



NorthStar Planner Web UI User Guide

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NorthStar Planner Web UI User Guide

4.3.0

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Table of Contents

	About the Documentation	ix
	Documentation and Release Notes	ix
	Documentation Conventions	ix
	Documentation Feedback	xi
	Requesting Technical Support	xii
	Self-Help Online Tools and Resources	xii
	Creating a Service Request with JTAC	xiii
Chapter 1	NorthStar Planner Web UI Introduction	15
	NorthStar UI Overview	15
	Browser Compatibility	15
	The NorthStar Login Window	16
	NorthStar Planner Web UI Overview	18
	Network Browser View	18
	Topology View	19
	Dashboard View	19
	Simulation View	20
	Report Manager View	21
	Web Planner Top Menu Bar	22
	Importing Archived Networks from NorthStar Controller	25
Chapter 2	Topology View	27
	Navigation Functions in the Topology View	27
	Interactive Map Features	28
	Right-Click Functions	28
	Auto Group	32
	Topology Menu Bar	34
	Show Paths	34
	Topology Settings Window	35
	Topology View Left Pane Options	37
	Protocols	38
	Types	39
	AS	39
	ISIS Areas	40
	OSPF Areas	40
	Nodes/Groups	41
	Network Information Table Overview	42
	Sorting and Filtering Options in the Network Information Table	43
	Sorting from Column Headings	43
	Filtering from Table Rows	44
	Filtering Using the Search Function	46

	Using the Show Path Tool from the Tunnels Tab	46
	Network Information Table Bottom Tool Bar	47
	Navigation Tools	48
	Column Chooser	48
	Download Data Tool	49
	Search Function	49
Chapter 3	Simulation View	51
	Simulation	51
Chapter 4	Report Manager View	55
	Report Manager	55
	Available Reports	56
	Sorting Report Data by Column	57
	Report Manager Bottom Tool Bar	57

List of Figures

Chapter 1	NorthStar Planner Web UI Introduction	15
	Figure 1: NorthStar Login Window	17
	Figure 2: NorthStar Controller More Options Menu	17
	Figure 3: Network Browser View	18
	Figure 4: Topology View	19
	Figure 5: Dashboard View	20
	Figure 6: Simulation View	21
	Figure 7: Report Manager View	22
	Figure 8: Upper Right Corner Display	22
	Figure 9: Active Users Window	23
	Figure 10: Console Window	24
	Figure 11: Network Browser Archived Networks Tab	25
Chapter 2	Topology View	27
	Figure 12: Right-Click Options for Nodes or Groups	29
	Figure 13: Right-Click Options for Links	30
	Figure 14: Right-Click Options for the Topology Map as a Whole	31
	Figure 15: Auto Group Window Example	32
	Figure 16: Regular Expression Rule Window	33
	Figure 17: Topology Settings Menu Bar	34
	Figure 18: Topology Settings Window	35
	Figure 19: Wrap Links as Great Arcs Example	36
	Figure 20: Light and Dark Map Styles	36
	Figure 21: Protocols List	38
	Figure 22: Left Pane Types List	39
	Figure 23: AS List	40
	Figure 24: ISIS Areas List	40
	Figure 25: OSPF Areas List	41
	Figure 26: Example Node/Groups List	42
	Figure 27: Network Information Table	42
	Figure 28: Right-Click Options Example	43
	Figure 29: Sort Arrow in Table Column Heading	44
	Figure 30: Right-Click Filtering Options Example	44
	Figure 31: Search Field	46
	Figure 32: Paths Window	47
	Figure 33: Network Information Table Bottom Tool Bar	48
	Figure 34: Column Chooser for the Interfaces Tab	49
Chapter 3	Simulation View	51
	Figure 35: Simulation, Step 1	52
	Figure 36: Simulation, Step 2	53

Chapter 4

Figure 37: Simulation, Step 3 53

Figure 38: Simulation, Step 4 54

Report Manager View 55

Figure 39: Report Manager Overview 56

Figure 40: Report Manager Overview 57

Figure 41: Report Manager Bottom Tool Bar 57

List of Tables

	About the Documentation	ix
	Table 1: Notice Icons	x
	Table 2: Text and Syntax Conventions	x
Chapter 1	NorthStar Planner Web UI Introduction	15
	Table 3: Internet Browsers Compatible with the NorthStar Controller Web UI . . .	15
Chapter 2	Topology View	27
	Table 4: Supported Topology Window Navigation Functions	27
	Table 5: Right-Click Options for Nodes or Groups	29
	Table 6: Right-Click Options for Links	30
	Table 7: Right-Click Options for the Topology Map as a Whole	31
	Table 8: Regular Expression Examples	33
	Table 9: NorthStar Planner Topology View Left Pane Options	37
	Table 10: Right-Click Filtering Options in the Nodes Tab	45
	Table 11: Right-Click Filtering Options in the Links Tab	45
	Table 12: Right-Click Filtering Options in the Interfaces Tab	45
	Table 13: Navigation Tools in the Network Information Bottom Tool Bar	48
Chapter 4	Report Manager View	55
	Table 14: Tools in the Report Manager Bottom Tool Bar	58

About the Documentation

- Documentation and Release Notes on page ix
- Documentation Conventions on page ix
- Documentation Feedback on page xi
- Requesting Technical Support on page xii

Documentation and Release Notes

To obtain the most current version of all Juniper Networks® technical documentation, see the product documentation page on the Juniper Networks website at <https://www.juniper.net/documentation/>.

