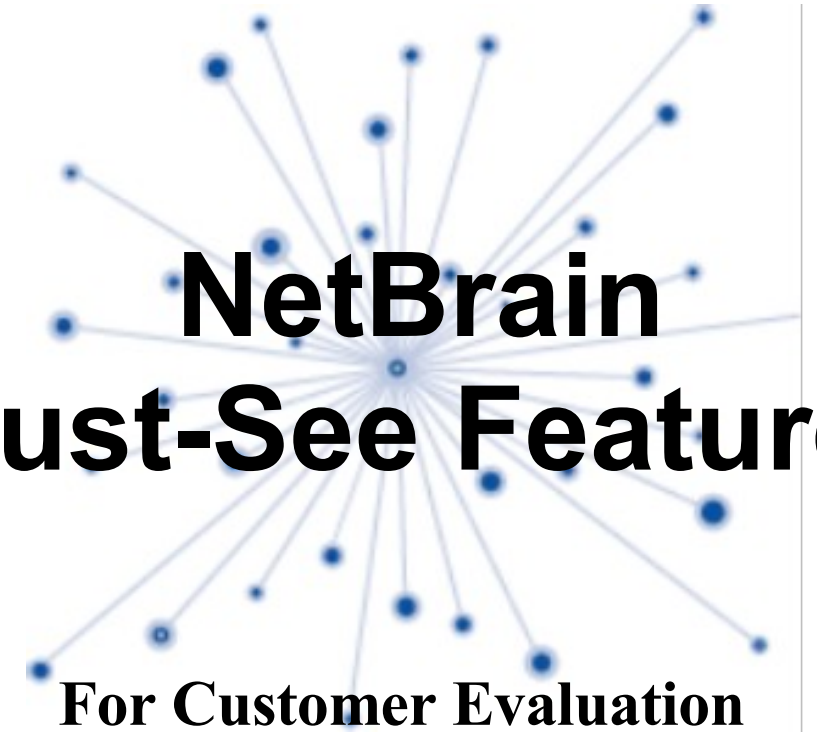

NetBrain Must-See Features

For Customer Evaluation

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This Must-See Feature Guide is a guided tour through the key features to quickly familiarize yourself with the powerful capabilities in our solutions.

	Key Feature	Description
1	Quick Start	How to jump start NetBrain in minutes? Also Introduce key deployment options and underlying concepts of NetBrain
2	Network Discovery	What do you have in your network? Discovery is an unsolved challenge, until now.
3	Automate Mapping	Say good-bye to manual mapping… Here is how.
4	Network Assessment	From decoding network design to one-click creation of document, network assessment is no longer cumbersome with NetBrain automation
5	Map-based Troubleshooting	Use map to drive troubleshooting? Yes. The three step map-driven processes can be used in virtually every troubleshooting task…
6	Network Design	Use NetBrain's virtual workspace to help you define and verify your network design.
7	Routing & Configure Management	What's changed? NetBrain will provide the most comprehensive answer.

NetBrain Must-See Feature Cards

Category	Title	Use Case
Quick Start		
1.1	Drag-and-drop configuration files to create a map	Create a map to support an upcoming network upgrade.
1.2	Inside the workspace : : Device → Map → Everything else	Building a map from a single device.
1.3	Device Setting & Network Setting: key to your live network	I need to get to any router…quick.
Network Discovery		
2.1	Discover an entire network from one IP address	What do I have in the network?
2.2	Benchmark the network and build L2 topology	L2 and L3 connectivity – mapped out.
Automate Mapping		
3.1	Search and then Drag-and-drop to create a map	I need a map around an IP/device…
3.2	Map the traffic path between Point A & B	Here is the map for that problematic application…
3.3	Map the traceroute result	I need a quick translation…
3.4	Map out a region	Device group

Category	Title	Use Case
Network Assessment		
4.1	Use “Design Reader” to analyze your network	How is the network designed and configured?
4.2	Customize Design Reader for a vulnerability check	Automate compliance checks.
4.3	One-Click Visio maps	Need a Visio map?
4.4	One-Click network assessment documents	Network assessment in minutes.
Map-Based Troubleshooting		
5.1	Problem area mapping	Isolate the reason for a performance problem between points A and B.
5.2	Use heat map to discover hot spots	Isolate the reason for a performance problem between points A and B.
5.3	Discover what’s changed	Compare the before and after results of physical network or configuration changes.
5.4	Measure delay, jitter, packet loss via IP-SLA	Understand if poor VoIP call quality and dropped calls are the result of QoS issues.
5.5	Top-talker drill down via IP Accounting	Network is slow and no one knows why.
Network Design		
6.1	Build a new workspace for a design scenario	Will the proposed configuration changes work as expected?

Category	Title	Use Case
Routing & Config Management		
7.1	Route table comparison and analysis	Need to understand the differences between current routing structure as compared to a previous version.
7.2	Configure file viewer	Need to understand the differences between a current device configuration as compared to a previous version.
7.3	Setting a recurring network benchmark	Establish a known good baseline of the network.

Title	Drag-and-drop Configuration Files to Create a Workspace and SmartMap	Category	Quick Start	No.	1.1
Description	Drag-and-drop a configuration file or a folder containing configuration files into NetBrain Consultant Edition (CE) and a workspace is automatically created. Based on the contents of the configuration files, CE automatically builds a fully detailed SmartMap .	**Use Case**	Develop a map to support an upcoming network upgrade.		

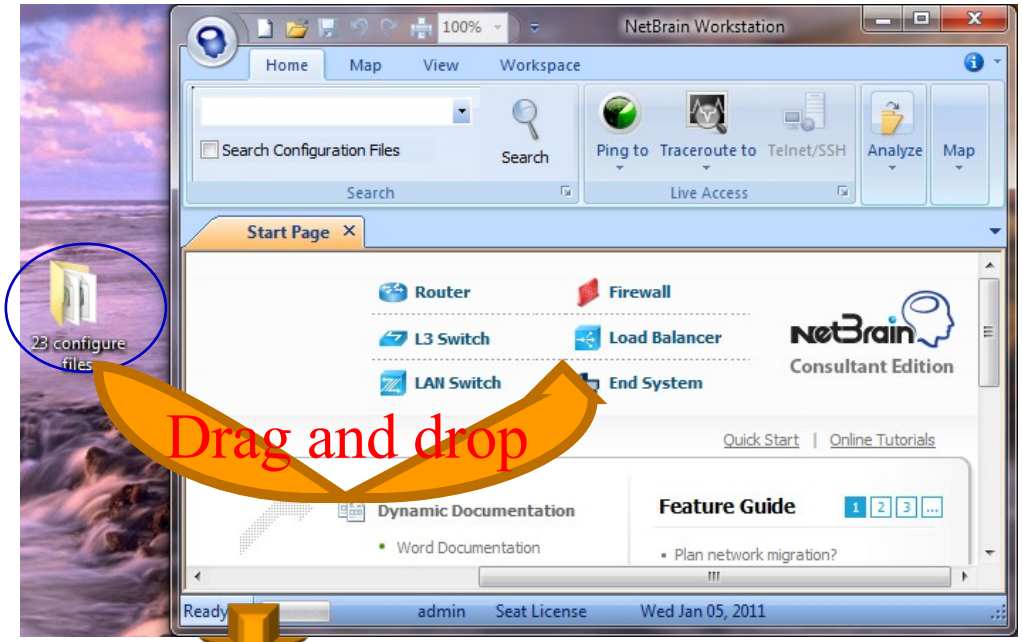
How To

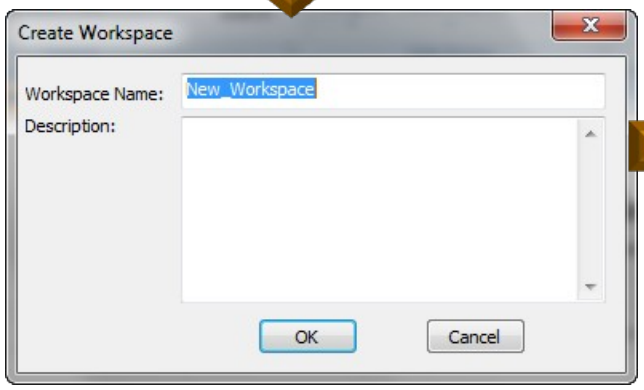
Step1: Select a single or multiple configuration files and drag them into the **Start Page**. The **Create Workspace** dialog box opens.

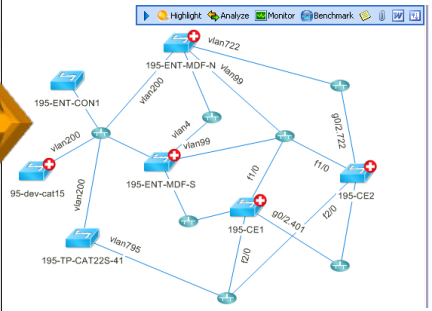
Step2: Enter the workspace name and description in the **Create Workspace** dialog. Click the **OK** button, the system will automatically import the configuration files and create a workspace.

Step3: After the workspace is created, the **Navigation Guide** window opens to describe basic SmartMap operations.

Step4: Click the **OK** button. The system automatically creates a SmartMap with all newly added devices diagrammed.







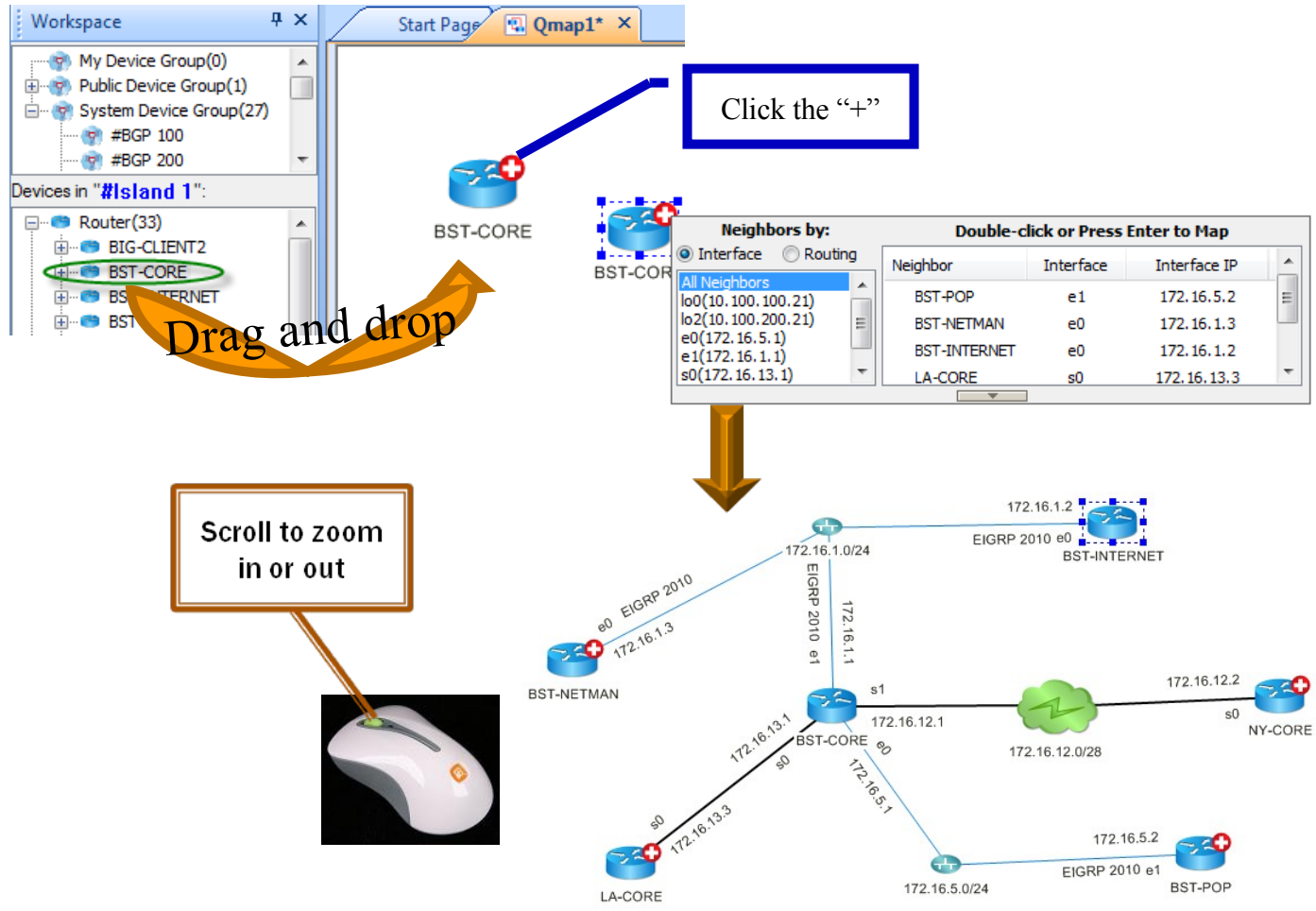
Title	Inside the workspace: Device → Map → Everything else	Category	Quick Start	No.	1.2
Description	A NetBrain SmartMap is built on the information obtained during the discovery process. Drag and drop a single device into the workspace and then click on the ＋, you can add neighbor devices directly connected to the device to the map. Since all the data is embedded in the map, you never need to manually annotate a map, simply zoom in to view the data. Intelligent layout ensures the map is always readable.	**Use Case**	Building a map from a single device.		

