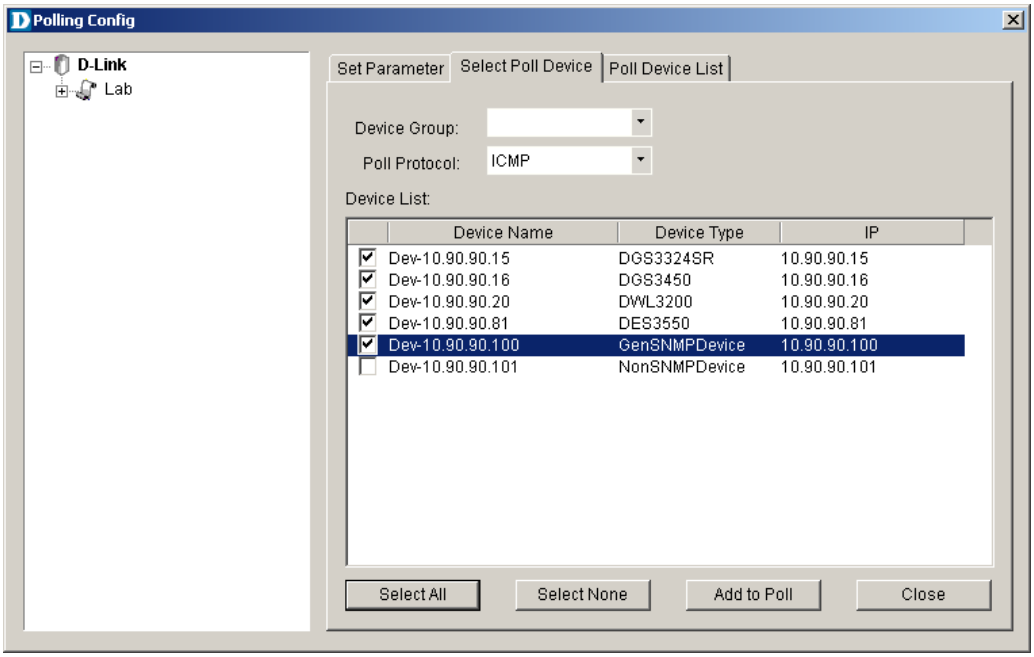
After the discovered topology is ready, you can start to the polling operation. “**Polling Config**” function enables you to monitor the network devices in the managed Netmap periodically.

Steps:

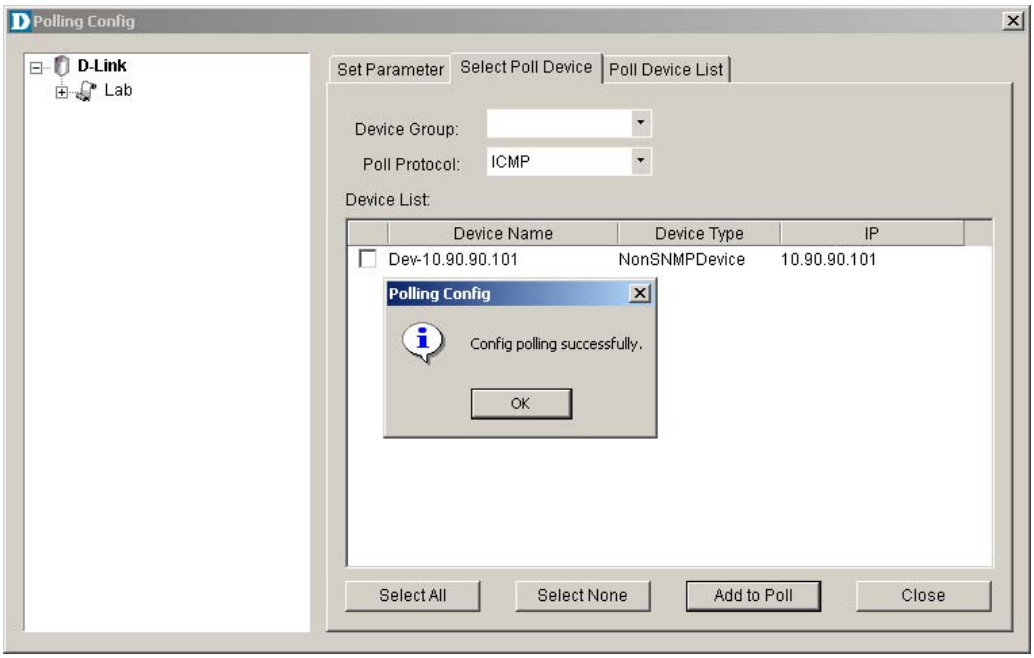
1. Click on the Netmap “**Lab**”, and right-click to pop up the shortcut menu. Select the “**Polling Config**” item to enter the Polling Config window.



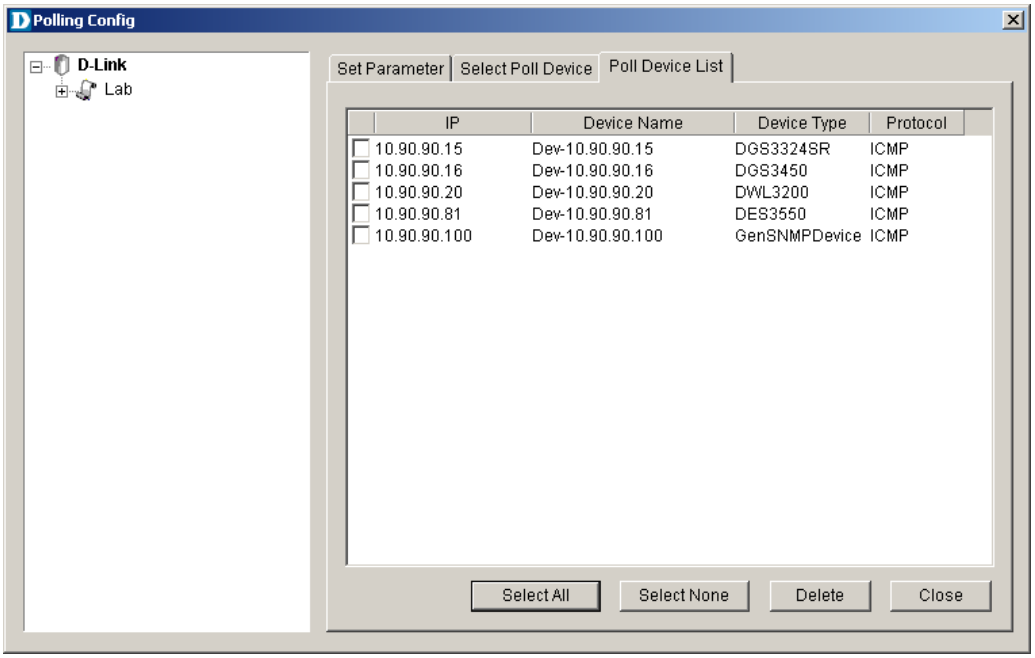
2. On the “**Select Poll Device**” tab, there is a device list, and you can choose the polling protocol either as **ICMP** or as **SNMP**. Select the devices you want to poll and press the “**Add to Poll**” button.



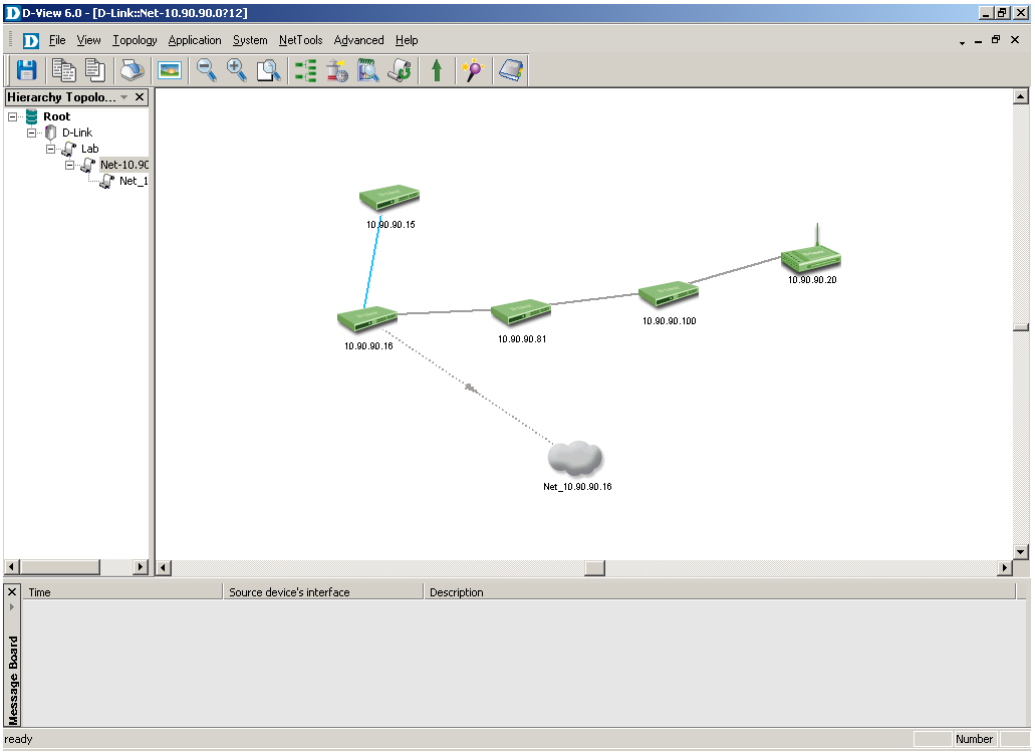
3. Setup the polling config successfully.



4. You can shift the tab to “**Poll Device List**” to confirm the polling devices, or you can delete the polling devices from the polling list.



5. If you go back to the network topology and check the device icons again. Now the gray icons turn to green. This represents the polling is performing and all network endpoints are alive.