If the information in the latest release notes differs from the information in the documentation, follow the product Release Notes.

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Documentation Conventions

Table 1 on page x defines notice icons used in this guide.

Table 1: Notice Icons







Icon	Meaning	Description
	Informational note	Indicates important features or instructions.
	Caution	Indicates a situation that might result in loss of data or hardware damage.
	Warning	Alerts you to the risk of personal injury or death.
	Laser warning	Alerts you to the risk of personal injury from a laser.
	Tip	Indicates helpful information.
	Best practice	Alerts you to a recommended use or implementation.

Table 2 on page x defines the text and syntax conventions used in this guide.

Table 2: Text and Syntax Conventions

Convention	Description	Examples
Bold text like this	Represents text that you type.	To enter configuration mode, type the configure command: user@host> configure
Fixed-width text like this	Represents output that appears on the terminal screen.	user@host> show chassis alarms No alarms currently active
<i>Italic text like this</i>	<ul style="list-style-type: none"> Introduces or emphasizes important new terms. Identifies guide names. Identifies RFC and Internet draft titles. 	<ul style="list-style-type: none"> A policy <i>term</i> is a named structure that defines match conditions and actions. <i>Junos OS CLI User Guide</i> RFC 1997, <i>BGP Communities Attribute</i>
<i>Italic text like this</i>	Represents variables (options for which you substitute a value) in commands or configuration statements.	Configure the machine's domain name: [edit] root@# set system domain-name <i>domain-name</i>

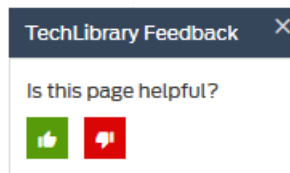
Table 2: Text and Syntax Conventions (continued)

Convention	Description	Examples
Text like this	Represents names of configuration statements, commands, files, and directories; configuration hierarchy levels; or labels on routing platform components.	<ul style="list-style-type: none">To configure a stub area, include the stub statement at the [edit protocols ospf area area-id] hierarchy level.The console port is labeled CONSOLE.
< > (angle brackets)	Encloses optional keywords or variables.	stub <default-metric <i>metric</i>>;
(pipe symbol)	Indicates a choice between the mutually exclusive keywords or variables on either side of the symbol. The set of choices is often enclosed in parentheses for clarity.	broadcast multicast (<i>string1</i> <i>string2</i> <i>string3</i>)
# (pound sign)	Indicates a comment specified on the same line as the configuration statement to which it applies.	rsvp { # Required for dynamic MPLS only
[] (square brackets)	Encloses a variable for which you can substitute one or more values.	community name members [<i>community-ids</i>]
Indentation and braces ({ })	Identifies a level in the configuration hierarchy.	<pre>[edit] routing-options { static { route default { nexthop <i>address</i>; retain; } } }</pre>
;(semicolon)	Identifies a leaf statement at a configuration hierarchy level.	
GUI Conventions		
Bold text like this	Represents graphical user interface (GUI) items you click or select.	<ul style="list-style-type: none">In the Logical Interfaces box, select All Interfaces.To cancel the configuration, click Cancel.
> (bold right angle bracket)	Separates levels in a hierarchy of menu selections.	In the configuration editor hierarchy, select Protocols>Ospf .

Documentation Feedback

We encourage you to provide feedback so that we can improve our documentation. You can use either of the following methods:

- Online feedback system—Click TechLibrary Feedback, on the lower right of any page on the [Juniper Networks TechLibrary](#) site, and do one of the following:



- Click the thumbs-up icon if the information on the page was helpful to you.
- Click the thumbs-down icon if the information on the page was not helpful to you or if you have suggestions for improvement, and use the pop-up form to provide feedback.
- E-mail—Send your comments to techpubs-comments@juniper.net. Include the document or topic name, URL or page number, and software version (if applicable).

Requesting Technical Support

Technical product support is available through the Juniper Networks Technical Assistance Center (JTAC). If you are a customer with an active Juniper Care or Partner Support Services support contract, or are covered under warranty, and need post-sales technical support, you can access our tools and resources online or open a case with JTAC.

- JTAC policies—For a complete understanding of our JTAC procedures and policies, review the *JTAC User Guide* located at <https://www.juniper.net/us/en/local/pdf/resource-guides/7100059-en.pdf>.
- Product warranties—For product warranty information, visit <https://www.juniper.net/support/warranty/>.
- JTAC hours of operation—The JTAC centers have resources available 24 hours a day, 7 days a week, 365 days a year.

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- Search for known bugs: <https://prsearch.juniper.net/>
- Find product documentation: <https://www.juniper.net/documentation/>
- Find solutions and answer questions using our Knowledge Base: <https://kb.juniper.net/>
- Download the latest versions of software and review release notes: <https://www.juniper.net/customers/csc/software/>
- Search technical bulletins for relevant hardware and software notifications: <https://kb.juniper.net/InfoCenter/>

- Join and participate in the Juniper Networks Community Forum:
<https://www.juniper.net/company/communities/>
- Create a service request online: <https://myjuniper.juniper.net>

To verify service entitlement by product serial number, use our Serial Number Entitlement (SNE) Tool: <https://entitlementsearch.juniper.net/entitlementsearch/>

Creating a Service Request with JTAC

You can create a service request with JTAC on the Web or by telephone.

- Visit <https://myjuniper.juniper.net>.
- Call 1-888-314-JTAC (1-888-314-5822 toll-free in the USA, Canada, and Mexico).