How To

Step1: Select one or multiple devices and drag them to Q-map.

Step2: Click the ”+” on the device to open the extend neighbor dialog. In the dialog, select one neighbor device and double click, the selected device will be added to the map. Repeating this operation, you can add more devices to the map.

Step3: Scroll the middle wheel of mouse to zoom in or zoom out to view the network at different levels. As you expand the map more data is shown including: interface IP address, interface name, device hostname, routing protocols, as well as other detailed information about the network.



Title	Device Setting & Network Setting: Key to your Live Network	Category	Quick Start	No.	1.3
Description	Live Network Settings allows you to configure credentials to access network devices. Once the necessary credentials are configured, you can then start Tune Live Access. When started, Tune Live Access will login to devices on the network and download information about each device and automatically match and fill in the correct settings for each device.	**Use Case**	I need to get to any router…quick.		

How To

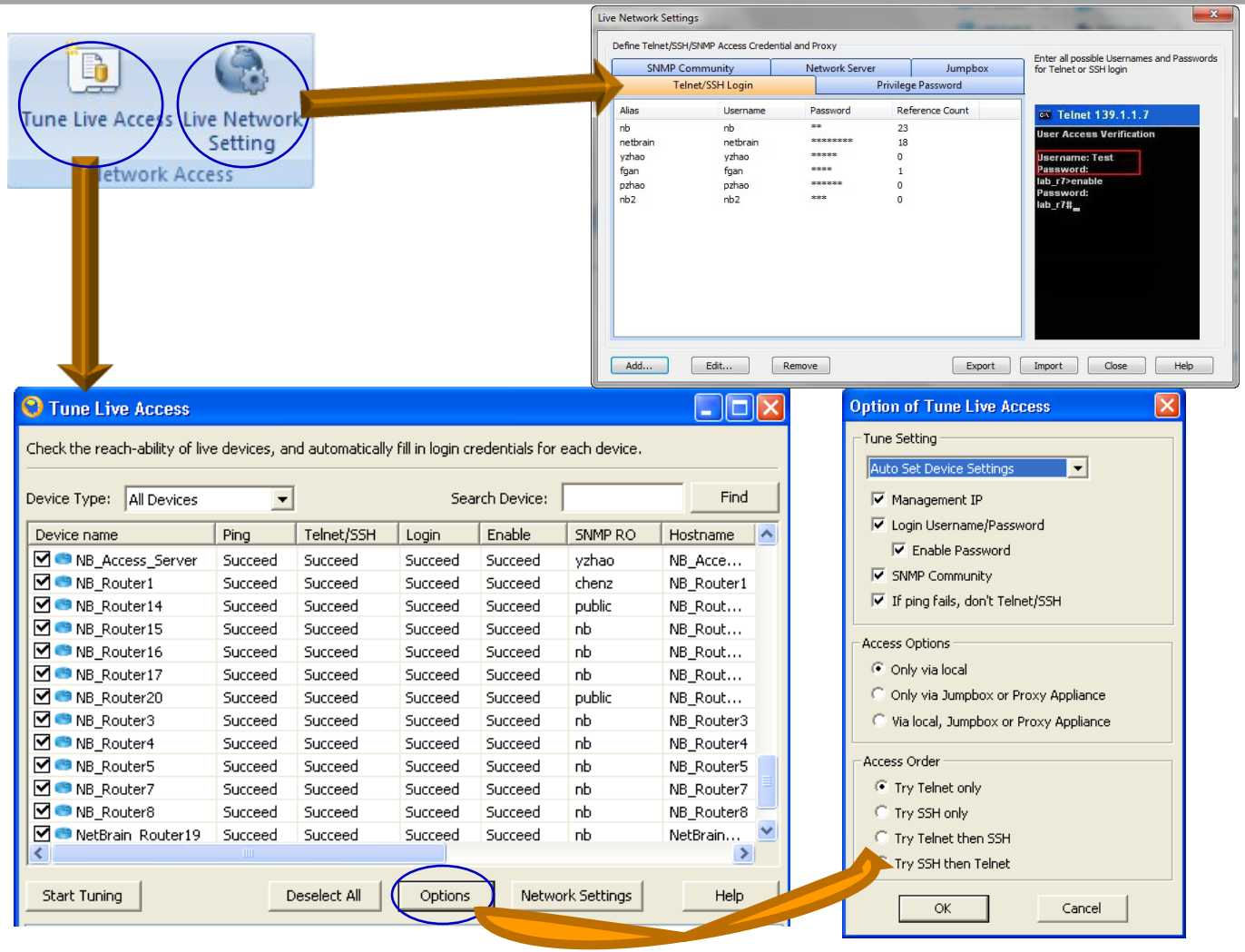
Step1: Click on the **Live Network Settings** button, the **Live Network Settings** dialog opens.

Step2: In the **Live Network Settings** dialog click the **Add** button to input the login credentials (SNMP community strings, username, password, etc.). If you need to edit any settings, select the device and then click the **Edit** button. When finished, close the **Live Network Settings** dialog.

Step3: Click on the **Tune Live Access** button and the **Tune Live Access** dialog opens.

Step4: In the **Tune Live Access** dialog, click on the **Options** button, the **Option of Tune Live Access** dialog opens. Check the necessary settings and then click the **OK** button to exit.

Step5: Click on the **Start Tuning** button. Using the configured credentials, CE will run Tune Live Access and start gathering detailed device configuration data.



Title	Discover an Entire Network from 1 IP Address	Category	Network Discovery	No.	2.1
Description	From a single device you can discover your entire network fast and accurately. NetBrain discovery engine finds the devices, L2/L3 information with full port-to-port connectivity and inventory information for all network devices.	Use Case	What do I have in the network?		

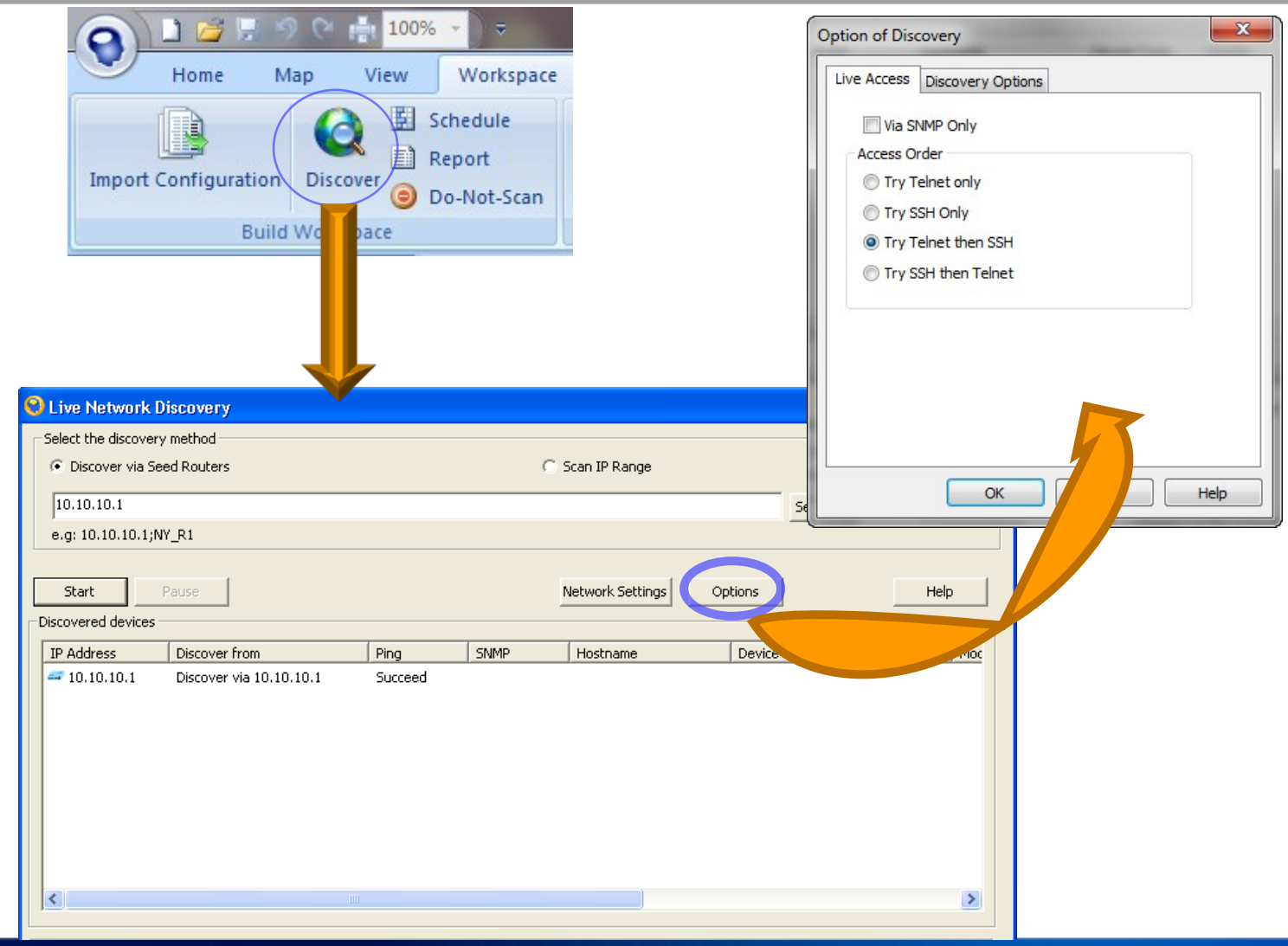
How To

Step1: Click on the **Discover** button to open the **Live Network Discovery** dialog.

Step2: Enter an IP address into the field; for example, 10.10.10.1.

Step3: Click on the **Options** button, the **Option of Discovery** dialog opens.
- Inside the tab of **Live Access**, you can set the **Access Options** and the **Access Order**.
- Inside the tab of **Discovery Logic**, you can set the **Discovery Technology** and the **Scan Subnet Options**.
- When finish, click the **OK** button to exit the **Option of Discovery** dialog.

Step4: Click the **Start** button to run a discovery and as devices are found discovery status will be updated and displayed in the **Discovered devices** field.



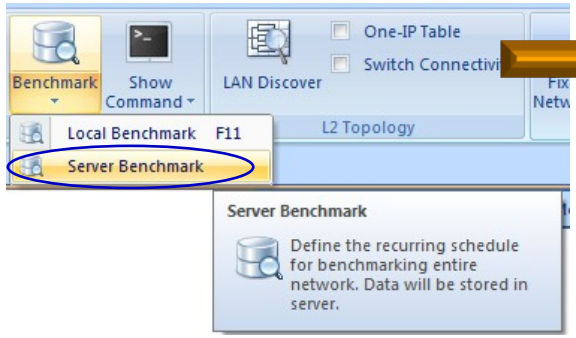
Title	Benchmark and build L2 topology	Category	Network Discovery	No.	2.2
Description	You can benchmark the network for the whole workspace and automatically build L3 and L2 topology. The discovered L2 data can be viewed in the One-IP table and then added into an existing map or used to build a new map.	**Use Case**	L2 and L3 connectivity – mapped out.		