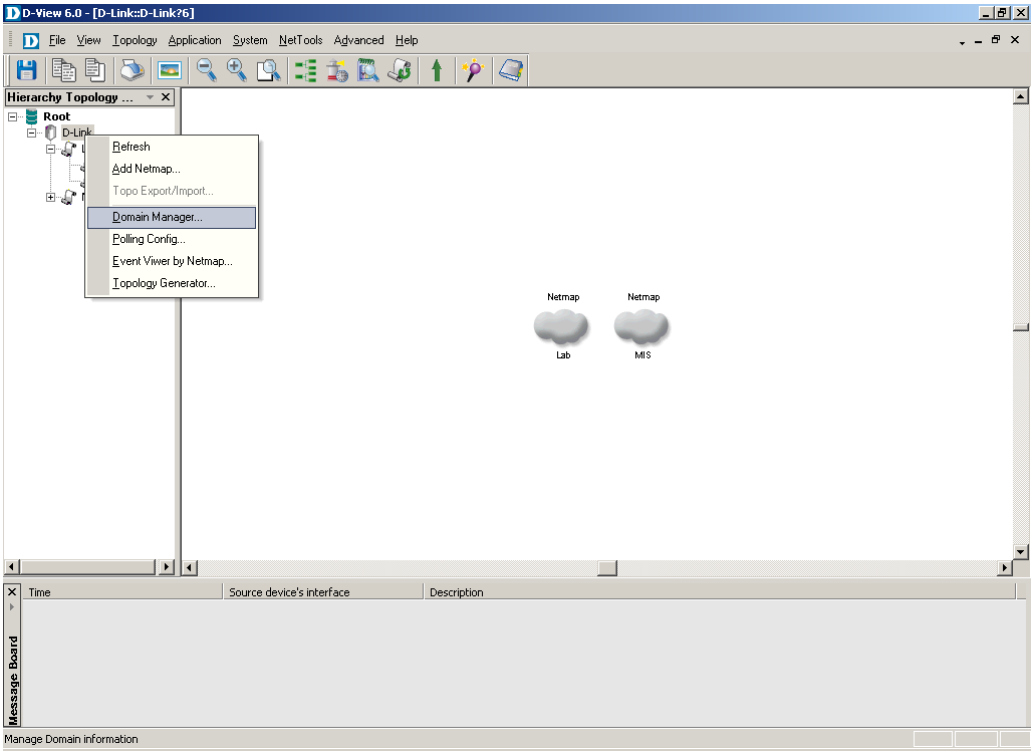


Create a Domain for Network Management Manually

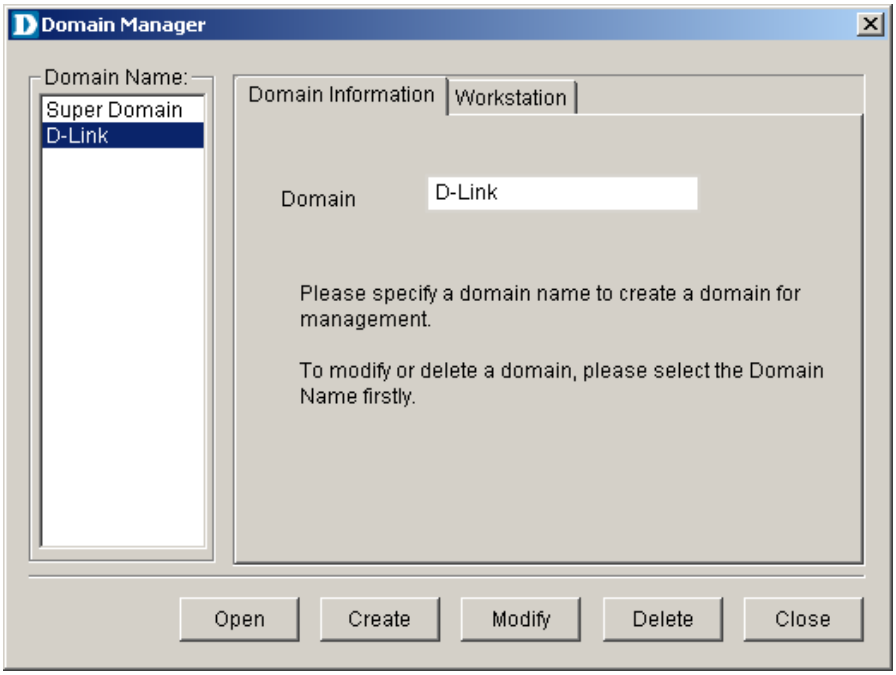
A domain in D-View 6.0 NMS platform is a logical group of network endpoints for network administration. When you begin to use D-View 6.0 Beta 2 for network administration, firstly you must create a management domain.

Steps:

1. Click on the default super domain "**Root**" to open the Root domain, and right-click on the "**Root**" domain to pop up the shortcut menu. Then select the "**Domain Manager**" item to enter the **Domain Manager** window.



2. Specify a domain name in the "**Domain**" field, and press the "**Create**" button to add a new management domain. After created successfully, the new domain will be shown in the "**Domain Name**" List.



3. Click the **"Close"** button to exit the Domain Manager window.

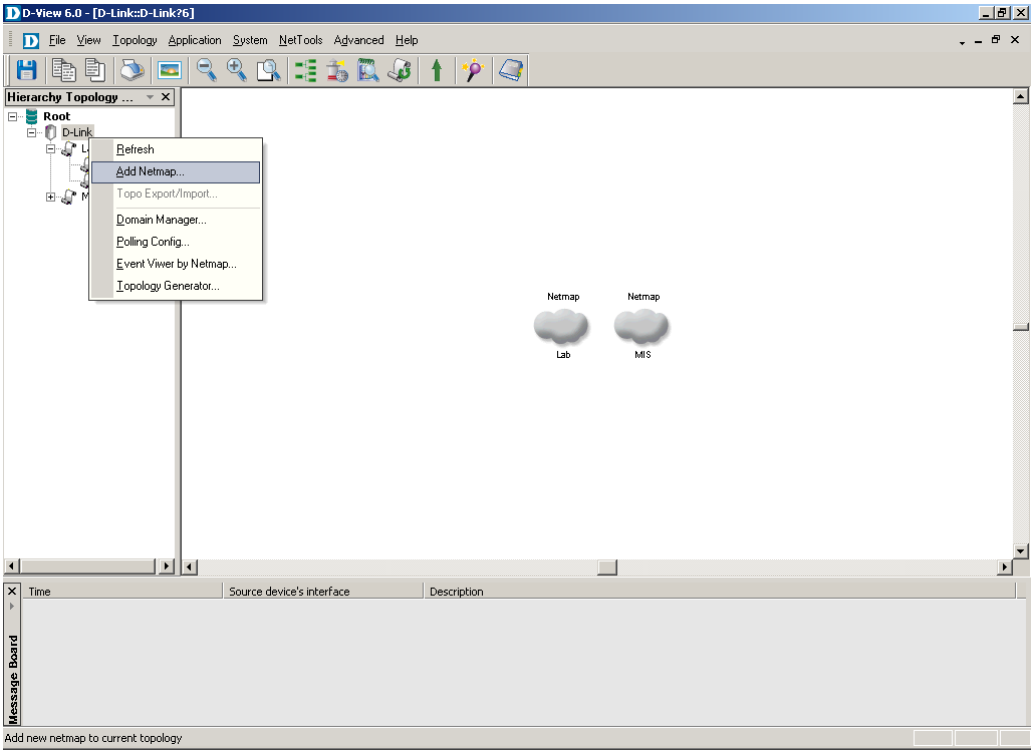
Create a Netmap for NMS Topology Import Manually

A Netmap in D-View 6.0 NMS platform is a logical network space for network endpoints while performing network administration. You could create a Netmap first, and later after performing Topology Generator, you can export the auto discovery result into the Netmap.

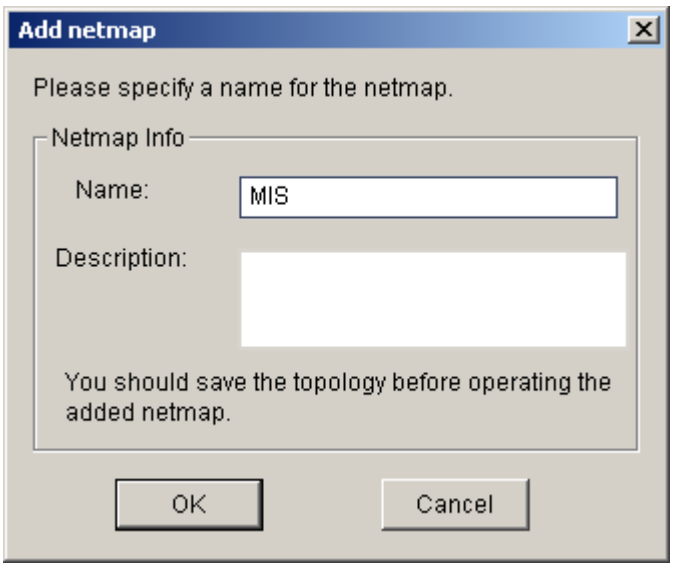
Note: Alternatively, users could create a Netmap by adding network components to the topology map manually.

Steps:

1. Click on the domain "**D-Link**" to open the management domain, and right-click on the "**D-Link**" domain to pop up the shortcut menu. Select the "**Add Netmap**" item to enter the **Add Netmap** window.