For international or direct-dial options in countries without toll-free numbers, see <https://support.juniper.net/support/requesting-support/>.

CHAPTER 1

NorthStar Planner Web UI Introduction

- [NorthStar UI Overview on page 15](#)
- [NorthStar Planner Web UI Overview on page 18](#)
- [Web Planner Top Menu Bar on page 22](#)
- [Importing Archived Networks from NorthStar Controller on page 25](#)

NorthStar UI Overview

NorthStar has two user interfaces (UIs):

- NorthStar Controller—web UI for working with a live network
- NorthStar Planner—for simulating the effect of various scenarios on the network, without affecting the live network. The NorthStar Planner is currently in transition from a desktop application to a web UI. Until the transition is complete, both the full-featured desktop application and the in-development web UI are available and documented separately.

Browser Compatibility

[Table 3 on page 15](#) shows the Internet browsers that have been tested and confirmed compatible with the NorthStar Controller web UI.

Table 3: Internet Browsers Compatible with the NorthStar Controller Web UI

OS	Browser
Windows 10	<ul style="list-style-type: none">• Google Chrome versions 55, 56• Mozilla Firefox version 53
Windows 7	<ul style="list-style-type: none">• Google Chrome versions 58• Mozilla Firefox version 53
CentOS 6.8/6.9	<ul style="list-style-type: none">• Google Chrome versions 56• Mozilla Firefox version 53
Mac OS	<ul style="list-style-type: none">• Google Chrome versions 58• Apple Safari version 10.1.1

The NorthStar Login Window

You connect to NorthStar using a modern web browser such as Google Chrome or Mozilla Firefox.

Your external IP address is provided to you when you install the NorthStar application. In the address bar of your browser window, type that secure host external IP address, followed by a colon and port number 8443 (for example, <https://10.0.1.29:8443>). The NorthStar login window is displayed, as shown in [Figure 1 on page 17](#). This same login window grants access to the NorthStar Controller and both versions of the NorthStar Planner. Make your selection from the drop-down menu in the **Access Portal** field. Enter your username and password, and click **Sign In**.

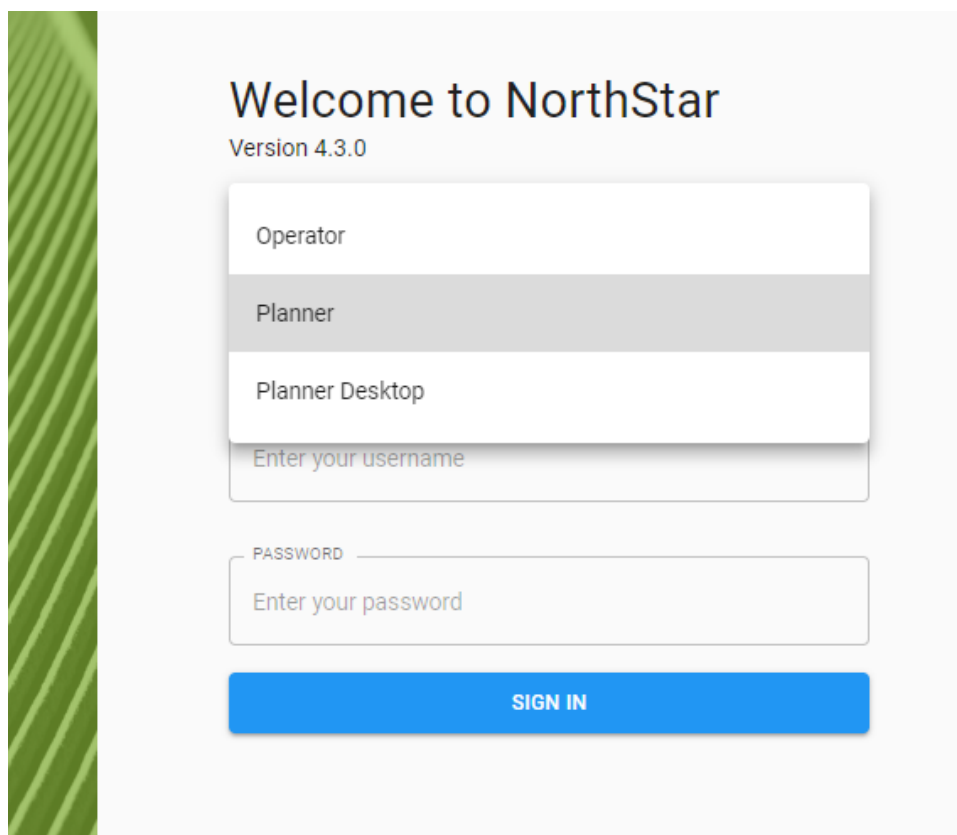
For the NorthStar Planner desktop application, depending on the browser you are using when you launch it, a dialog box might be displayed, asking if you want to open or save the .jnlp file, accept downloading of the application, and agree to run the application. Once you respond to all browser requests, a dialog box is displayed in which you enter your user ID and password. Click **Login**.



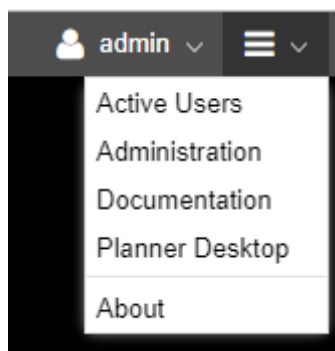
NOTE: If you attempt to reach the login window, but instead, are routed to a message window that says, “Please enter your confirmation code to complete setup,” you must go to your license file and obtain the confirmation code as directed. Enter the confirmation code along with your administrator password to be routed to the web UI login window. The requirement to enter the confirmation code only occurs when the installation process was not completed correctly and the NorthStar application needs to confirm that you have the authorization to continue.