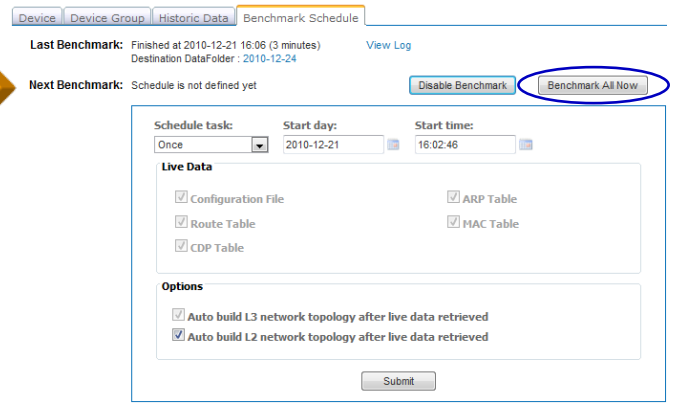
How To

Step1: Benchmark the network

•Click the **Benchmark > Server Benchmark** to open the **benchmark schedule.**

• Click **Benchmark all now** and keep the default options to auto build L3&L2 network topology

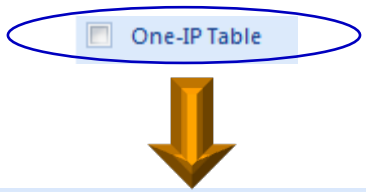


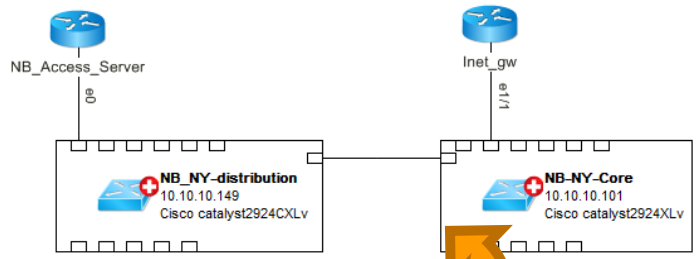


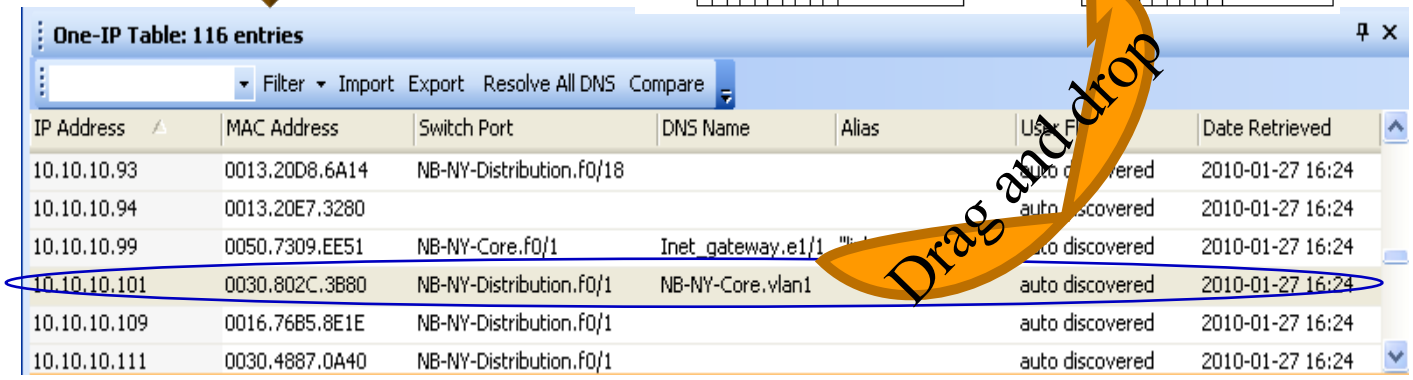
Step2: Map out the L2 and L3 connectivity

•Click the **View One-IP Table** link on the Start Page to launch the **One –IP Table** pane.

•Select a single One-IP item and then drag and drop the item into a L2 map and the device will be added to the map.



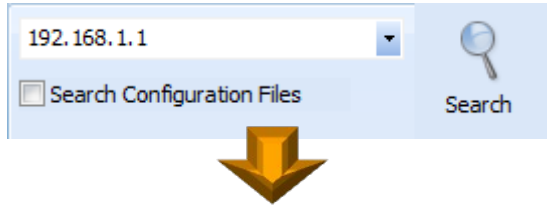




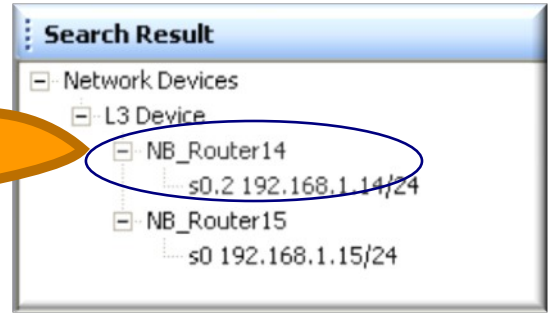
Title	Search and then Drag-and-drop to Create a Map	Category	Automated Mapping	No.	3.1
Description	Search for an IP address, or a MAC address, or which device has certain configure-let. The result is ready to be drag-and-dropped to a map.	Use Case	I need a map around an IP/device…		

How To

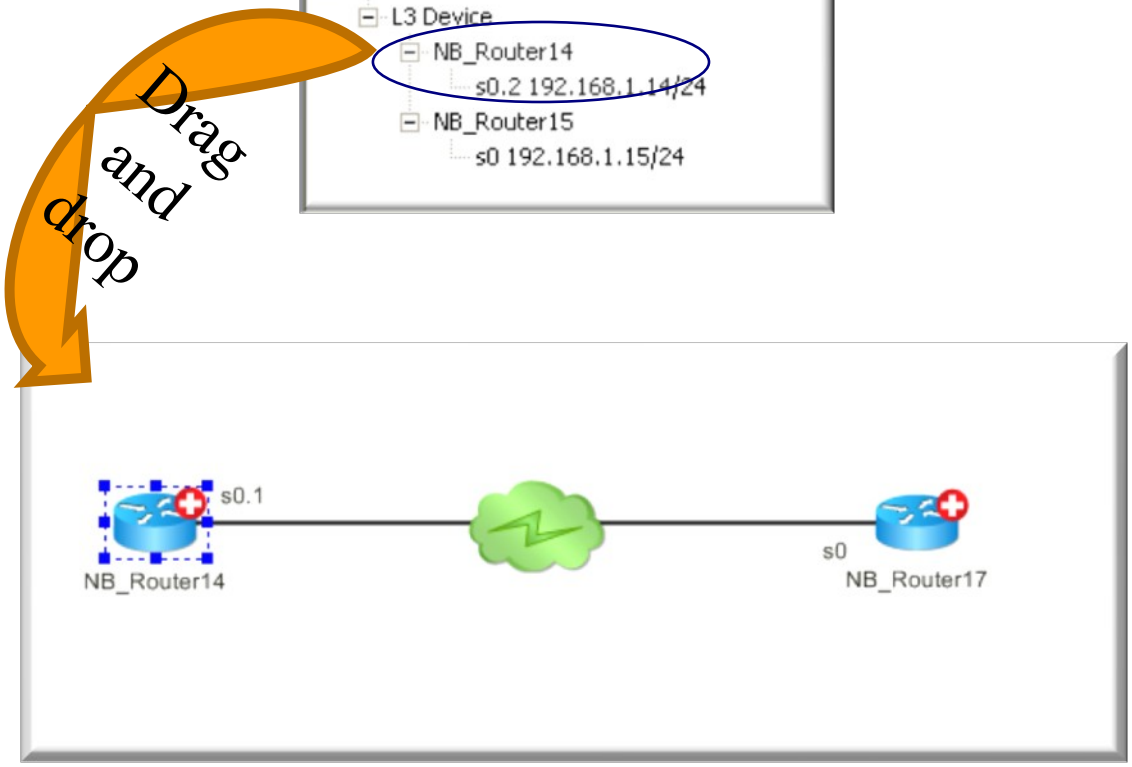
Step1: Enter an IP address or a device hostname into the search text box.



Step2: Click the Search button to find the device and then view the result in the Search Result dialog.



Step3: Select the appropriate device and then drag and drop the device into a map. The device will automatically build the connectivity to it's immediate neighbors, if there are physical connections.



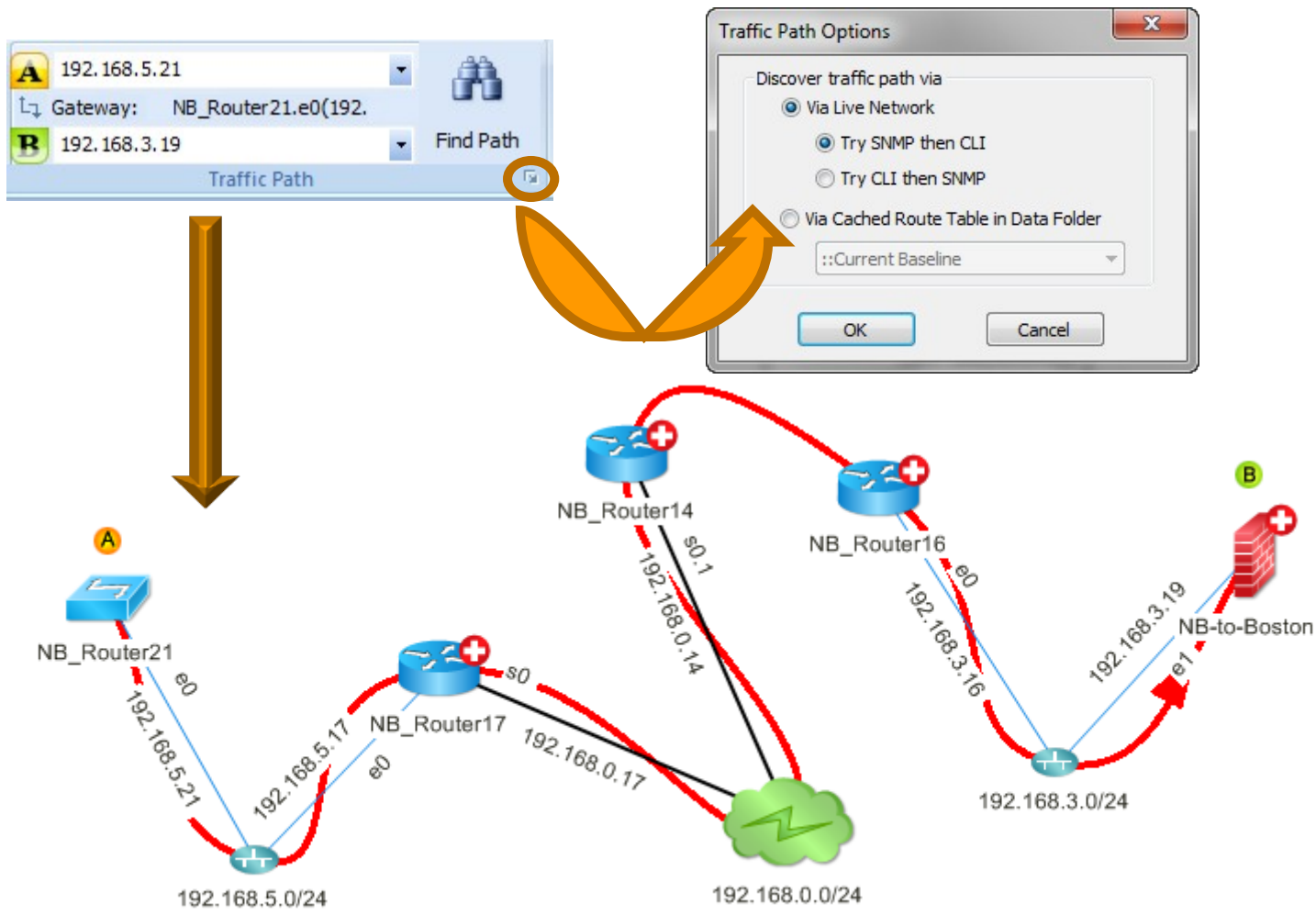
Title	Map the Traffic Path between Point A & B	Category	Automate d Mapping	No.	3.2
Description	Provide source and destination end points of an application and the traffic path is automatically mapped out. One of 3 methods can be used to discover and map the traffic path including: Live discovery, Cached Route Table or Simulation.	**Use Case**	Here is the map for that problematic application…		

How To

Step1: Input the IP addresses of the source and destination points into the IP address text boxes in the Traffic Path of **Home** menu.

Step2: Configure the path-discovery method.
Via Live Discovery: discover path from live network.
Via Cached Route Table: discover path based on the data cached in current DataFolder.

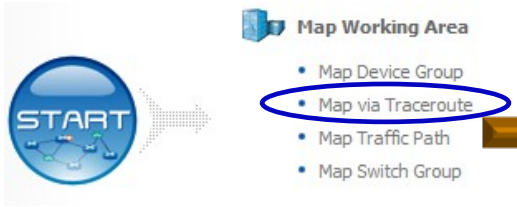
Step3: Click on the **Find Path** button to discover the traffic path. The traffic path will be automatically created in the current workspace map.