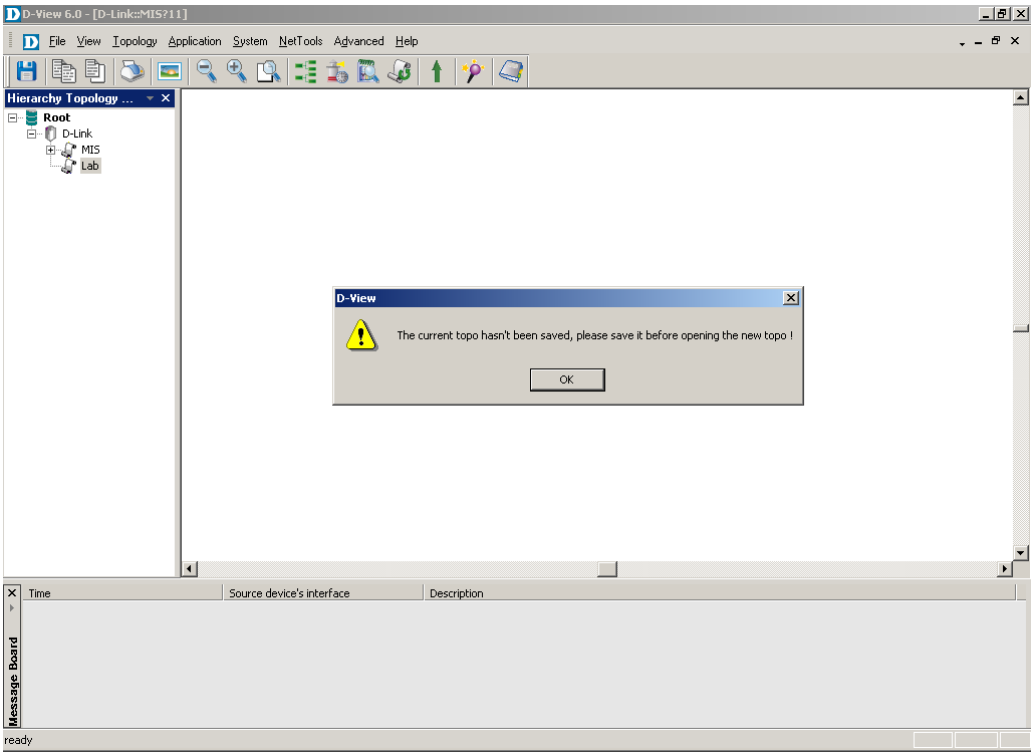


2. Specify a Netmap name in the "**Name**" field, and press the "**OK**" button. Here the Netmap "**MIS**" is the example.



3. After a Netmap is created successfully, the new Netmap will be shown in both "**Hierarchy Topology**" and "**Topology Map**" window. Be sure to **Save** the configuration you made before proceeding the next step.

Note: The above operation can be comprehend by clicking the "**Save**" icon on the menu bar, or simply by pressing "Ctrl + S".

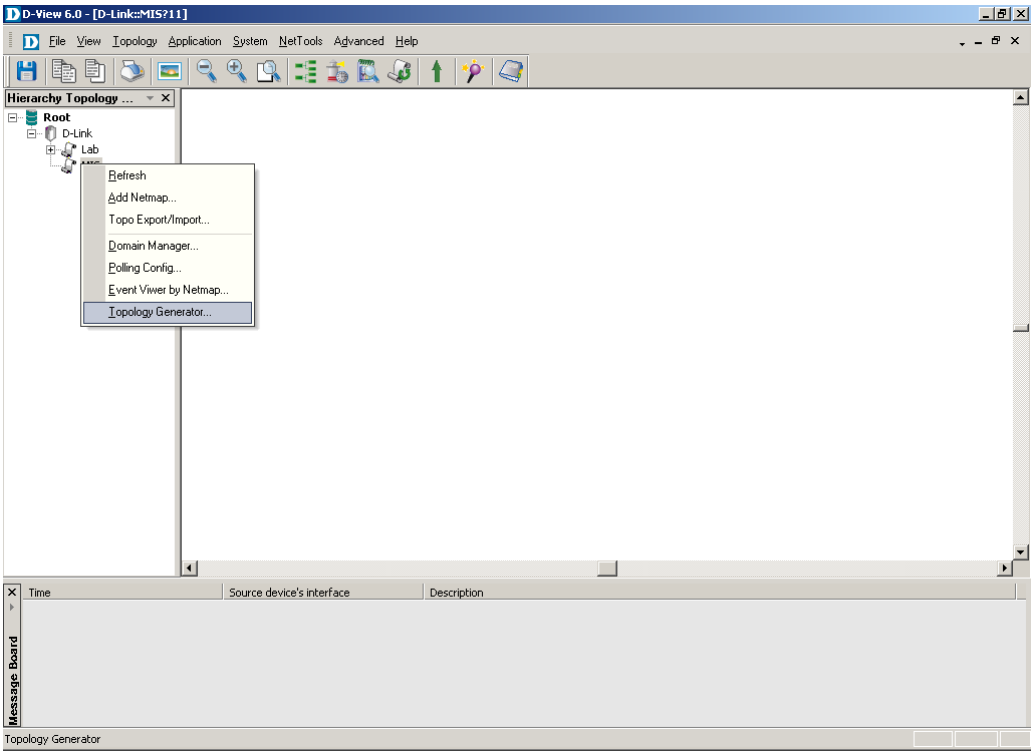


Perform Topology Generator Manually to Discover Network Endpoints Automatically

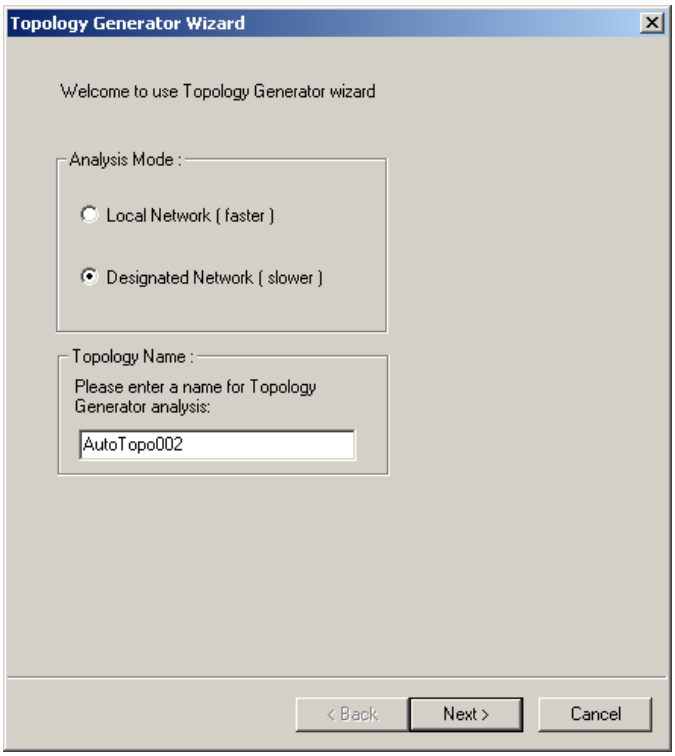
You can use “**Topology Generator**” function to search network devices within your network, meanwhile auto create their link relation accordingly.

Steps:

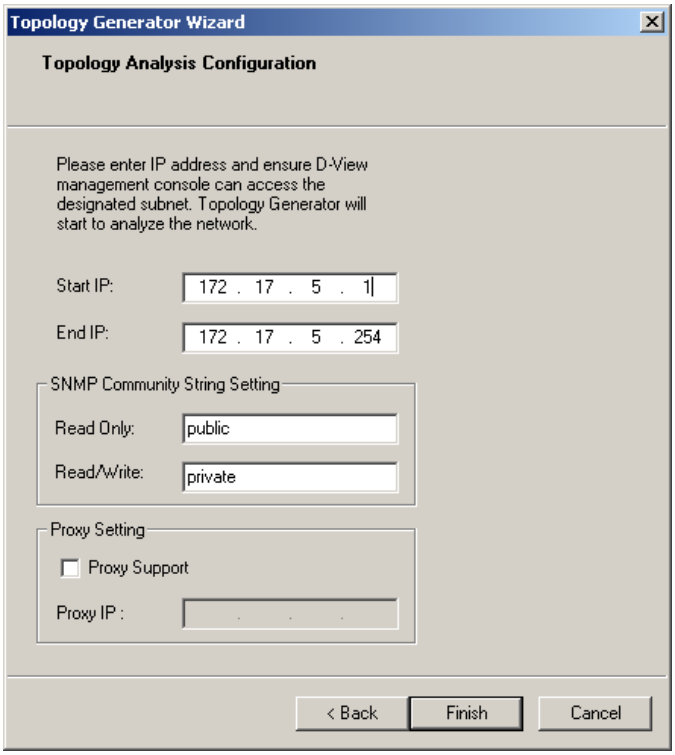
1. Click on the Netmap “**MIS**”, and right-click to pop up the shortcut menu. Please choose the “**Topology Generator**” item to enter the **Topology Generator Wizard**.



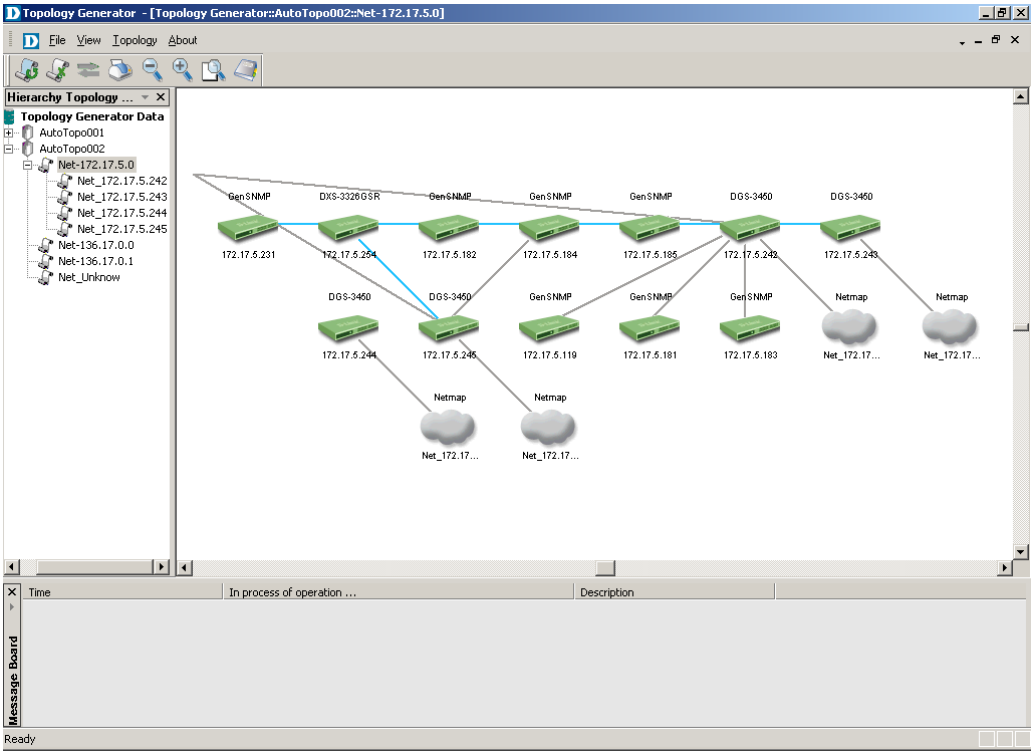
In Topology Generator Wizard, choose the “**Designated Network**” option as the Analysis Mode, and specify a topology name in the “**Name**” field, and press the “**Next**” button.