WARNING: To avoid a Browser Exploit Against SSL/TLS (BEAST) attack, whenever you log in to NorthStar through a browser tab or window, make sure that the tab or window was not previously used to surf a non-HTTPS website. A best practice is to close your browser and relaunch it before logging in to NorthStar.

Figure 1: NorthStar Login WindowThe image shows the NorthStar login window. On the left is a green vertical bar with a diagonal line pattern. The main area is light gray. At the top, it says "Welcome to NorthStar" in a large, dark font, with "Version 4.3.0" below it in a smaller font. Below this is a white box containing three radio buttons: "Operator", "Planner" (which is selected and highlighted with a gray background), and "Planner Desktop". Below the radio buttons is a text input field with the placeholder text "Enter your username". Below that is another text input field with the placeholder text "Enter your password". At the bottom of the form is a blue button with the text "SIGN IN" in white capital letters.

You can also launch the NorthStar Planner desktop application from within the NorthStar Controller by navigating to **Planner Desktop** from the NorthStar Controller More Options menu as shown in [Figure 2 on page 17](#):

Figure 2: NorthStar Controller More Options Menu

NorthStar Controller features are available through the web UI. NorthStar Planner features are available through the desktop NorthStar Planner application. A subset of Planner features are also available through the NorthStar Planner web UI.

A configurable User Inactivity Timer is available to the System Administrator (only). If set, any user who is idle and has not performed any actions (keystrokes or mouse clicks)

is automatically logged out of NorthStar after the specified number of minutes. By default, the timer is disabled. To set the timer, navigate to **Administration > System Settings** in the NorthStar Controller web UI.

NorthStar Planner Web UI Overview

The NorthStar Planner web UI has five main views that are summarized here and discussed in detail in later topics:

- Network Browser
- Topology
- Dashboard
- Simulation
- Report Manager

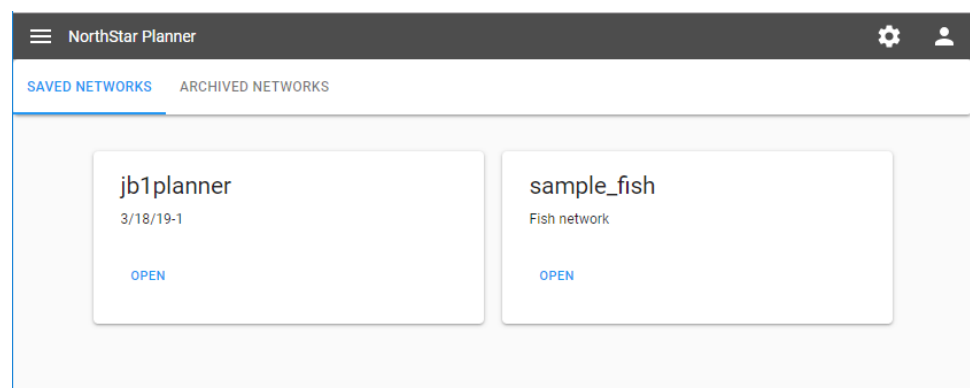
Network Browser View

When you first log into the Planner, the Network Browser view is displayed as shown in [Figure 3 on page 18](#). There are two tabs: Saved Networks and Archived Networks, which display the networks available for you to open.



NOTE: Once you have opened a network from either of those tabs, the other main views become available; they are network-specific.

Figure 3: Network Browser View



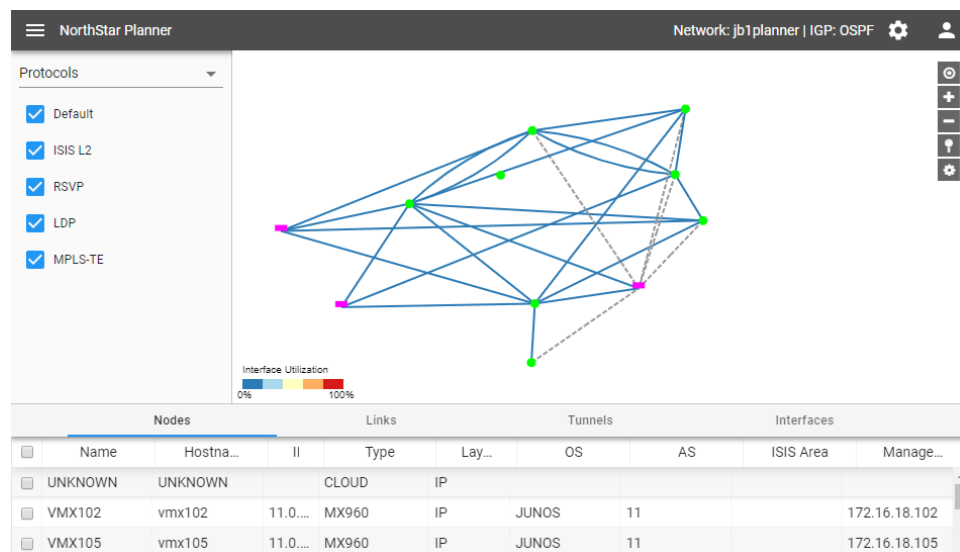
When you select a network and click **Open**, the network opens in Topology view, as shown in [Figure 4 on page 19](#). Click on the menu icon (horizontal bars) in the upper left corner of the Planner to select one of the other main views for the open network or to return to the Network Browser.