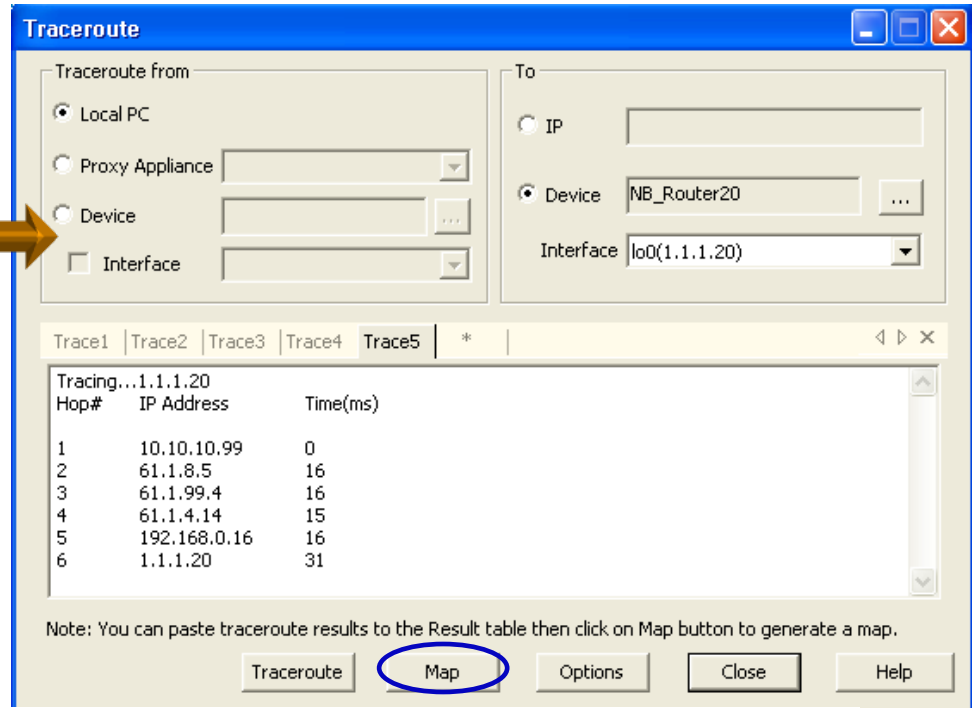
Title	Map the Traceroute Result	Category	Automate Mapping	No.	3.3
Description	Create a map by copying and pasting traceroute results into AE and map the traffic path with one-click. Use NetBrain's built-in trace route capability to quickly analyze paths from multiple sources.	**Use Case**	I need a quick translation…		

How To

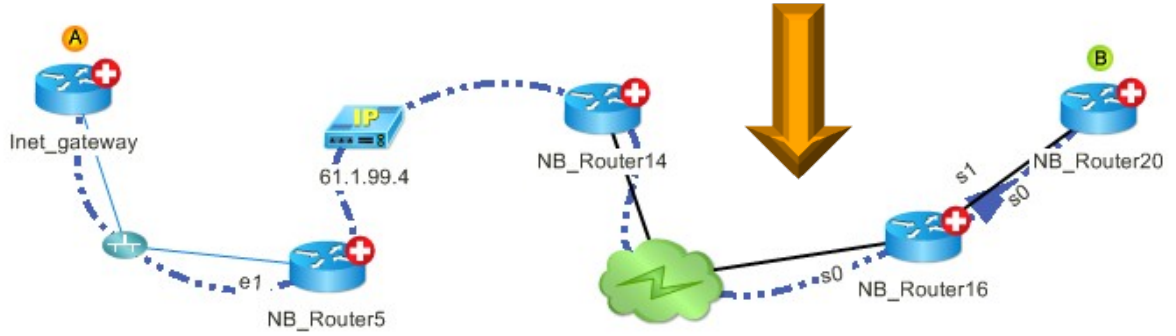
Step1: Click the **Map via Traceroute** link on the **Start Page** and the T**raceroute** dialog opens.



Step2: Move the cursor into the text box , then right click and choose the **Paste** option and paste the Trace route result into the text box.



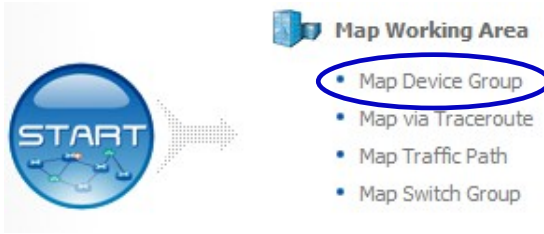
Step3: Click on the **Map** button and the Traceroute results are used to automatically create a map detailing the hop-by-hop path between the source and destination points.



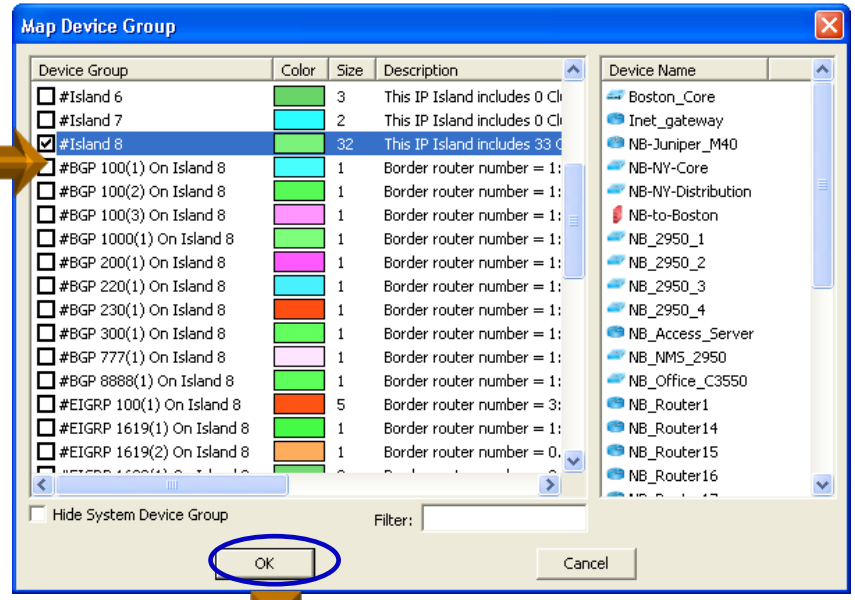
Title	Map Out a Region	Category	Automated Mapping	No.	3.4
Description	Create a map based upon a group of devices that have a common association. For example, all devices on the 3rd floor of your building or all devices configured on a VLAN. Using Device Groups you can map out a section in seconds.	**Use Case**	Device group		

How To

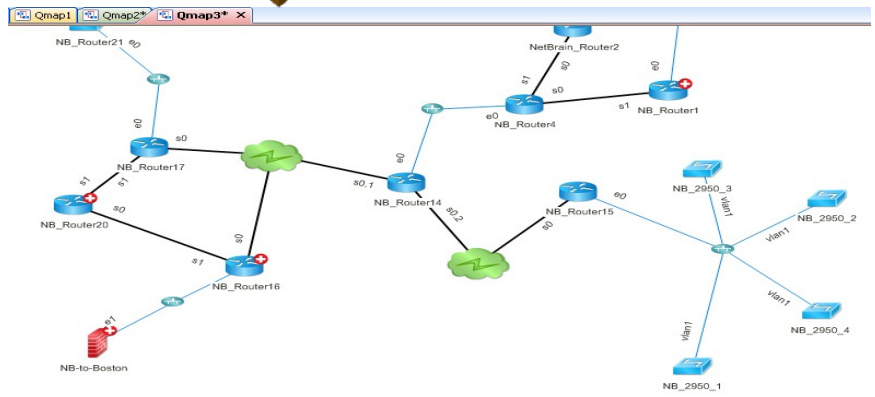
Step1: Click the **Map Device Group** link in the **Start Page** , the Map Device Group dialog opens.



Step2: Check one device group from from the device group list in the **Map Device Group** window.



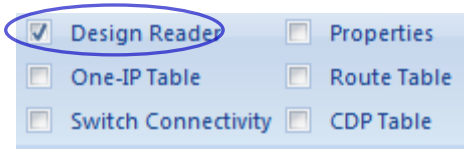
Step3: Click on the **OK** button and a map will be automatically created based on the selected device group.



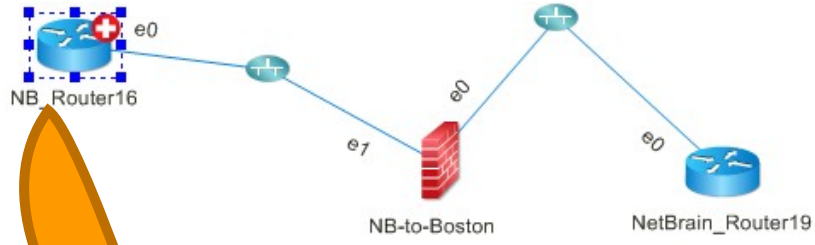
Title	Use "Design Reader" to Analyze your Network	Category	Network Assessment	No.	4.1
Description	Design Reader interprets the network design to provide in-depth analysis capability to maintain configuration consistency or locate any design discrepancies or misconfiguration by comparing configurations of two devices.	**Use Case**	How is the network designed and configured?		

How To

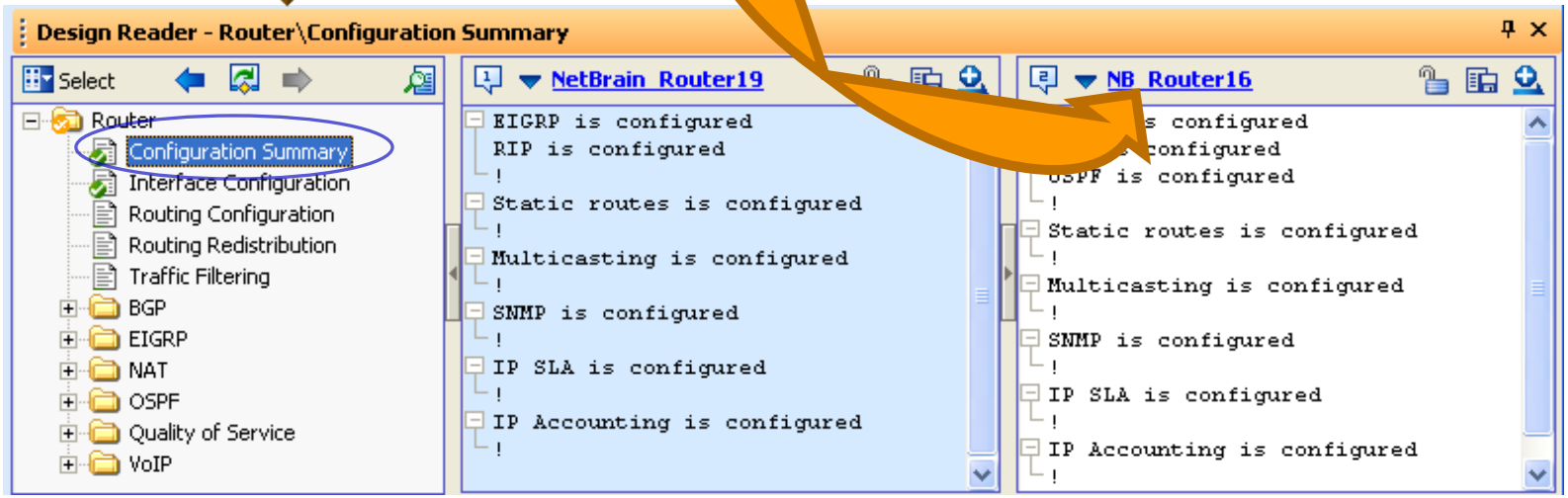
Step1: Click the **Design Reader** check box to launch **Design Reader** in the **Design Reader** pane.



Step2: Click on one or two devices on the current map being displayed and the selected devices will be displayed in the **Design Reader** pane.



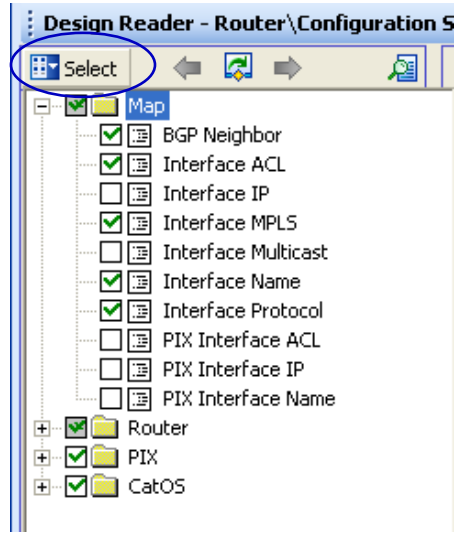
Step3: At the left side of the **Design Reader** pane, click the Configuration Summary and the configuration of the devices will be filtered and compared side by side.

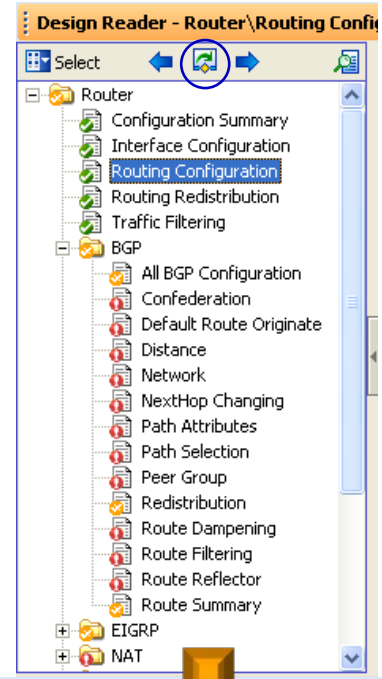


Title	Customize Design Reader for a Vulnerability Check	Category	Network Assessment	No.	4.2
Description	Over100 pre-defined filters can be applied to enable fine-grained analysis of configuration information for the selected device(s). Design Reader also incorporates a scripting engine, to create custom filters based upon your needs.	**Use Case**	Automate compliance checks.		