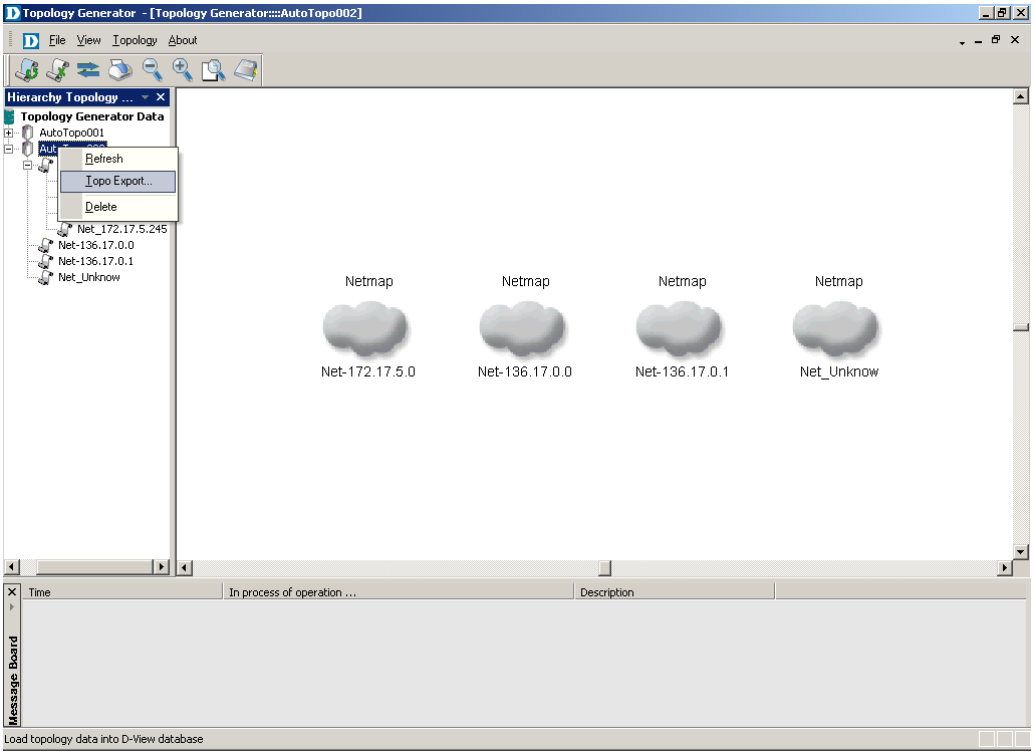
2. Please specify the IP range and SNMP community string for auto discovery in the setting, and then press the "**Finish**" button. Here the SNMP community string is left for the default setting. If your configuration of the SNMP community string on network devices is other than the default setting, please provide the correct SNMP community string in this step.



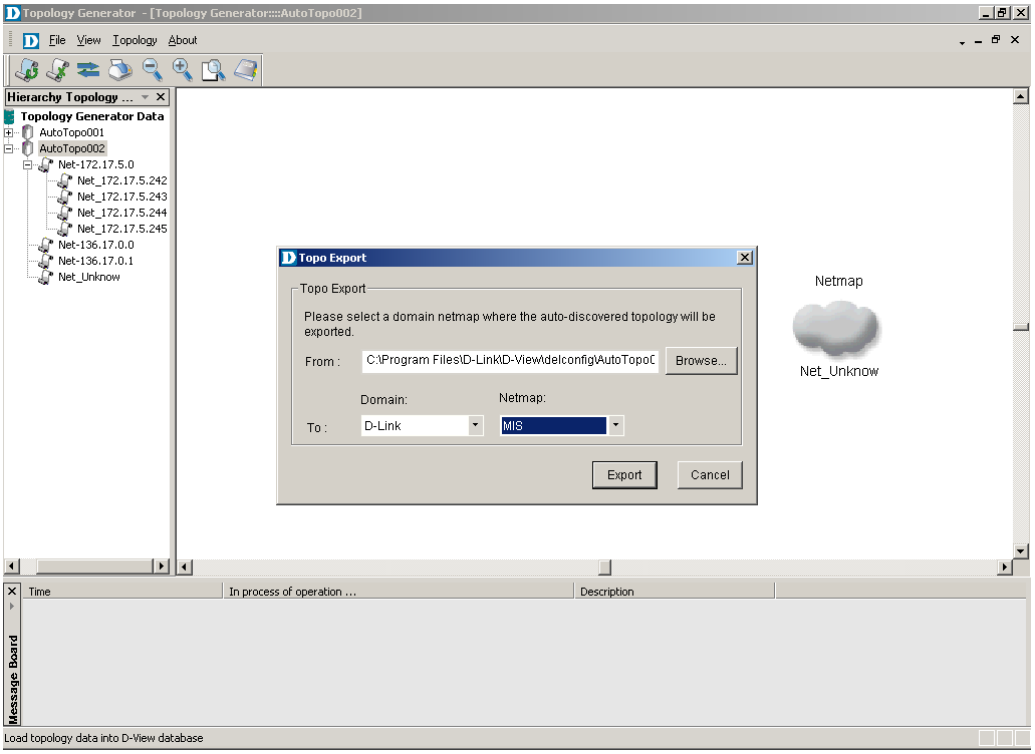
3. When the analysis finished, the auto discovery result will be shown in the "**topology**" window.



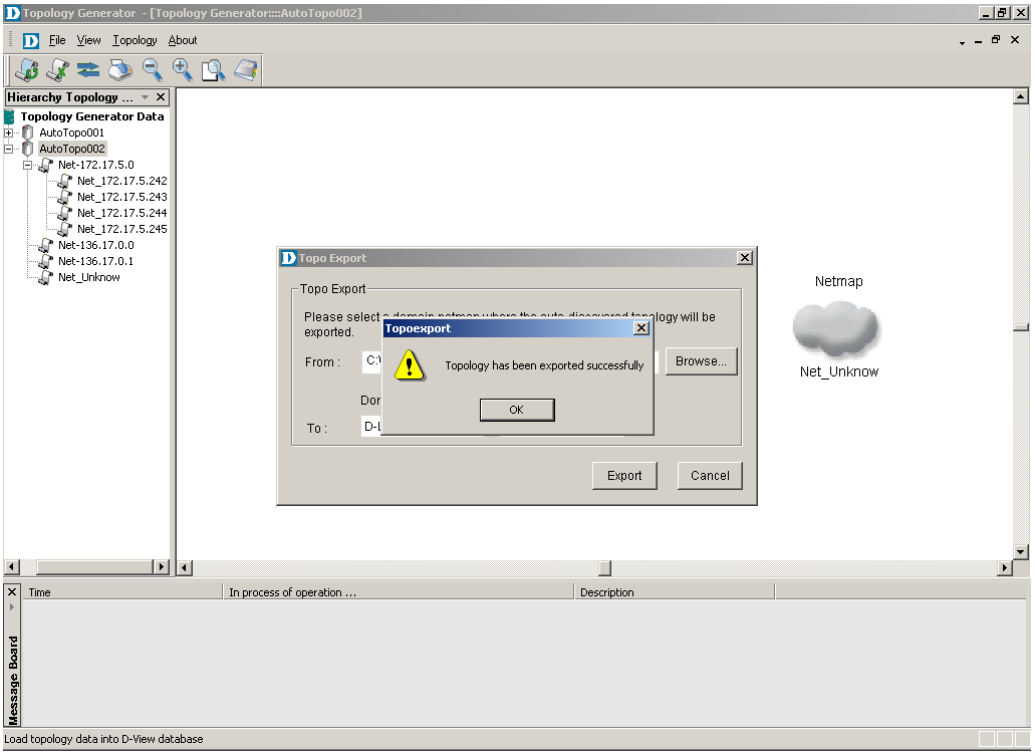
4. Click the topology name you have created in the Hierarchy Topology window, then right-click to pop up the shortcut menu. Select the "**Topo Expo**" item to enter the Topo Export window.



5. Choose the Domain and Netmap you created previously. Press the "**Export**" button. After this, you've exported the auto analysis result to D-View NMS platform successfully.



6. After successfully exporting the discovered topology into D-View main window, you may close the Topology Generator window.