NOTE: The features of the upper menu bar are documented in [“Web Planner Top Menu Bar” on page 22](#).

Topology View

Figure 4: Topology View



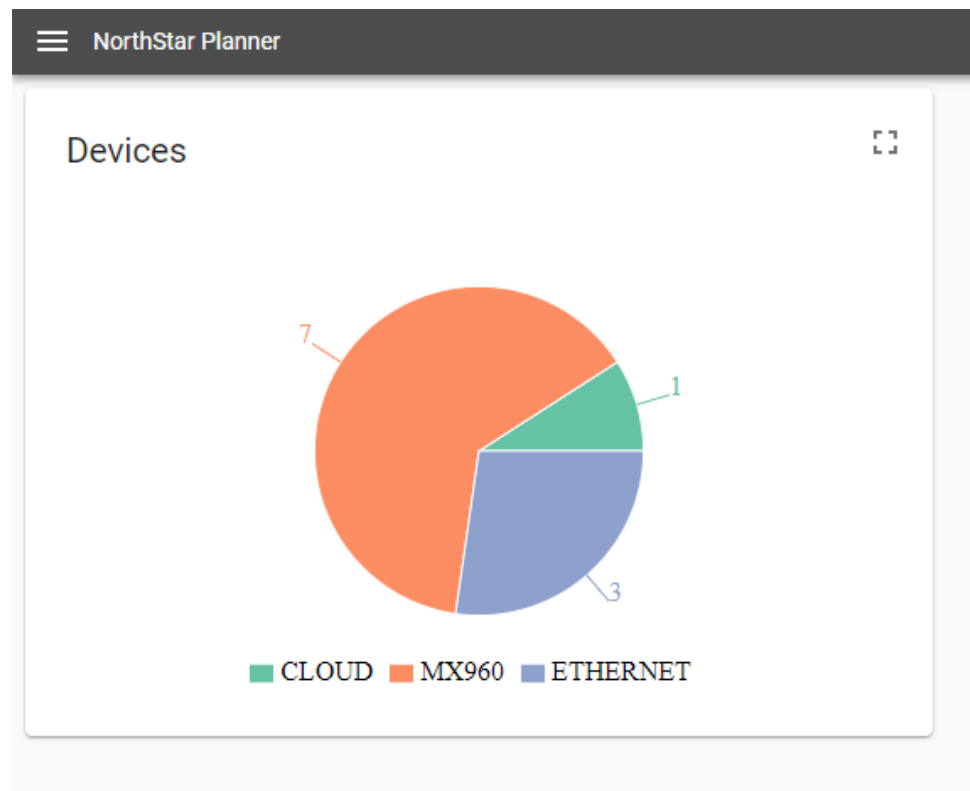
There are three main sections to the Topology view, similar to those in the NorthStar Controller UI:

- The left pane offers a number of display options that are selectable using the drop-down menu.
- The center area is devoted to the topology map of the network.
- Across the bottom of the display is the network information table with four available tabs: Nodes, Links, Tunnels, and Interfaces.

Dashboard View

The Dashboard view will present a variety of status and statistics information related to the network, in the form of widgets. As of this release, only the Devices widget is available as shown in [Figure 5 on page 20](#).

Figure 5: Dashboard View



The Devices widget shows the relative number of devices of each type included in the network.

Simulation View

The Simulation View, one step of which is shown in [Figure 6 on page 21](#), presents a tool for designing and executing failure simulations.



NOTE: NorthStar web UI Planner runs modeling and simulation in Tunnel / Layer 2.

Figure 6: Simulation View

NorthStar Planner Network: jb1planner | IGP: OSPF

Failure Simulation

- 1 Setup Simulation
- 2 Advanced Settings
Optional
- 3 Create Additional Reports
Optional
- 4 Run Simulation

BACK NEXT

Setup Simulation

Exhaustive Failure Combination
Single

Elements to simulate *

- ☐ Node
- ☐ Link
- ☐ Site
- ☐ SRLG
- ☐ Parallel Links

* Required

Report Manager View

The Report Manager view, shown in [Figure 7 on page 22](#), lists all the configuration and simulation reports that can be generated by the Planner. Click any report name on the left to display the report data on the right. A download option is available for saving reports.

Figure 7: Report Manager View

Router	Hostn...	Interfa...	ε	Type	Level ...
VMX103_SET1	vmx103-set1	ge-0/0/0.37	11.1...	L2	N/A
VMX103_SET1	vmx103-set1	lo0.0	11.0...	L2	N/A
VMX102_SET1	vmx102-set1	ge-0/0/0.12	11.1...	L2	N/A
VMX102_SET1	vmx102-set1	ge-0/0/0.25	11.1...	L2	N/A
VMX102_SET1	vmx102-set1	ge-0/0/0.26	11.1...	L2	N/A
VMX102_SET1	vmx102-set1	ge-0/0/0.112	11.1...	L2	N/A
VMX102_SET1	vmx102-set1	lo0.0	11.0...	L2	N/A
VMX101_SET1	vmx101-set1	ge-0/0/0.12	11.1...	L2	N/A
VMX101_SET1	vmx101-set1	ge-0/0/0.15	11.1...	L2	N/A
VMX101_SET1	vmx101-set1	ge-0/0/0.112	11.1...	L2	N/A
VMX101_SET1	vmx101-set1	lo0.0	11.0...	L2	N/A
VMX101_SET1(P105)	vmx101-set...	ge-0/0/0.56	11.1...	L2	N/A
VMX101_SET1(P105)	vmx101-set...	ge-0/0/0.57	11.1...	L2	N/A
VMX101_SET1(P105)	vmx101-set...	ge-0/0/1.15	11.1...	L2	N/A
VMX101_SET1(P105)	vmx101-set...	ge-0/0/1.25	11.1...	L2	N/A
VMX101_SET1(P105)	vmx101-set...	lo0.105	11.0...	L2	N/A
VMX101_SET1(P106)	vmx101-set...	ge-0/0/0.67	11.1...	L2	N/A
VMX101_SET1(P106)	vmx101-set...	ge-0/0/1.26	11.1...	L2	N/A
VMX101_SET1(P106)	vmx101-set...	ge-0/0/1.46	11.1...	L2	N/A
VMX101_SET1(P106)	vmx101-set...	ge-0/0/1.56	11.1...	L2	N/A