How To

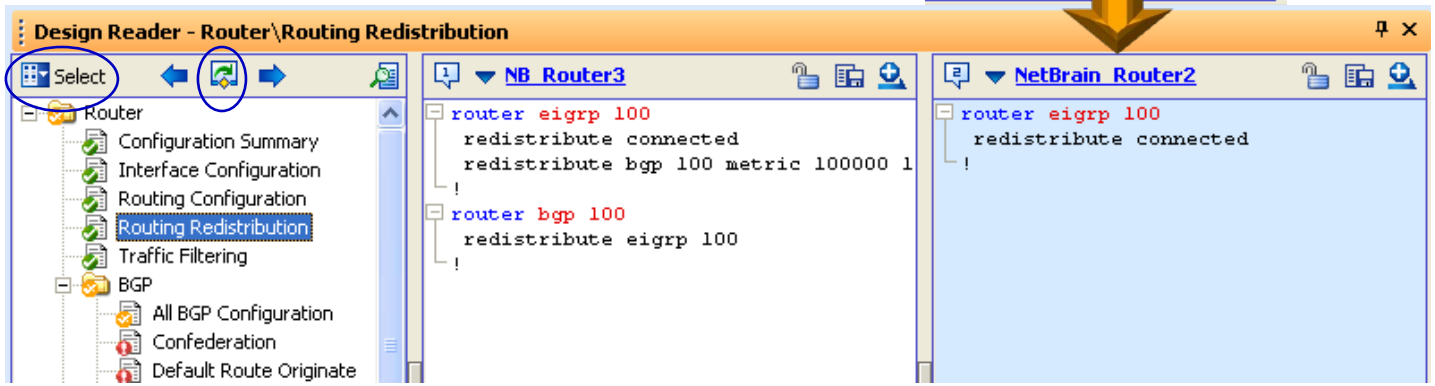
Step1: Click on the **Select** button to view all filters in the drop-down list. From the drop-down list, select the filters you want to apply.





Step2: Click on the **Check status of all filters** button and AE will start to check all filters for the devices displayed in the **Design Reader** pane and then highlight the selected filtered with icons.
Green indicates that the filter matches the configure files of the two devices in the Design filter.
Orange indicates that the filter matches the configure files of one of the two devices in the Design filter.
Red indicates that the filter does not match the configure files of either of the two devices in the Design filter.

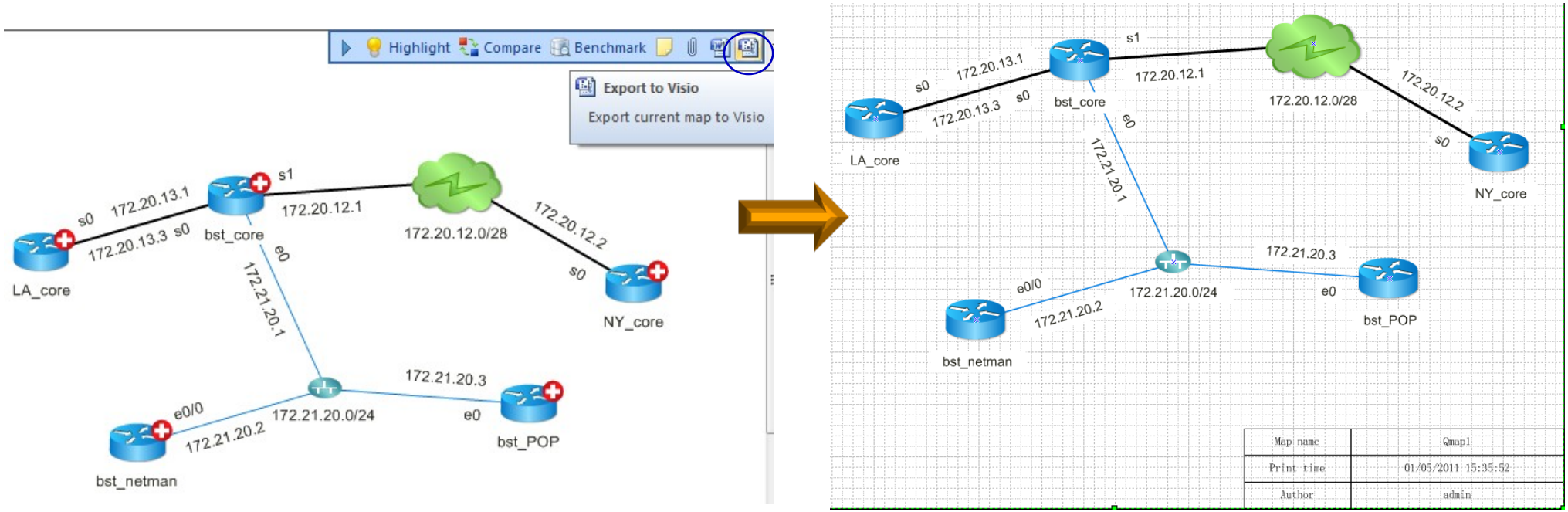
Step3: Click on the **Forward** or **Backward** button, you can switch between all filters and view the detailed configuration information for each filter.



Title	One-Click Visio Maps	Category	Network Assessment	No.	4.3
Description	Any SmartMap created can be exported to Microsoft Visio 2007 in one click. Each network diagram created in Visio is fully annotated with data extracted from the network model.	**Use Case**	Need a Visio map?		

How To

Click on the **Export to Visio** button in the map context menu, the system will automatically export the SmartMap to Microsoft Visio



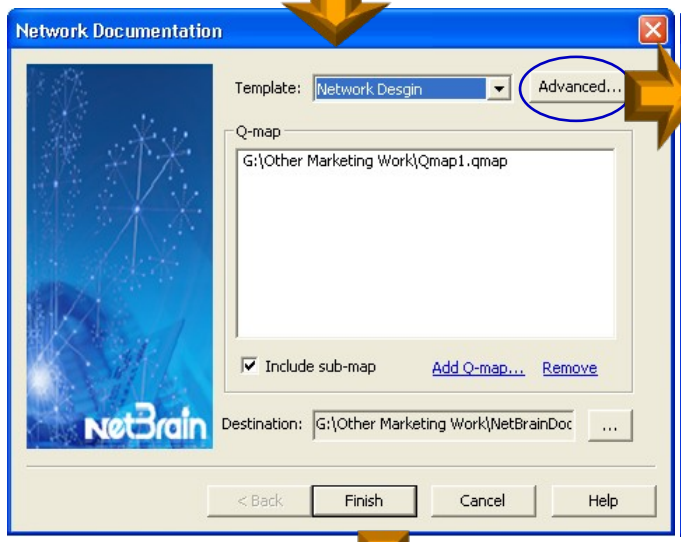
Title	One-Click Network Assessment Documents	Category	Network Assessment	No.	4.5
Description	A template driven assessment documentation package is automatically created in Microsoft Word based upon the network data model. Custom templates can be defined to personalize the documentation package.	**Use Case**	Network assessment in minutes.		

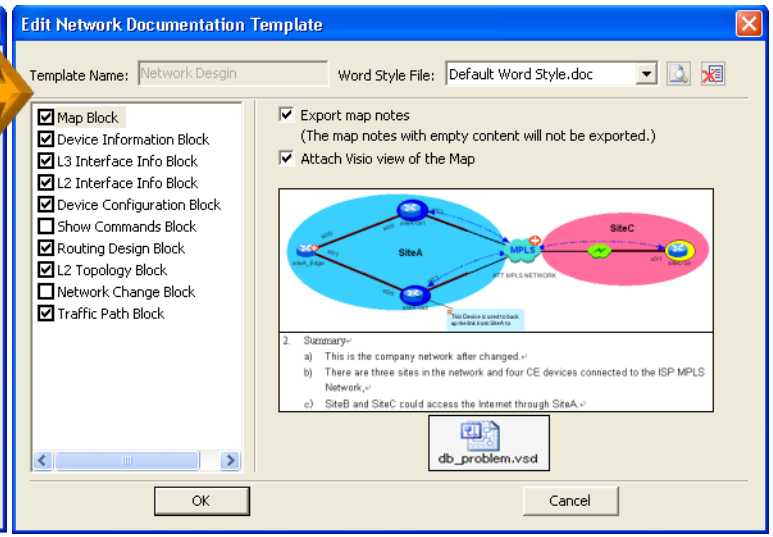
How To

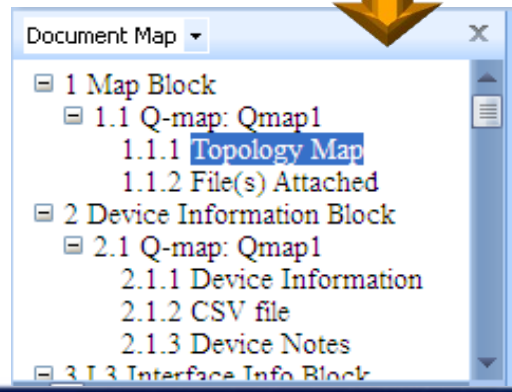
Step1: Click on the **Network Documentation** button in the map context menu in the upper left corner of the map to open the **Network Documentation** dialog.

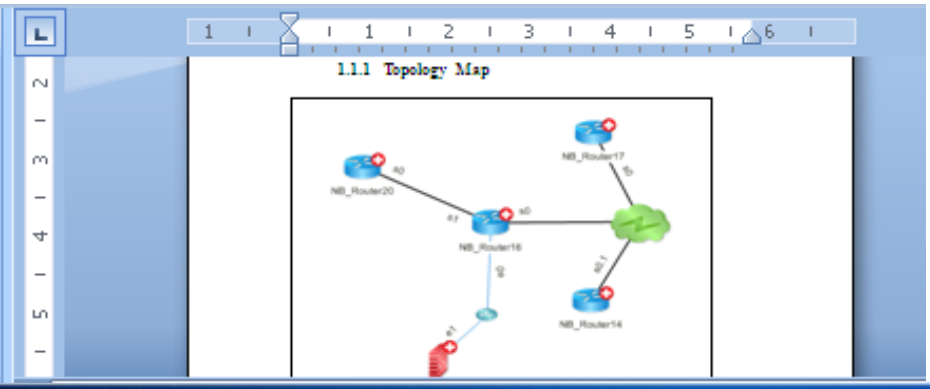
Step2: Customize the document:

- Select a document template or define a new template from the template drop-down menu.
- Click on the **Advanced…** button to open the **Edit Network Documentation Template** dialog. Inside this dialog, you can set the word style and select the information to be included in the documentation. When finished, click the **OK** button to exit.
- Click the **Add Q-map** link to add additional Q-maps for export or click the **Remove** link to remove a Q-map from the list.
- Click the … button to save the documentation to the destination folder.







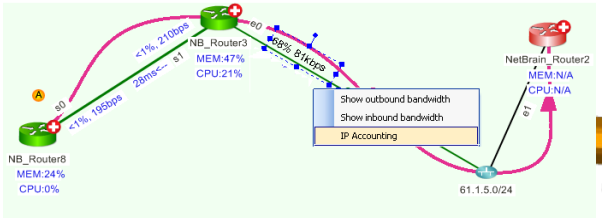


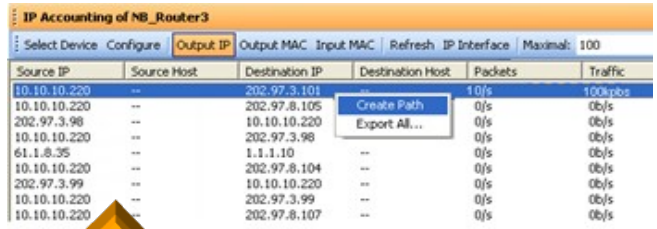
Step3: Click on the **Finish** button to create the assessment documentation.

Title	Problem Area Mapping	Category	Map-Based Troubleshooting	No.	5.1
Description	Create a map that contains only the relevant devices and links that are affected by the performance issue. Isolation of issues is straight forward as troubleshooting is focused on the problem area and not the whole network.	**Use Case**	Isolate the reason for a performance problem between points A and B.		