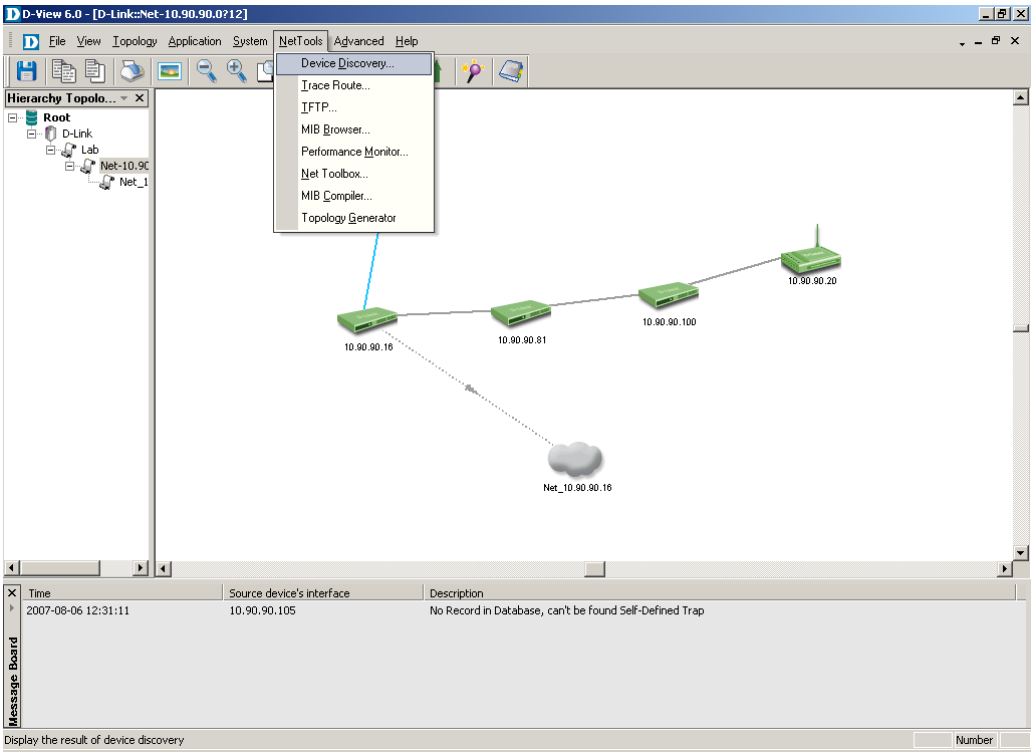


Adding a Device to the Managed Netmap Manually

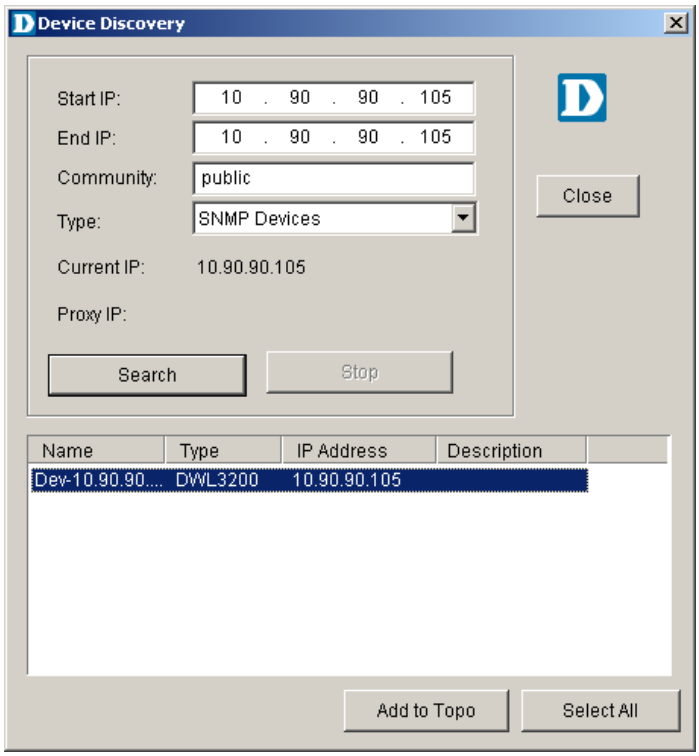
If there is a new network device, e.g. its IP is **10.90.90.105**, joined into your network; you can manually discover the device and add it into the existing managed Netmap. The steps below will guide you how to comprehend this task.

Steps:

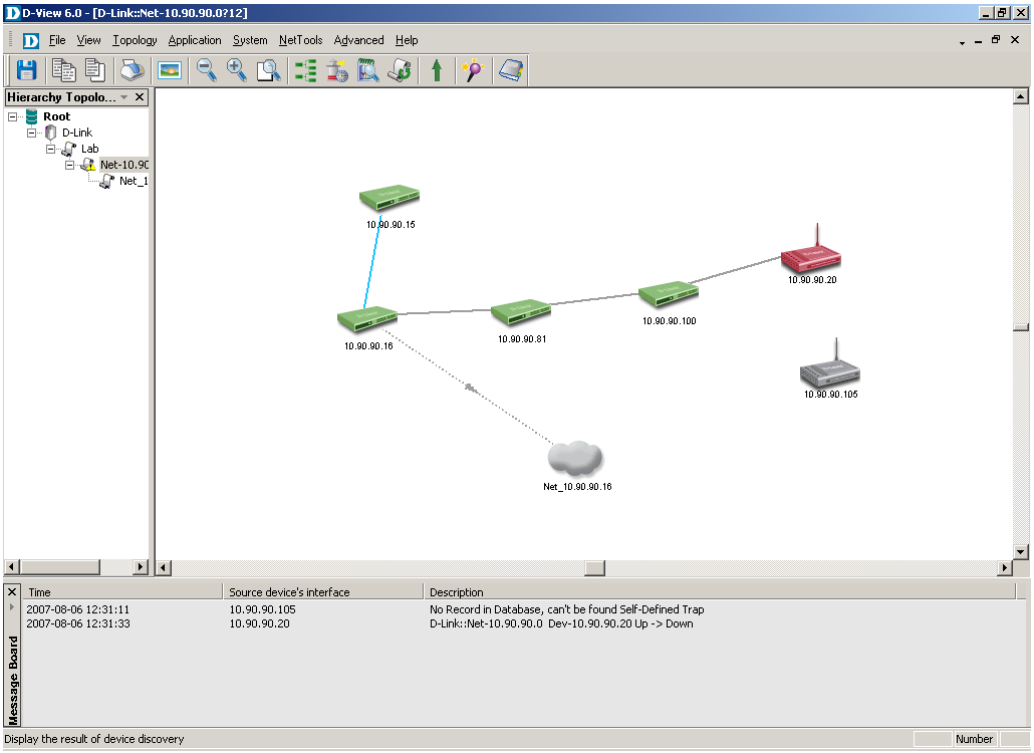
1. You can achieve this goal by visiting "**NetTools > Device Discovery**" to begin the procedure for adding a device manually.



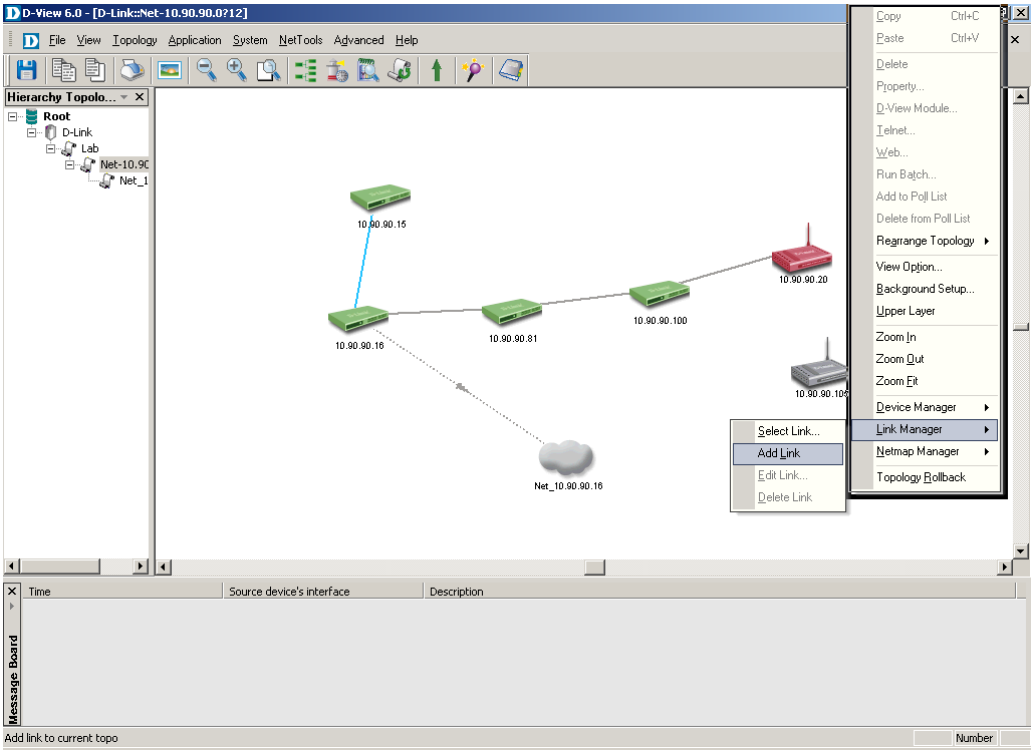
2. Input the IP range for discovering network devices you intend to add manually, for example, Start IP: 10.90.90.105, End IP: 10.90.90.105, then press the "**Search**" button.



3. Select the device you want to add, and then press the "**Add to Topo**" button to complete the adding device process. Press the "**Close**" button to exit the Device Discovery window. Now a new device has been manually added into the managed Netmap.



4. After added a new device, the link relations have to be created manually for it. Now right-click on the empty space in the topology map to pop up the shortcut menu. Choose the sub-item "**Add Link**" under the "**Link Manager**". After entering the Add Link mode, the mouse indicator will display as a cross sign.

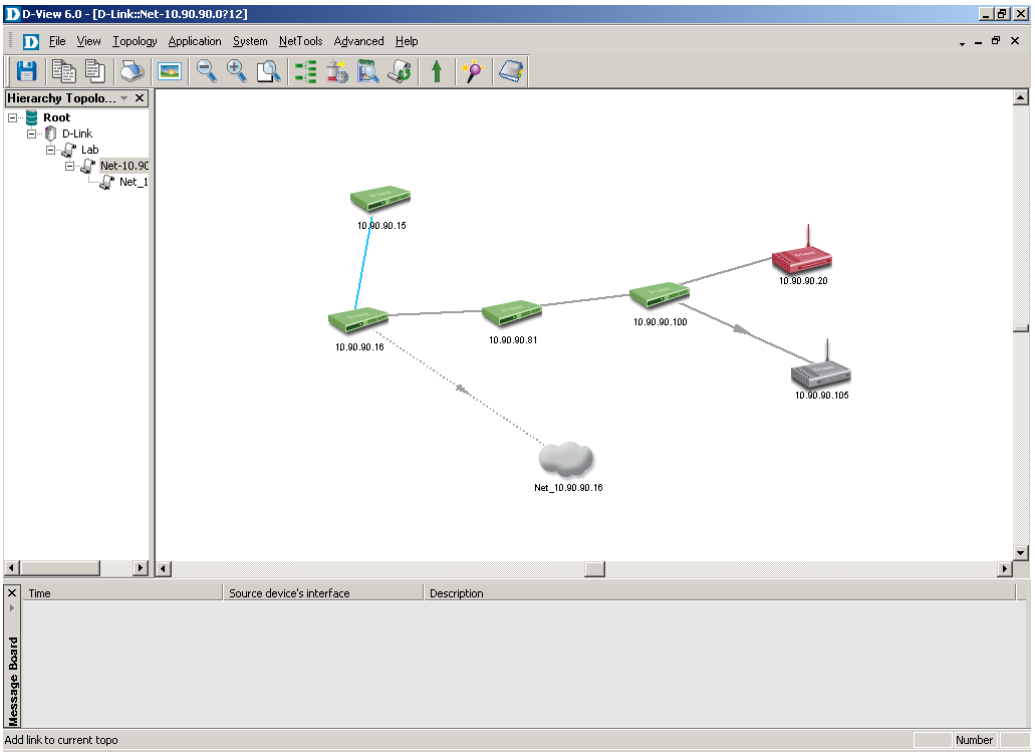


5. Click the device, e.g.10.90.90.100, which has existed in the topology map, then move your mouse to the icon of the added device, e.g. 10.90.90.105, and click on it. Now a new link will be created between those 2 devices.