Related Documentation

- [Web Planner Top Menu Bar on page 22](#)
- [Simulation on page 51](#)
- [Report Manager on page 55](#)

Web Planner Top Menu Bar

The top menu bar in the NorthStar Planner web UI (all views) displays the name of the currently open network, if there is one, plus two icons that provide administrative functions, as shown in [Figure 8 on page 22](#).

Figure 8: Upper Right Corner Display



Click the tools icon (gear) for a drop-down list of network and viewing options:

- **Save Network**

Use Save Network to save your work to the NorthStar data directory. This option is only available when you open a network from the Saved Networks tab. It is not available when you open an archived network from the Archived Networks tab because the archived network only exists in a temporary file that would be overwritten the next time you open an archived network. To save an archived network, use the Save Network As option.

- **Save Network As**

Use the Save Network As option to save an archived network for the first time or to save your work on a network with a new name. The Save As window prompts you for a network name and an optional description. The saved network is then available to you from the Saved Networks tab.



NOTE: Spaces and most special characters are not allowed in network names. Hyphens and underscores are allowed. These restrictions do not apply to descriptions.

- **Close Network**

Select Close Network to close the network you currently have open. The name of the open network disappears from the upper right corner of the Planner window. If you are in any main view other than Network Browser when you close the network, the display returns to Network Browser where you can select a network to open.

- **View Active Users**

Select View Active Users to display a list of users currently logged into the Planner as shown in [Figure 9 on page 23](#).

Figure 9: Active Users Window

Active Users					
Username	From	Logged In	Duration	Group	Current Baseline
user1jb	10.104.42.224	2019-03-18 20:51	0 min	Administrators	sample_fish
admin	10.104.42.224	2019-03-18 20:48	3 min	Administrators	Operator
user1jb	10.104.42.224	2019-03-18 20:49	2 min	Administrators	jb1planner

OK

The Current Baseline column shows the name of the network each user has open.

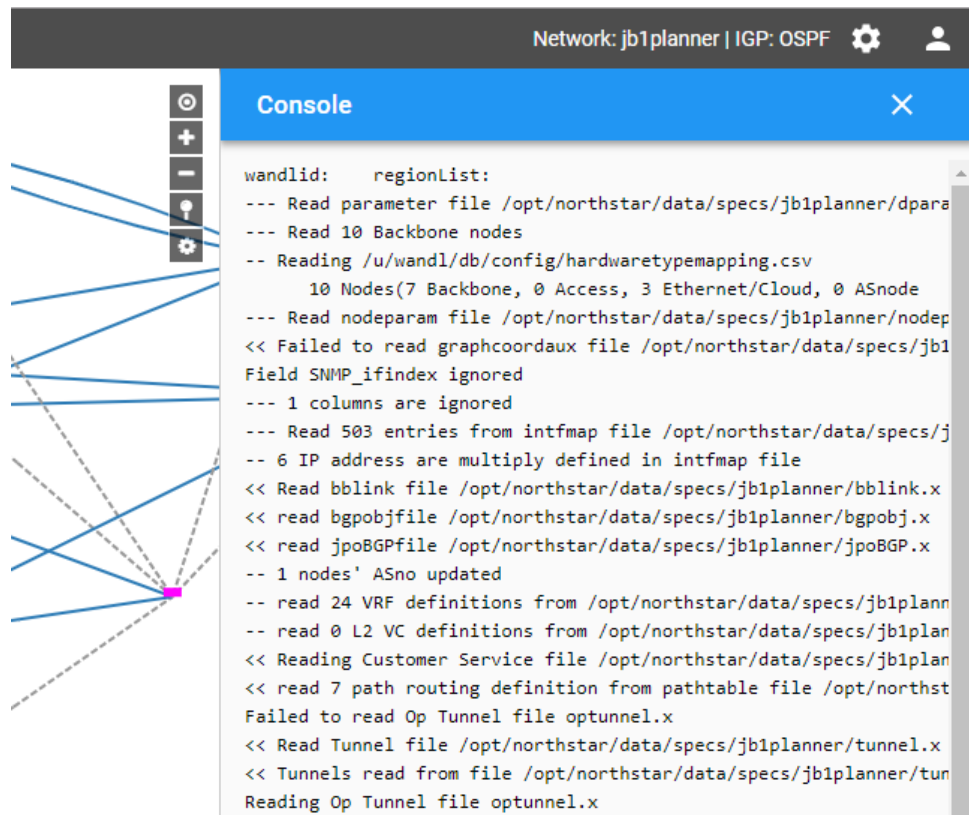


NOTE: At this time, there is no user management in the NorthStar Planner web UI. New users must be created in the NorthStar Controller. See *User Management*.