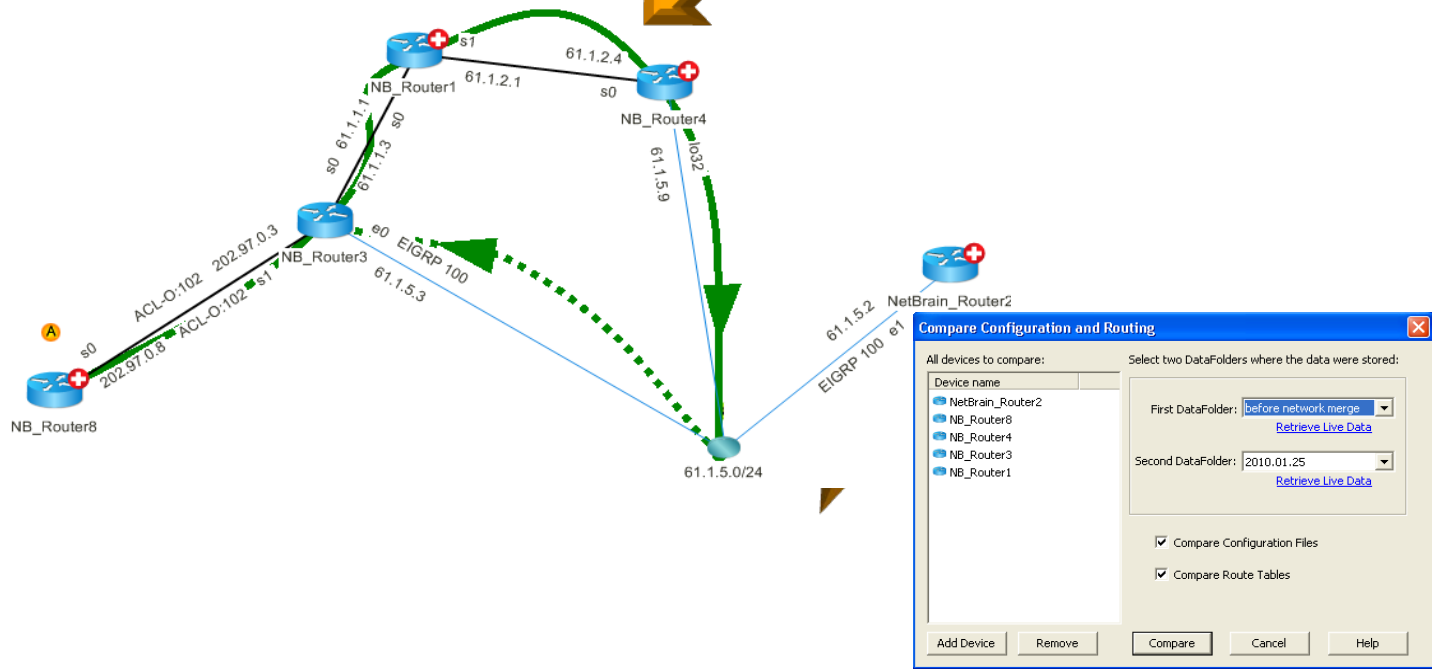
How To

Step1: Map the traffic path between points **A** and **B**, then enable live monitoring for the devices in the path. The map will display real-time status and performance data for the devices and links in the path. Any problematic devices or links are highlighted.





Step2: Right click on a link in the path and launch **IP Accounting**. This will display Top Talkers information by IP address from each source to each destination. Analysis of top talker data will highlight if there is a user or system generating large amounts of traffic along the path and impacting network performance.



Step3: Comparison of route tables and configuration files retrieved before and after any network changes will immediately show what has changed.

Title	Use HeatMap to Discover Hot Spots	Category	Map-Based Troubleshooting	No.	5.2
Description	Establish visual monitoring for devices and links to provide real-time status using a HeatMap. Pinpoint problem devices and links to ensure fast resolution of any problems.	**Use Case**	Isolate the reason for a performance problem between points A and B.		

How To

Step1: Choose the **Monitor > Define Instant Monitor** menu option from the main menu to open the **Define Instant Monitor** dialog. In the **Define Instant Monitor** dialog to select the parameters to be monitored in the map.

Step2: Click the **Monitor** button in the map context menu to launch the instant monitor.

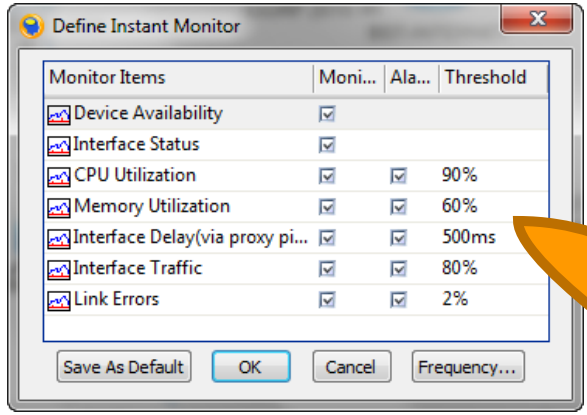
The data (CPU, Memory, Interface Traffic, etc.) retrieved from live network will display on the Q-map and will be refreshed automatically.

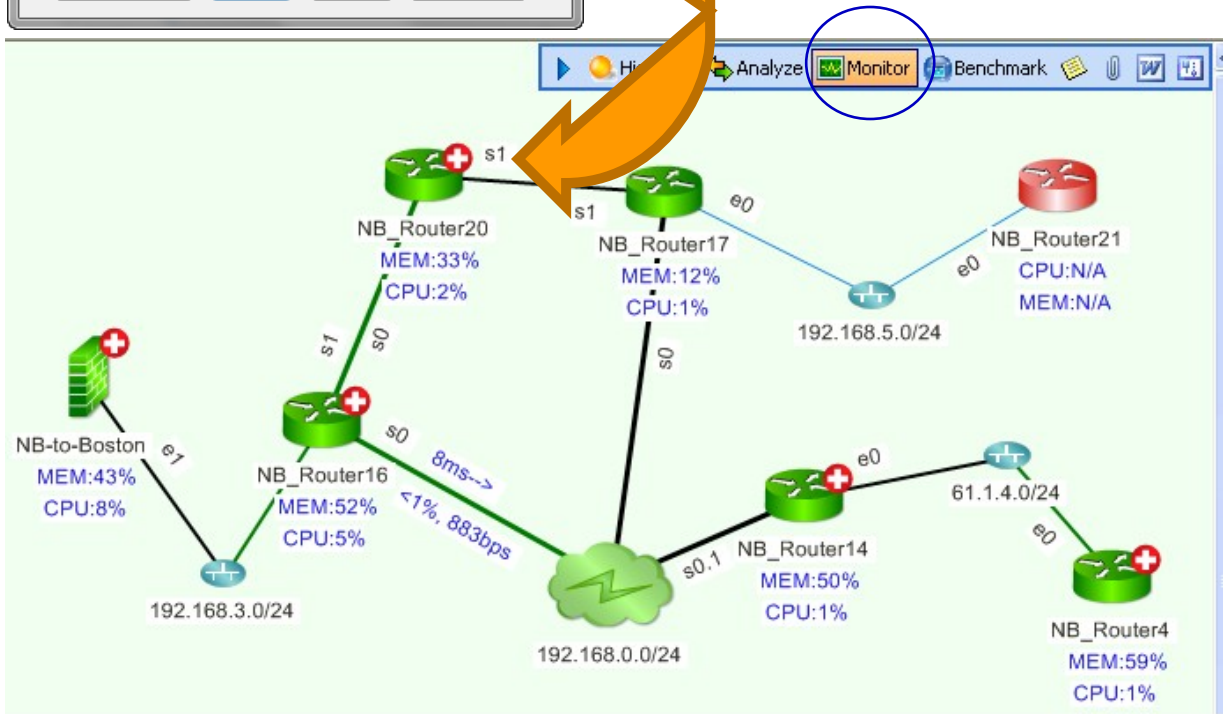
Clear real-time status of all devices and links are displayed directly in the map.

Up

Unstable

Down





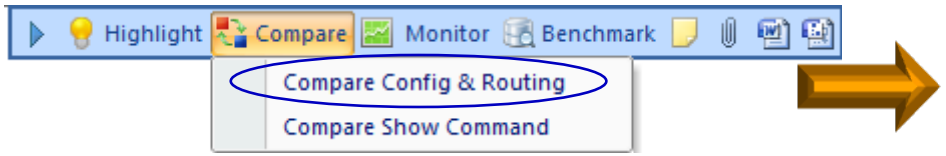
Title	Discover What's Changed	Category	Map-Based Troubleshooting	No.	5.3
Description	Run a comparison of the results configuration changes and routing tables using data from before and after the changes were rolled out.	Use Case	Compare the before and after results of physical network or configuration changes.		

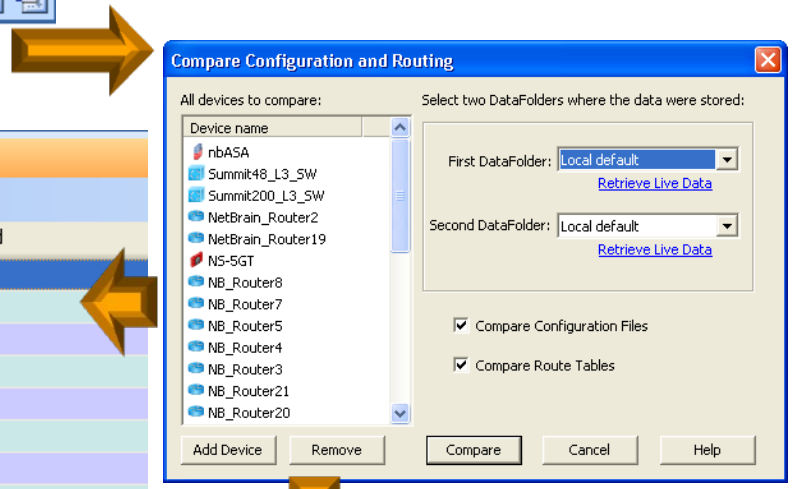
How To

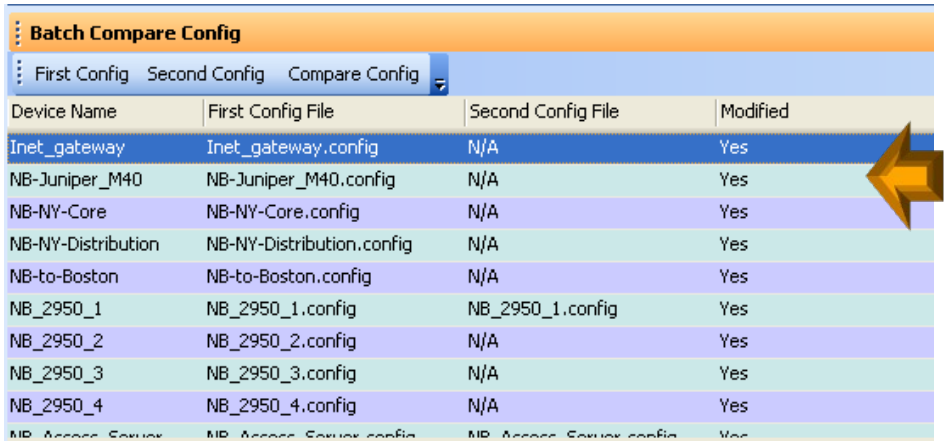
Step1: Click **Compare>Compare Configuration & Routing** in the map context menu, the **Compare configuration and routing** dialog opens.

Step2: Select one DataFolder to be the first DataFolder and select another DataFolder to be the second DataFolder

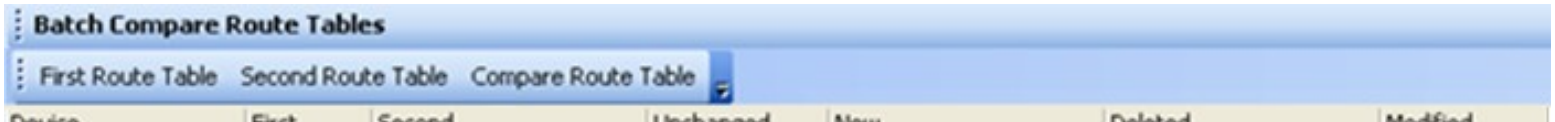
Step3: Click on the **Compare** button to compare. The compare result displays in the **Batch Compare Config** pane and the **Batch Compare Route Tables** pane.