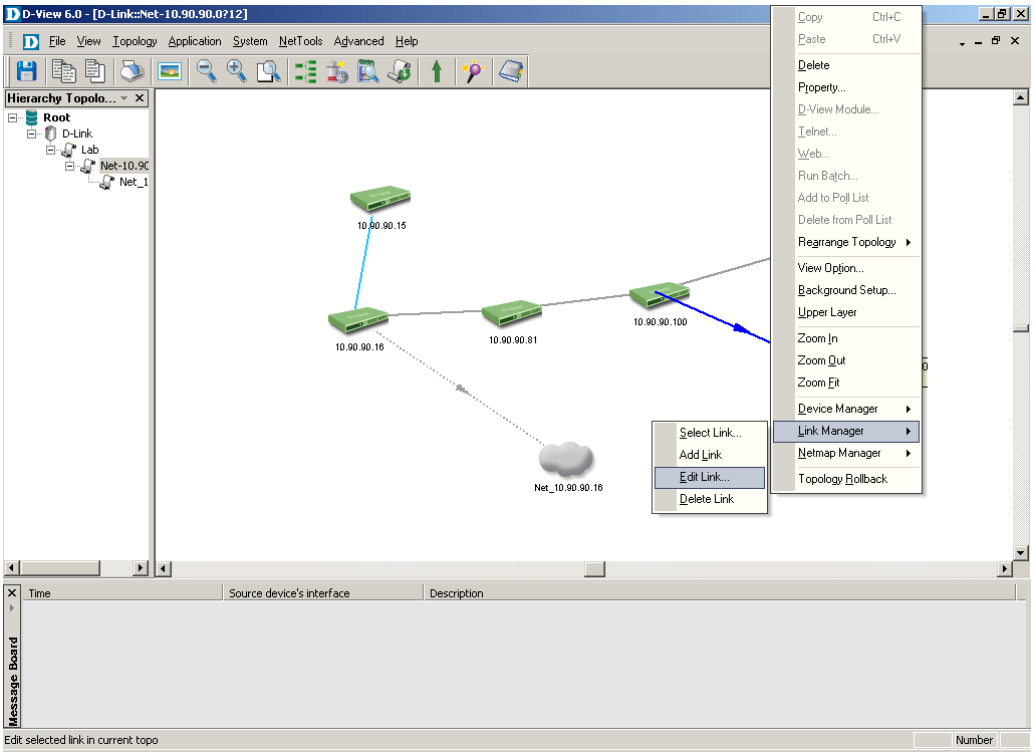
Note:

(1) To leave the Add Link mode, please right-click on the empty space in the topology map, after pop up the shortcut menu, click on the empty space in the topology map.

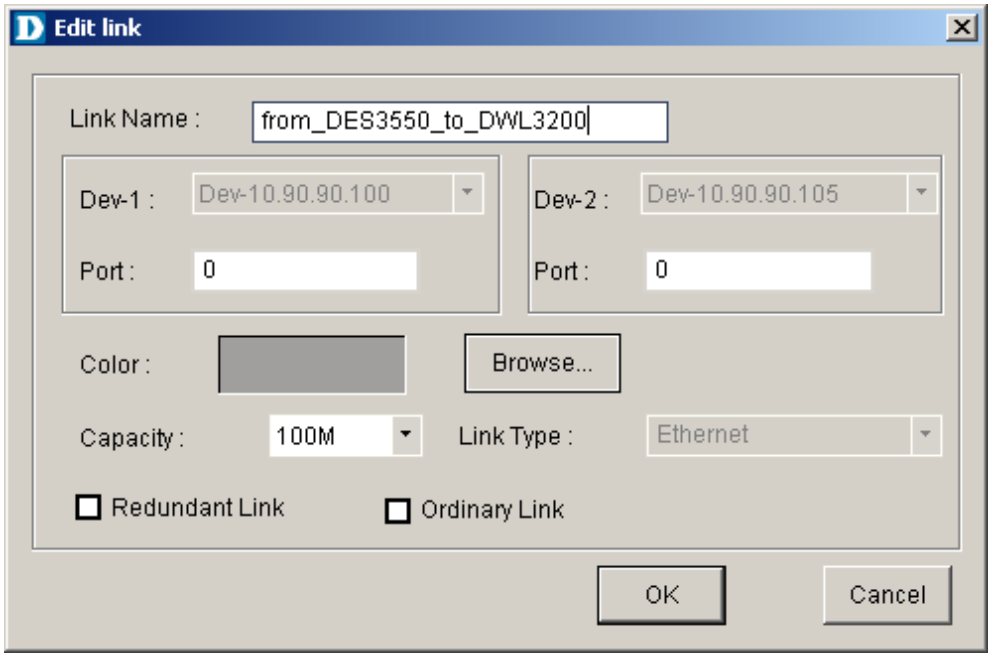
(2) If you remove an existing network device from the topology map, and try to manually add the device back to the topology. It is very important to **Save** the topology map first before you add the removed network device back to the topology. Otherwise, the operation will be failed since the topology change has not been submitted to the database.



6. You may edit the added link via right-click on the added link. After pop up the shortcut menu, select the sub-item "**Edit Link**" under the "**Link Manager**" to enter the Edit Link window.

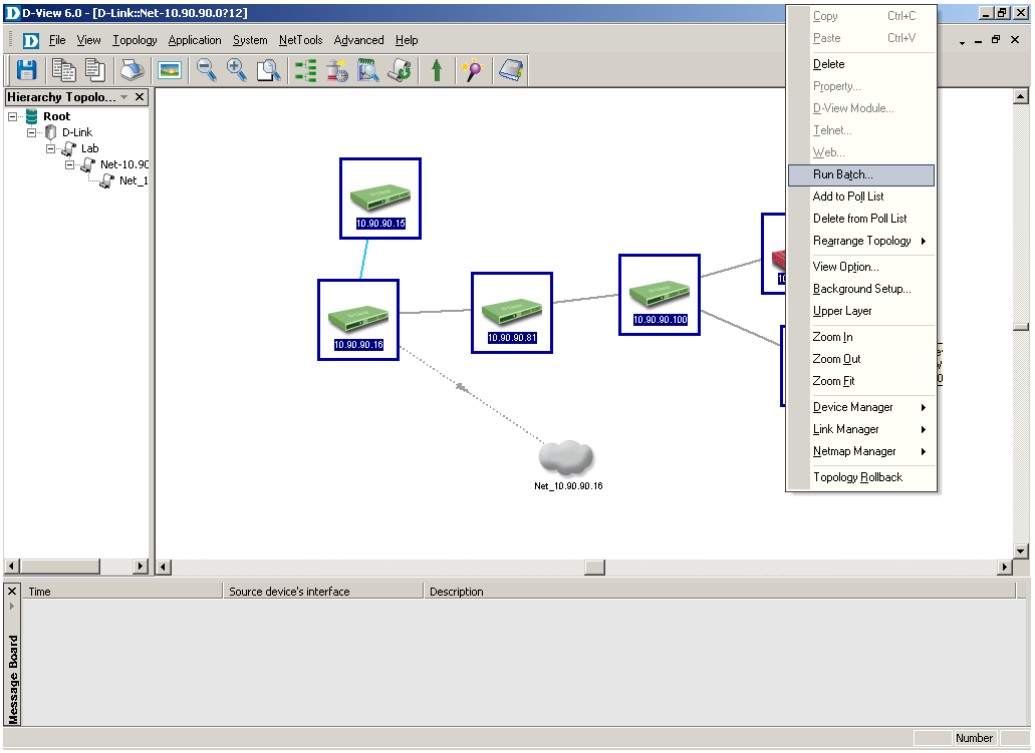


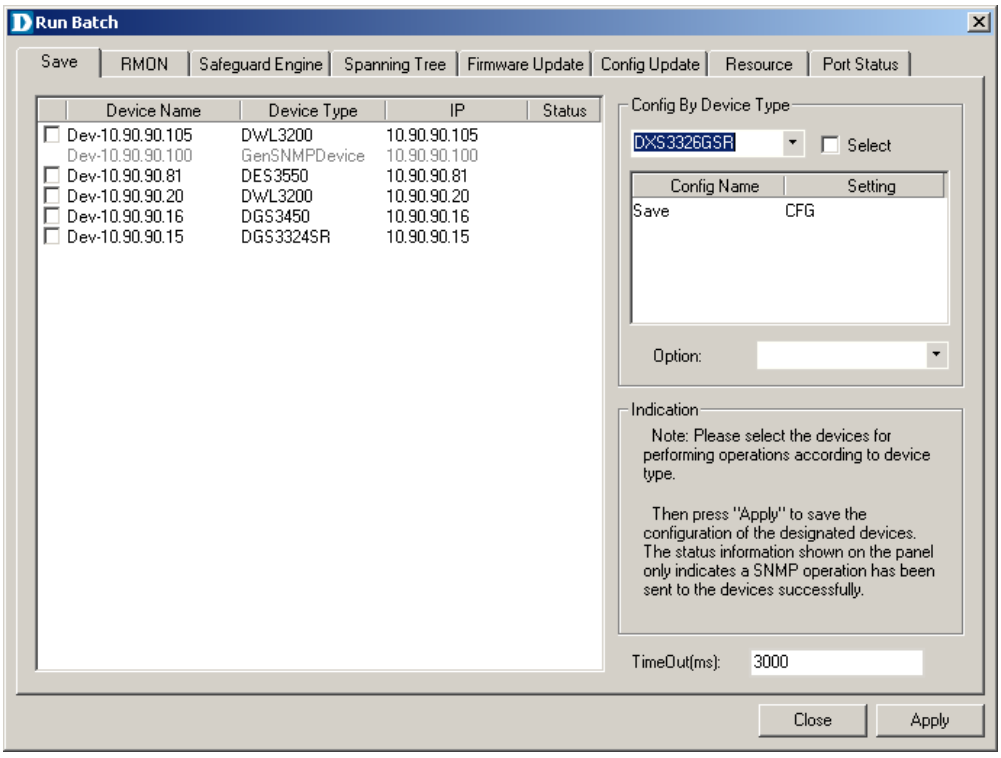
7. You can edit the detail information of the added link. Click the “**OK**” button to exit the Edit Link window.