- **View Console**

View Console is only available in Topology View. When you select this option, the console opens on the right side of the Planner window as shown in [Figure 10 on page 24](#).

Figure 10: Console Window



The console displays information when loading a network, reading files, running failure simulation, generating reports, and various other functions. You can use the console to trace through information in more detail.

Click the user icon in the upper right corner of the Planner window to log out of NorthStar Planner.

Related Documentation

- [NorthStar Planner Web UI Overview on page 18](#)

Importing Archived Networks from NorthStar Controller

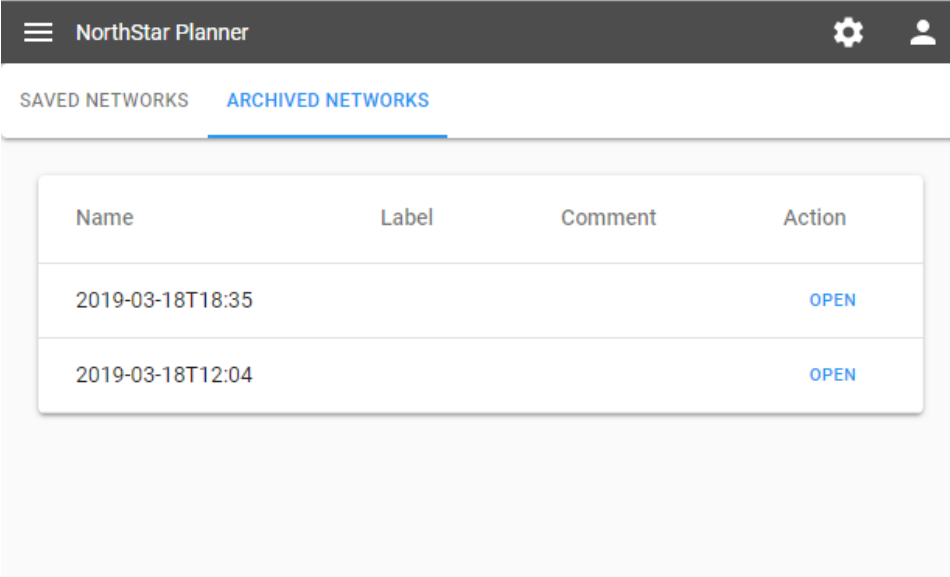
Archived networks are generated in the NorthStar Controller and saved, after which, they are available in the NorthStar Planner under the Archived Networks tab in the Network Browser view.

Use the following procedure:

1. In the NorthStar Controller, ensure the device profiles are set up correctly. Test connectivity of all devices and troubleshoot as needed until all devices are reachable. See *Device Profile and Connectivity Testing* in the *NorthStar Controller User Guide*.
2. Create and run a device collection task to collect configuration data for the devices. See *Scheduling Device Collection for Analytics* in the *NorthStar Controller User Guide*.
3. Create and run a Network Archive task to archive the collected data. See *Collection Tasks to Create Network Archives* in the *NorthStar Controller User Guide*. **IMPORTANT:** Be sure to select the option to **Archive network data after processing**.

Archived networks created in this way are then available in the Network Browser, Archived Networks Tab as shown in [Figure 11 on page 25](#).

Figure 11: Network Browser Archived Networks Tab



Name	Label	Comment	Action
2019-03-18T18:35			OPEN
2019-03-18T12:04			OPEN



NOTE: The Name of the archived network is a timestamp of the creation time/date; it is not the same as the name you gave to the corresponding Network Archive task in the NorthStar Controller. In this release, the Label and Comment fields are not used.

When you open an archived network from the Network Browser, it opens in a temporary file that you cannot save. If you want to work with an archived network and then save it, you can select **Save As** from the Tools icon (gear) in the upper right corner of the Planner. Once saved, you can continue to access that network from the Saved Networks tab in the Network Browser.

**Related
Documentation**

- *Device Profile and Connectivity Testing* (NorthStar Controller User Guide)
- *Scheduling Device Collection for Analytics* (NorthStar Controller User Guide)
- *Collection Tasks to Create Network Archives* (NorthStar Controller User Guide)

CHAPTER 2

Topology View

- [Navigation Functions in the Topology View on page 27](#)
- [Interactive Map Features on page 28](#)
- [Topology View Left Pane Options on page 37](#)
- [Network Information Table Overview on page 42](#)
- [Sorting and Filtering Options in the Network Information Table on page 43](#)
- [Network Information Table Bottom Tool Bar on page 47](#)

Navigation Functions in the Topology View

Many familiar navigation functions are supported in the Topology window, and are summarized in [Table 4 on page 27](#).

Table 4: Supported Topology Window Navigation Functions




Function	Method
Drag and drop	Left-click an element, hold while repositioning the cursor, then release.
Select an element	Click a link or node to select it.
Select multiple elements	<ol style="list-style-type: none">1. Hold down the Shift key and left mouse button while dragging the mouse to create a rectangular selection box. All elements within the box are selected.2. Hold down the Shift key and click multiple nodes, one at a time. <p>One application for selecting multiple elements is creating node groups.</p>
Zoom to fit 	Click the circular button that looks like a bull's eye in the upper right corner of the window to size and center the topology map to fit the window.
Zoom in and out  	<ol style="list-style-type: none">1. Use the mouse scroll wheel.2. Click the +/- buttons in the upper right corner of the Planner window.
Right-click to access functions	Right-click a blank part of the topology map or on a map element to access context-relevant functions.