Device Name	First Config File	Second Config File	Modified
Inet_gateway	Inet_gateway.config	N/A	Yes
NB-Juniper_M40	NB-Juniper_M40.config	N/A	Yes
NB-NY-Core	NB-NY-Core.config	N/A	Yes
NB-NY-Distribution	NB-NY-Distribution.config	N/A	Yes
NB-to-Boston	NB-to-Boston.config	N/A	Yes
NB_2950_1	NB_2950_1.config	NB_2950_1.config	Yes
NB_2950_2	NB_2950_2.config	N/A	Yes
NB_2950_3	NB_2950_3.config	N/A	Yes
NB_2950_4	NB_2950_4.config	N/A	Yes

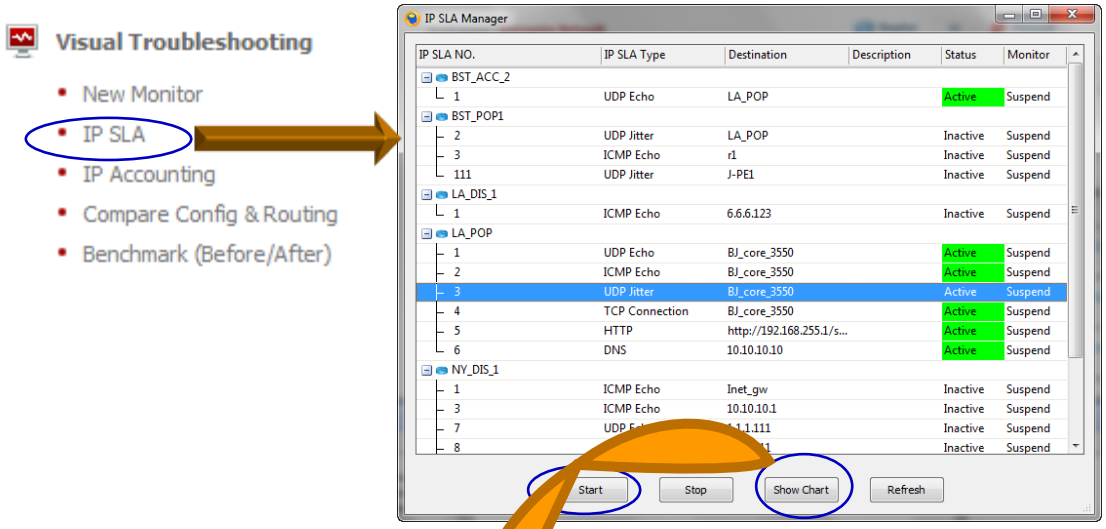


Device	First	Second	Unchanged	New	Deleted	Modified
NetBrain_Router14	76	75	75	0	1	0
NetBrain_Router15	74	74	74	0	0	0
NetBrain_Router16	74	74	74	0	0	0
NetBrain_Router2	78	78	78	0	0	0
NetBrain_Router4	76	76	76	0	0	0
NetBrain_Router8	76	76	76	0	0	0
NetBrain_Router9	71	71	71	0	0	0

Title	Measure Delay, Jitter, Packet Loss via IP-SLA	Category	Map-Based Troubleshooting	No.	5.4
Description	Configure IPSLA to measure packet loss, jitter and latency between two Cisco devices across a LAN or a WAN link.	Use Case	Understand if poor VoIP call quality and dropped calls are the result of QoS issues.		

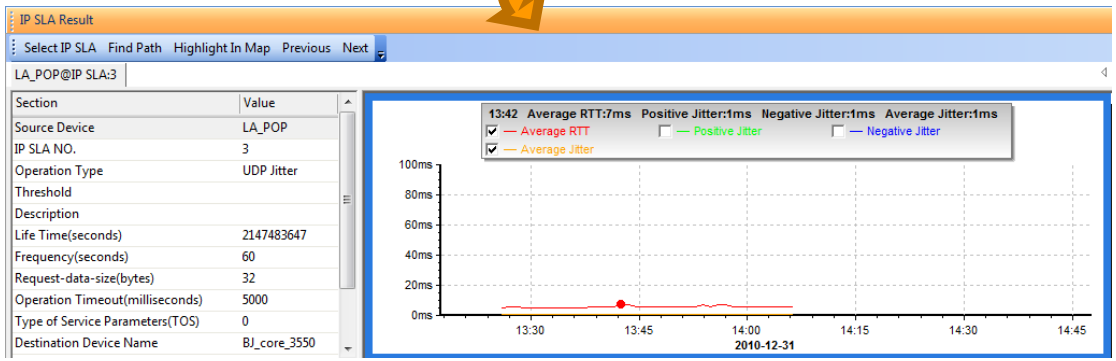
How To

Step1:View IPSLA operations
Select **IP SLA** link in the start page. All IP SLA operations defined in your network are displayed in **IPSLA manager** pane.



Step2:Activate an IPSLA
From the **IPSLA manager**, select one of the configured IPSLA measurements and then click on the **Start** button

Step3:Viewing IPSLA data
•In the **IP SLA Manager** dialog, select one of the IPSLA and then click the **Show Chart** button and the **IP SLA Result** pane appears.
•Double-click an item under **Description** and view measured data in the chart.



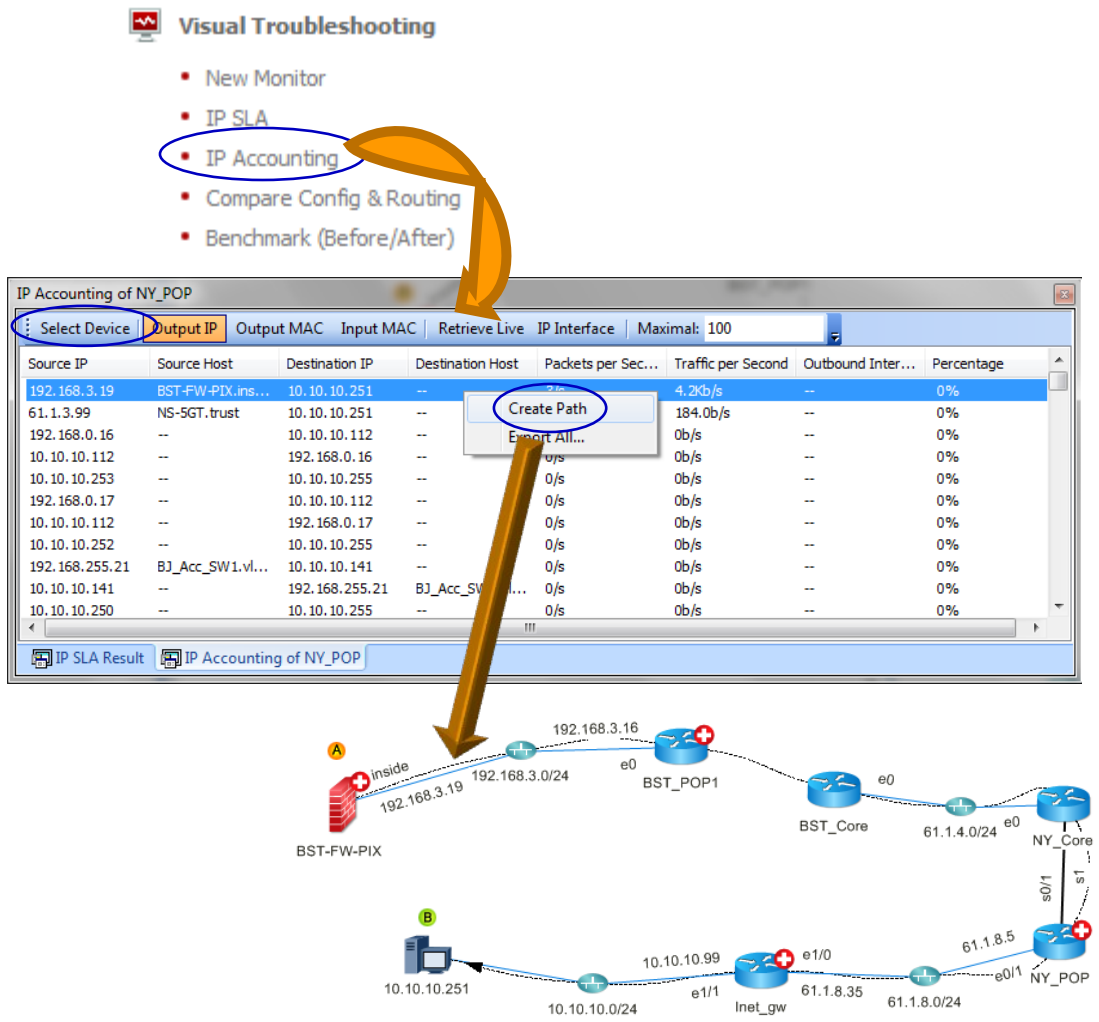
Title	Top-talker Drill Down via IP Accounting	Category	Map-Based Troubleshooting	No.	5.5
Description	Monitoring of links shows high utilization. Configure IP Accounting to view the top talkers that are consuming large amounts of bandwidth on those links.	**Use Case**	Network is slow and no one knows why.		

How To

Step1: Click **IP Accounting link** in the start page to launch the **IP Accounting** pane.

Step2: Configure IP Accounting in the **IP Accounting** pane: Click the **Select Device** button to open the **Select a Device** dialog Inside this dialog, select a device.

Step3:Viewing the IP Accounting Data:
•Click on the **Output IP, Output MAC** and **Input MAC** buttons to view the data.
•Click on the **Refresh** button, to update the IP Accounting data.
•Choose one of the measurements from the list and right click and choose the **Create Path** option, a traffic path map from the Source Host to the Destination IP is automatically created in the current map.



Title	Build a New Workspace for a Design Scenario	Category	Network Design	No.	6.1
Description	Create a environment to test out and validate any changes.	Use Case	Will the proposed configuration changes work as expected?		

How To

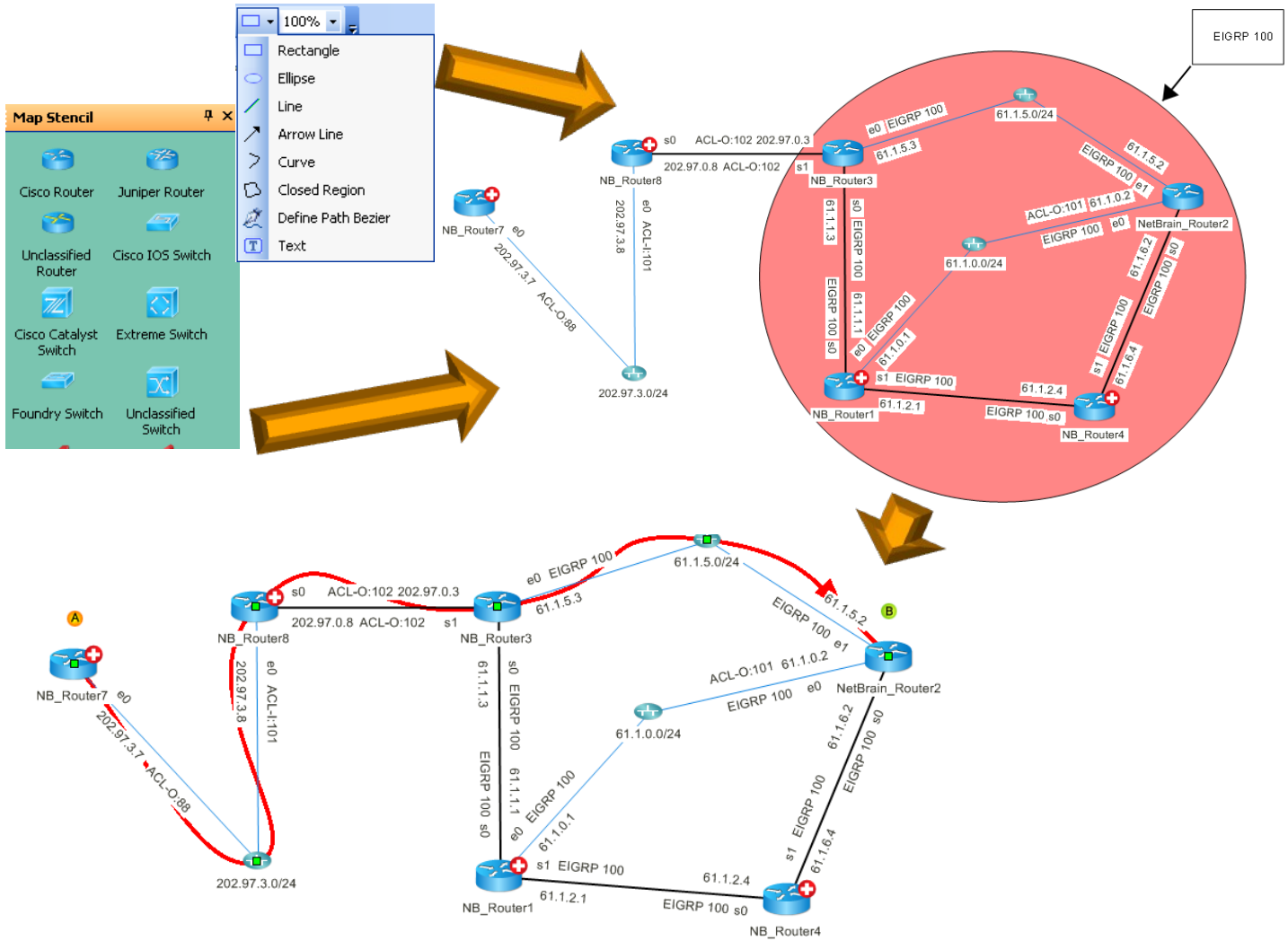
Step1: Create the Design Map

a. From the **Map Stencil** pane, drag and drop required icons into a map.

•Link the device icons and configure the interface data by using the **map drawing tool**.

Step2: Configure devices based on the Design Map.