Perform Run Batch Function for One-To-Many Configuration

1. Users can select multiple devices at the same time via mouse drag for performing batch configuration function. After multiple devices are selected, simply right-click on one of the selected device to pop up the shortcut menu, select the "**Run Batch**" item to enter the Run Batch window.



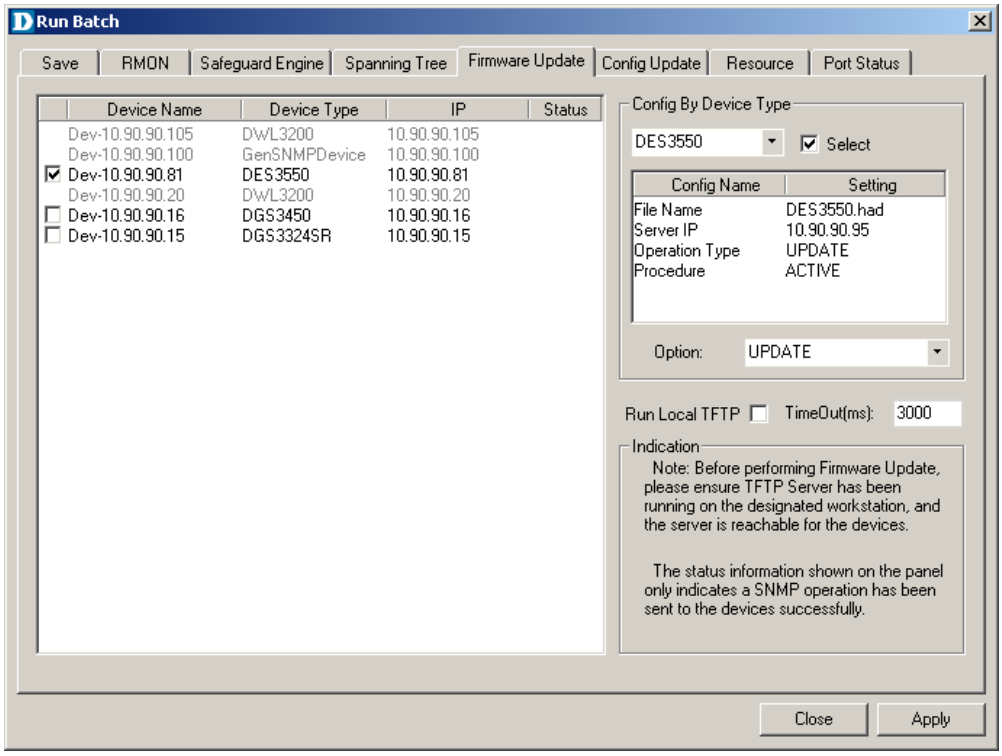


For running batch configuration for network endpoints, below “**Firmware Upgrade**” and “**Safeguard Engine**” are as the examples.

Firmware Upgrade for DES-3550

1. Shift to the “**Firmware Update**” tab, and specify the models you intend to upgrade from the “Config By Device Type” block. Choose the model name as DES3550 from the drill down list, and tick the “**Select**” checkbox. See the illustration below.

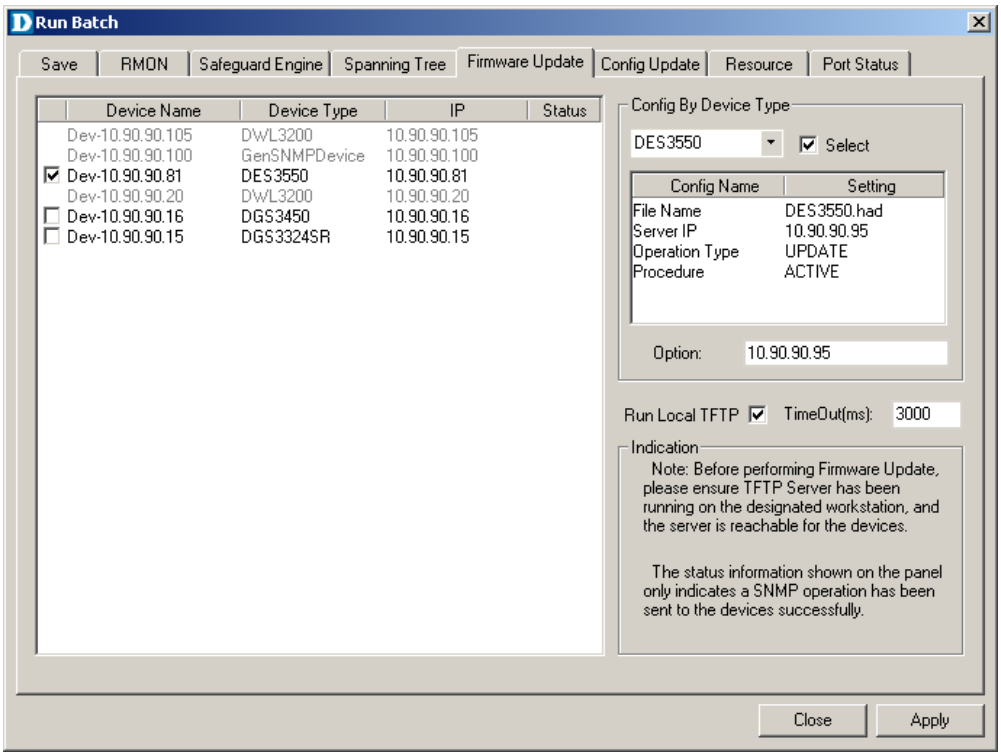
Note: When you tick the checkbox, all DES-3500 devices listed on the left will be selected automatically. If you intend to perform firmware upgrade simply for partial DES-3500 devices, you can uncheck part of the devices listed on the left.



2. Please provide the corresponding config parameters as below:

- File Name: DES3550.had
- Server IP: 10.90.90.101
- Operation: **UPDATE**
- Procedure: ACTIVE

Tick the “**Run Local TFTP**” checkbox, and then press the “**Apply**” button.

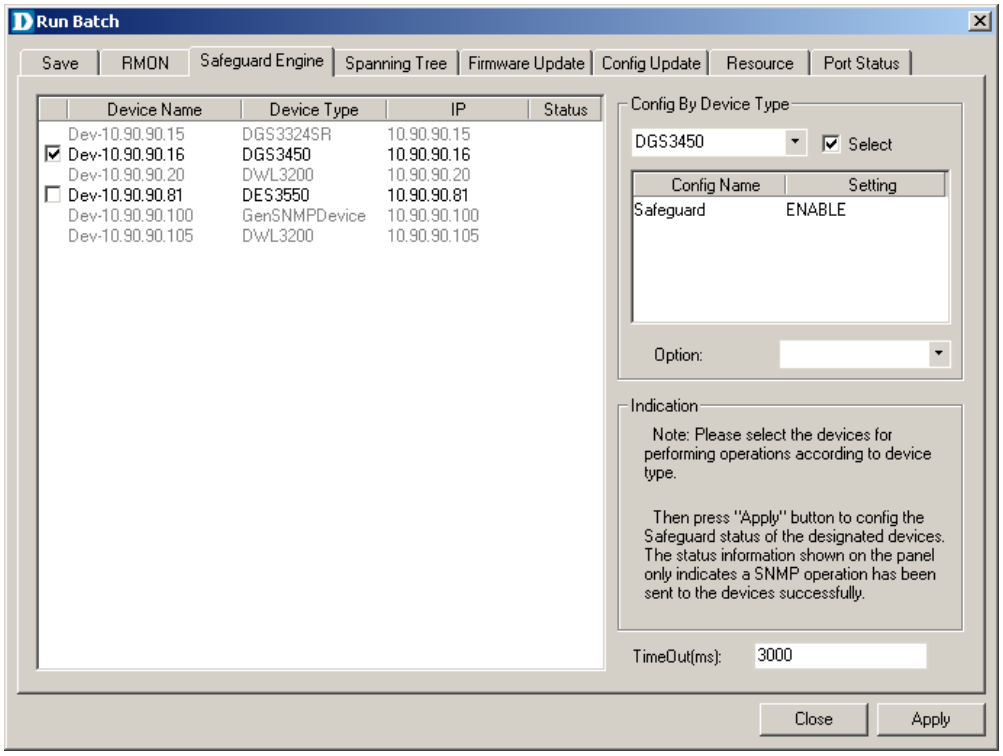


Note: The firmware files must reside in the default folder of Local TFTP Server before you perform this task. You may download the switch firmware from PMD, and copy these firmware files to the default folder “C:\Program Files\D-Link\D-View”.