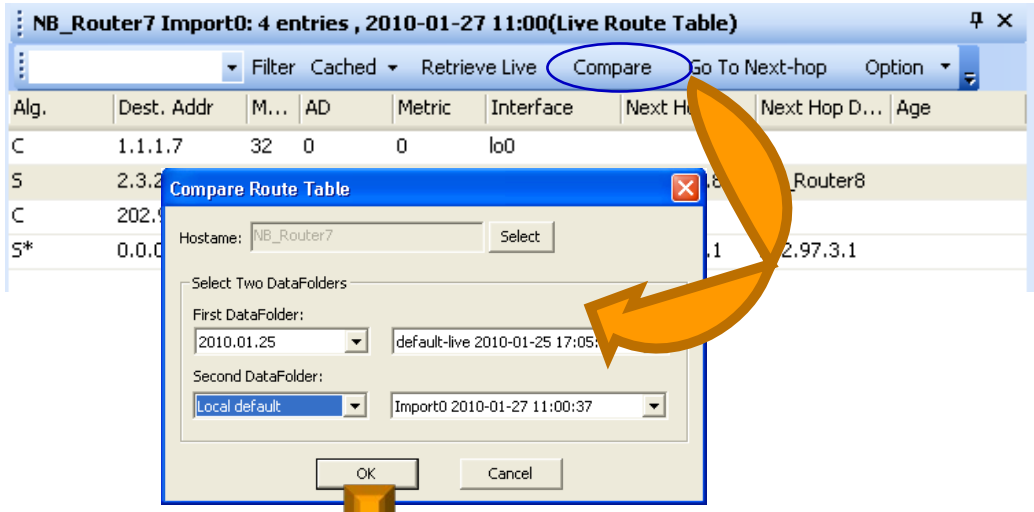
Step3: Drag-and-drop the configuration files into NetBrain.



Title	Route Table Comparison and Analysis	Category	Routing & Configuration Management	No.	7.1
Description	Choose routing tables from different timeframes to compare how routing has changed over time in the network and visualize any changes in a map. Routing tables from different devices and timeframes can be compared at the same time.	**Use Case**	Need to understand the differences between current routing structure as compared to a previous version.		

How To

Step1: Right click a device (for example, a router) then choose the **Device Data> Route Table**, the **Router Table** pane opens and displays the route table of the selected device.

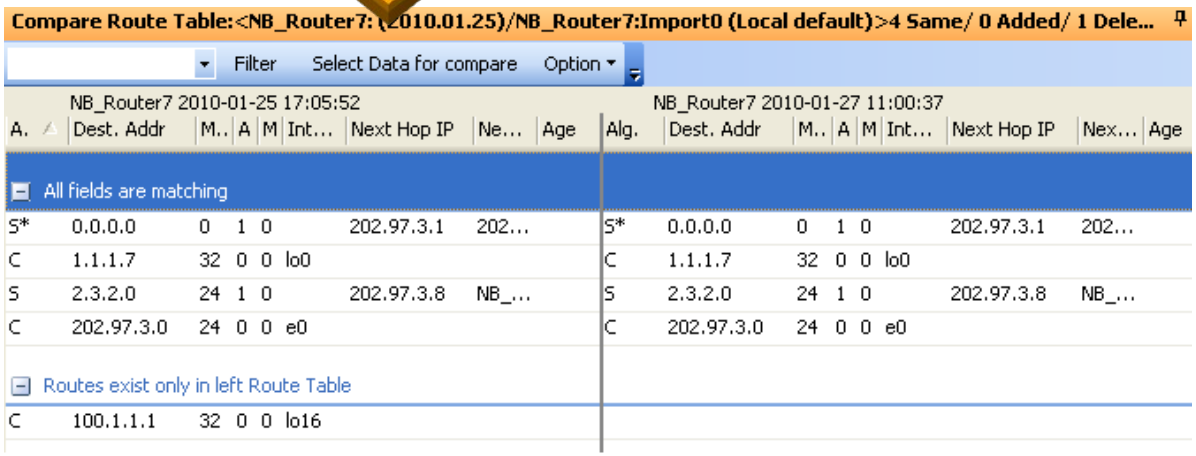


Step2: Work on the route table items.

- Enter a destination IP address into the text box then click on the **Filter** button, the route item will be filtered.
- Select one route table item, then drag and drop this item onto the current map, the route item will be mapped in the Q-map.

Step3: Click on the **Compare** button , the **Compare Route Table window** opens.

- Choose one DataFolder to be the First DataFolder and choose another DataFolder to be the Second DataFolder.
- Click on the **OK** button. The route tables in the First DataFolder and the second DataFolder will be compared side by side in the **Compare Route Table** pane. You can then view the differences between the two route tables.



Title	Configure File Viewer	Category	Routing & Configuration Management	No.	7.2
Description	Choose configuration files from different timeframes and view specific sections of the file based on any filter that is applied to the file. different filters. Changes between different versions are highlighted. Configuration files from different devices and timeframes can be compared at the same time.	**Use Case**	Need to understand the differences between a current device configuration as compared to a previous version.		

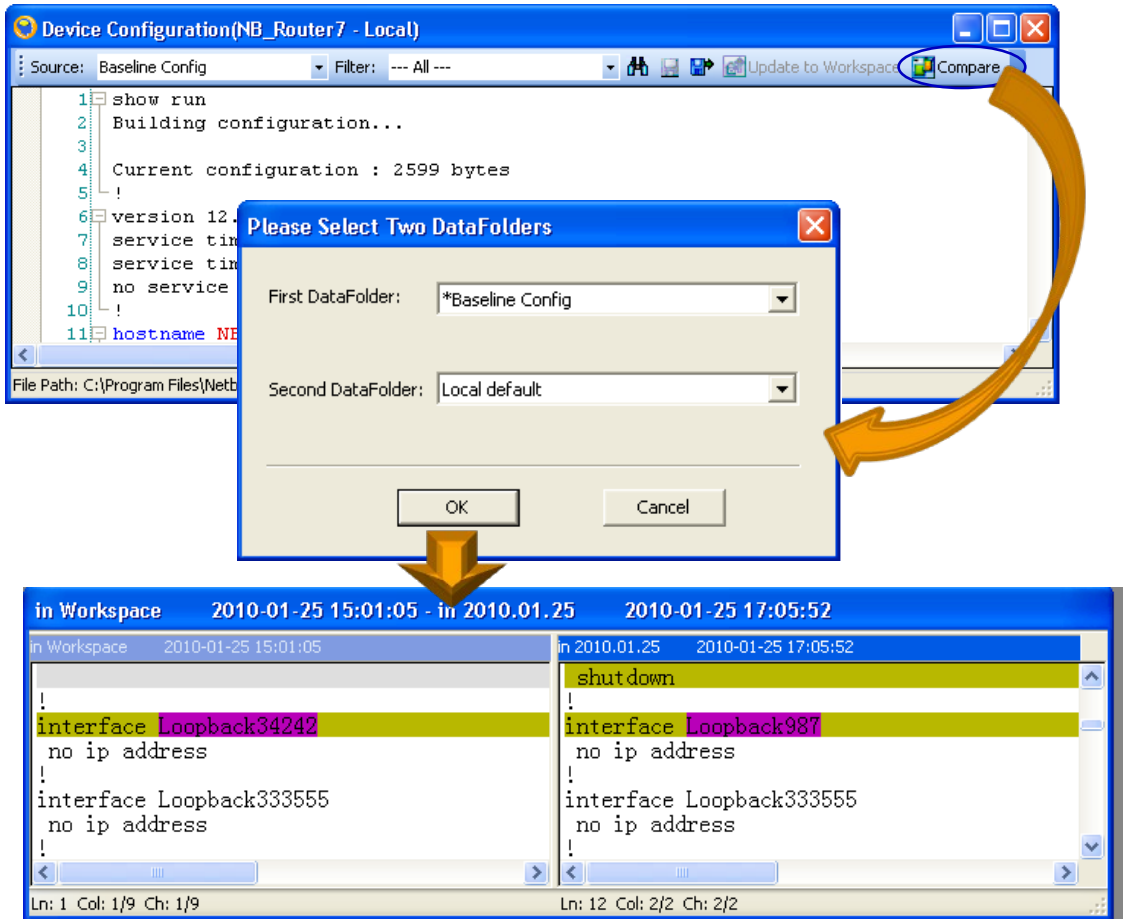
How To

Step1: Right click one device (for example, one router), then choose the **Device Data > Device Configuration** menu option, the **Device Configuration** dialog opens.

Step2: Customize the configure file to be displayed in the **Device Configuration** dialog:
•From the **Source** drop-down menu, choose one DataFolder. The configuration file in this DataFolder will be displayed.
b. From the **Filter** drop-down menu, choose a filter (interface, access-list,) and the section of the configuration file based on the filter will be displayed.

Step3: Click on the **Save As** button, you can save this configuration file to a local folder.

Step4: Click on the **Compare** button, the **Please Select Two DataFolders** window opens:
•Choose one DataFolder to be the First DataFolder and choose another DataFolder to be the Second DataFolder.
•Click on the **OK** button. The configuration files in the First DataFolder and second DataFolder will be compared side by side. Any difference between the two files will be highlighted.



Title	Setting a Recurring Network Benchmark	Category	Routing & Configuration Management	No.	7.3
Description	Benchmarking provides a mechanism to establish a known good network configuration baseline. This known baseline can then be used to compare against other benchmarks. Benchmarking can be configured to run on a scheduled basis.	**Use Case**	Establish a known good baseline of the network.		

How To

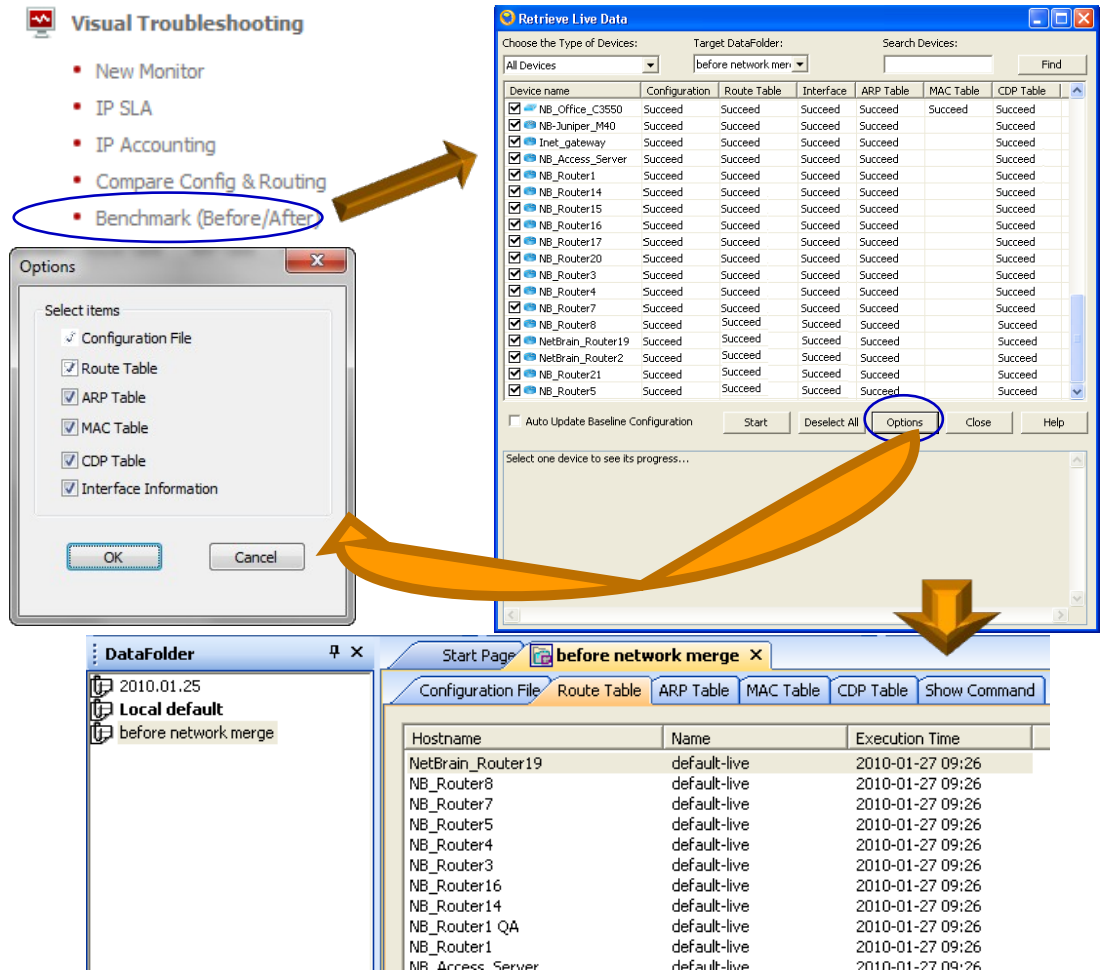
Step1: Click the **Benchmark (Before/After)** link in the **Start Page**, the **Retrieve Live Data** dialog opens.

Step2: Customize the benchmark in the **Retrieve Live Data** dialog:

- From the **Choose the Type of Devices** drop-down menu, choose the type of devices to benchmark the network data.
- From the **Target DataFolder** drop-down menu, choose or create a DataFolder to save the benchmarked data.
- Click on the **Options** button to open the Options window. Inside the **Options** window, you can select the type of data to be retrieved.

Step3: Click on the **OK** button to start retrieving live data.

Step4: In the **DataFolder** pane, double click one DataFolder, you can view the benchmarked data details in this DataFolder.



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