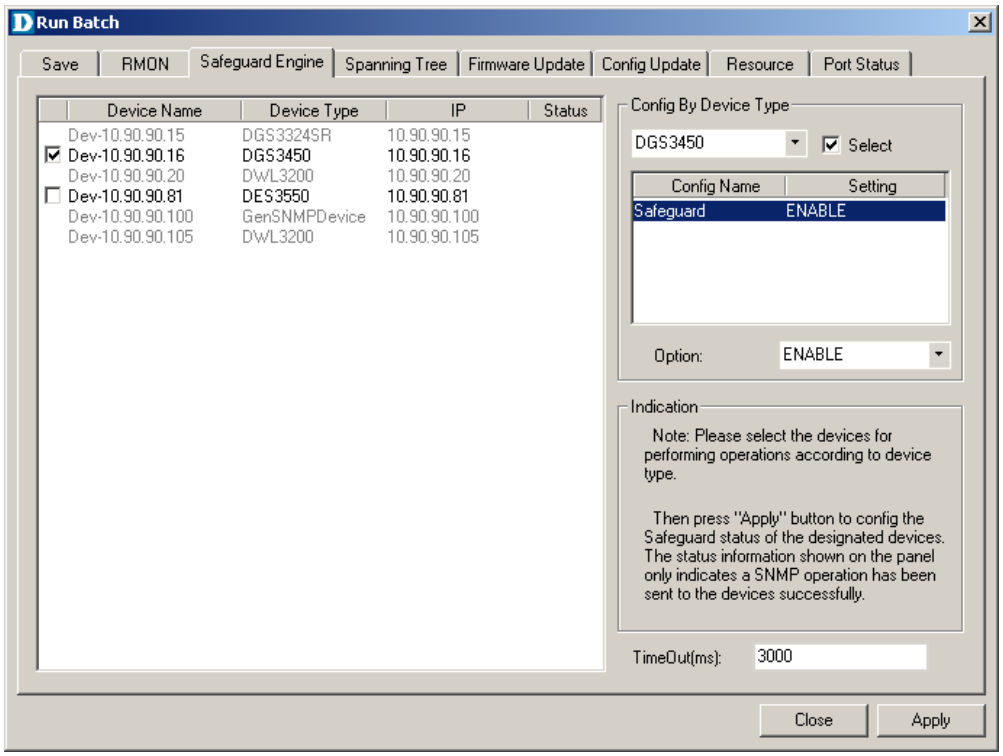
Enable Safeguard Engine for DES-3550

1. Shift to “**Safeguard Engine**” tab, specify the models you intend to enable or disable Safeguard Engine from the “**Config By Device Type**” block. Choose the model name as DES3550 from the drill down list, and tick the “**Select**” checkbox. See the illustration below.

Note: When you tick the checkbox, all DES-3500 devices listed on the left will be selected automatically. If you intend to enable or disable Safeguard Engine simply for partial DES-3500 devices, you can uncheck part of the devices listed on the left.



2. Please configure the setting parameter as “**Enable**” or “**Disable**”, and then press the “**Apply**” button.

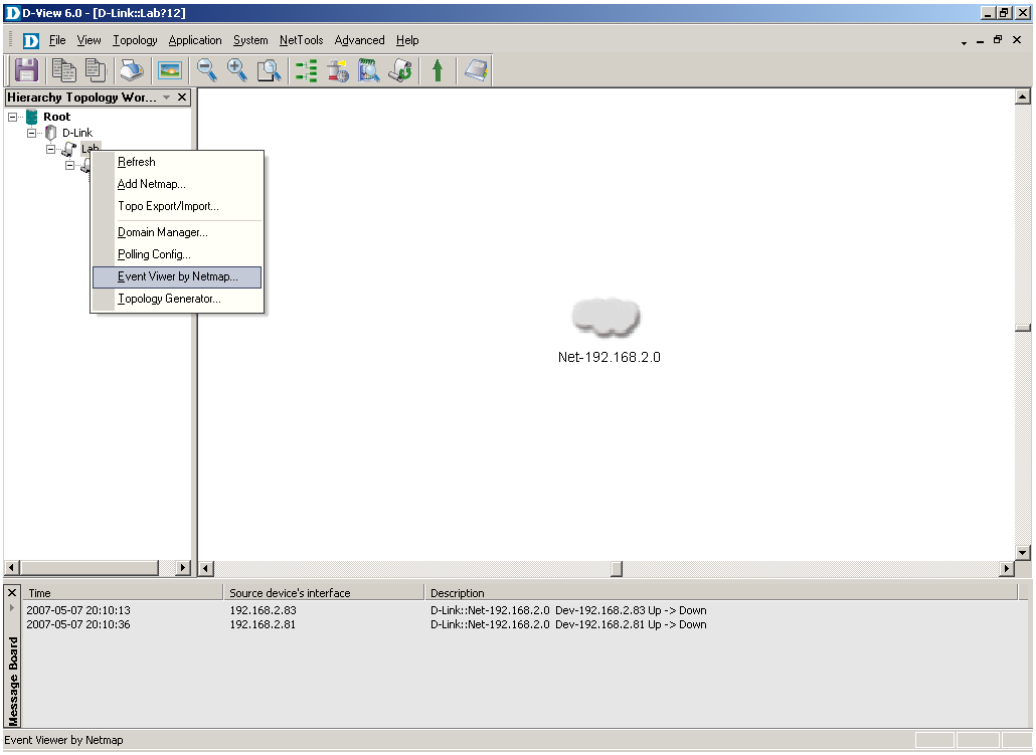

Run Batch
Save
RMON
Safeguard Engine
Spanning Tree
Firmware Update
Config Update
Resource
Port Status
Device Name
Device Type
IP
Status
Dev-10.90.90.15 DGS3324SR 10.90.90.15
Dev-10.90.90.16 DGS3450 10.90.90.16
Dev-10.90.90.20 DWL3200 10.90.90.20
Dev-10.90.90.81 DES3550 10.90.90.81
Dev-10.90.90.100 GenSNMPDevice 10.90.90.100
Dev-10.90.90.105 DWL3200 10.90.90.105
Config By Device Type
DGS3450
Select
Config Name
Setting
Safeguard
ENABLE
Option:
ENABLE
Indication
Note: Please select the devices for performing operations according to device type.
Then press "Apply" button to config the Safeguard status of the designated devices. The status information shown on the panel only indicates a SNMP operation has been sent to the devices successfully.
TimeOut(ms):
3000
Close
Apply

Event Viewer

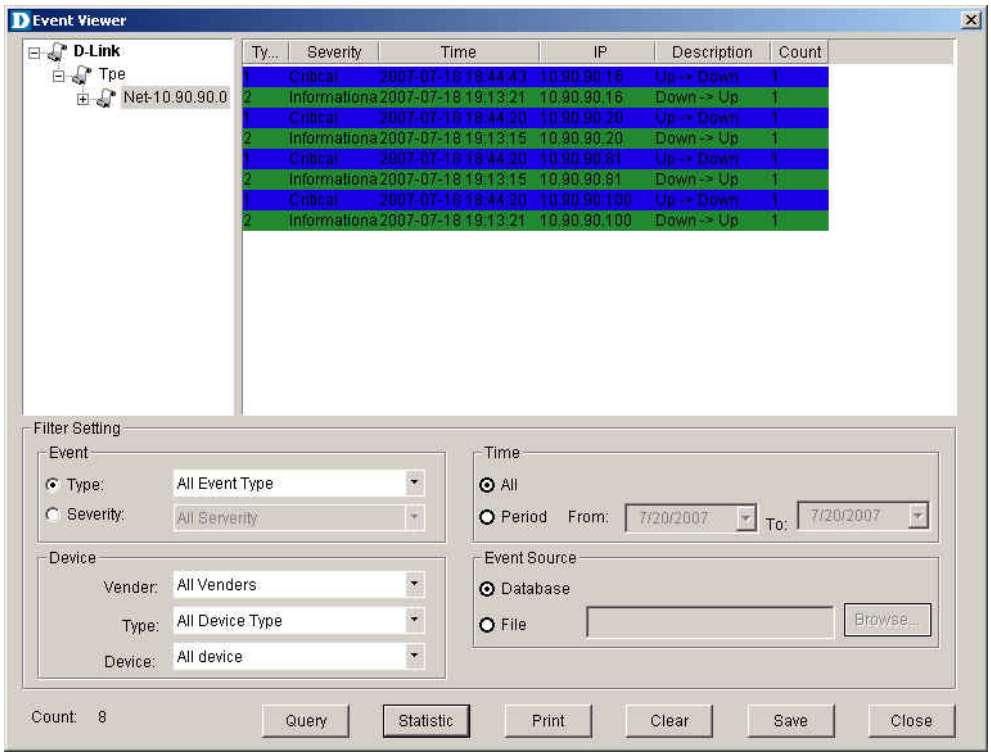
You can check the events for network devices via the "**Event Viewer**" function; the feature is available while you go to **System > Event Manager > Event Viewer By Netmap, or Event Viewer By IP**. The steps below illustrate how to perform Event Viewer By Netmap via the shortcut menu.

Steps:

1. Click the Netmap "**Lab**", then right-click to pop up the shortcut menu. Select the "**Event Viewer by Netmap**" item to enter the Event Viewer window.



2. You may configure the Filter Setting, and click the "**Query**" button to apply the filter to review the Event records you would like to observe.


Event Viewer
D-Link
Tpe
Net-10.90.90.0
Ty...
Severity
Time
IP
Description
Count
1 Critical 2007-07-16 18:44:43 10.90.90.16 Up -> Down 1
2 Informationa 2007-07-18 19:13:21 10.90.90.16 Down -> Up 1
1 Critical 2007-07-16 18:44:20 10.90.90.20 Up -> Down 1
2 Informationa 2007-07-18 19:13:15 10.90.90.20 Down -> Up 1
1 Critical 2007-07-16 18:44:20 10.90.90.81 Up -> Down 1
2 Informationa 2007-07-18 19:13:15 10.90.90.81 Down -> Up 1
1 Critical 2007-07-16 18:44:20 10.90.90.100 Up -> Down 1
2 Informationa 2007-07-18 19:13:21 10.90.90.100 Down -> Up 1
Filter Setting
Event
Type:
All Event Type
Severity:
All Serverity
Time
All
Period
From:
7/20/2007
To:
7/20/2007
Device
Vender:
All Venders
Type:
All Device Type
Device:
All device
Event Source
Database
File
Browse...
Count: 8
Query
Statistic
Print
Clear
Save
Close