Table 4: Supported Topology Window Navigation Functions (continued)

Function	Method
Hover	You can hover over some network elements in the topology map to display the element name or ID.
Resize panes	You can click and drag many of the pane margins to resize the panes in a display.

Interactive Map Features

The topology map is interactive, meaning that you can use features within the map itself to customize it. The map uses a geographic coordinate reference system. Some features enabled by that system include:

- Constrained zooming: NorthStar Controller performs coordinate checking so the view is constrained to the coordinates of the earth.
- World wrapping/map wrapping: Scrolling the map in one direction is like spinning a globe. This enables representation of links across an ocean, for example.

The following sections describe additional map features and functionality:

- [Right-Click Functions on page 28](#)
- [Auto Group on page 32](#)
- [Topology Menu Bar on page 34](#)
- [Show Paths on page 34](#)
- [Topology Settings Window on page 35](#)

Right-Click Functions

Right-click a node, selected nodes, or node group on the topology map to display node-specific filtering options as shown in [Figure 12 on page 29](#) and described in [Table 5 on page 29](#).

Figure 12: Right-Click Options for Nodes or Groups

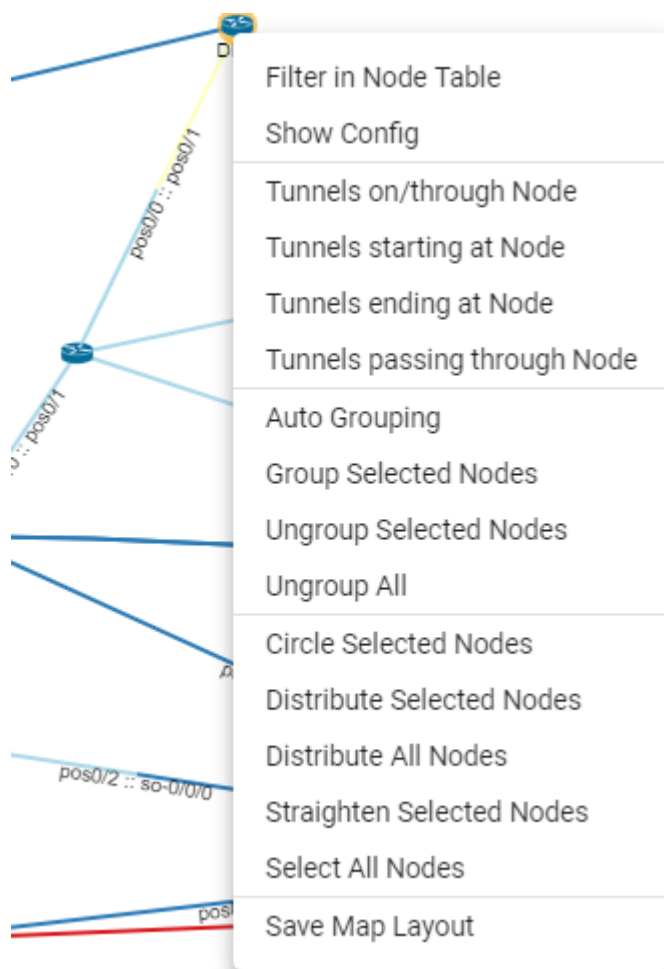


Table 5: Right-Click Options for Nodes or Groups

Option	Function
Filter in Node Table	Filters the nodes displayed in the network information table to display only the selected node(s) or node group(s). To clear the filter in the network information table, click Clear Filter in the lower right corner.
Tunnels on/through Node	Filters the tunnels displayed in the network information table to include only those that meet the On or Through Node criteria.
Tunnels starting at Node	Filters the tunnels displayed in the network information table to include only those that meet the Starting at Node criteria.
Tunnels ending at Node	Filters the tunnels displayed in the network information table to include only those that meet the Ending at Node criteria.
Auto Grouping	Opens the Auto Group tool window on the right side of the topology view. The Auto Group tool allows you to establish rules for automatic node-grouping. There is more information about this tool later in this topic.

Table 5: Right-Click Options for Nodes or Groups (continued)

Option	Function
Group Selected Nodes	Prompts you to give the group of selected nodes a name, after which the group can be expanded or collapsed on the topology map.
Ungroup Selected Nodes	Ungroups the nodes in the selected group.
Ungroup All	Ungroups the nodes in all groups.
Circle Selected Nodes	Arranges the selected nodes in a roughly circular pattern with the nodes and links separated as much as possible.
Distribute Selected Nodes	Forces the selected elements away from each other and minimizes overlap.
Straighten Selected Nodes	Aligns the selected nodes in a horizontal pattern.
Select All Nodes	Selects all nodes on the topology map. This is a shortcut to using shift-left-click to create a selection box around all nodes or individually shift-clicking on all nodes.
Save Map Layout	Saves the current map layout (mapview.json) in the server spec directory, which is then displayed the next time you open the same network. You will not see any confirmation that the save was successful.

Right-click a link on the topology map to display link-specific filtering options as shown in [Figure 13 on page 30](#) and described in [Table 6 on page 30](#).

Figure 13: Right-Click Options for Links*Table 6: Right-Click Options for Links*

Option	Function
Filter in Link Table	Filters the links or tunnels displayed in the network information table to display only the selected link.
Tunnels on/through Link	Filters the links or tunnels displayed in the network information table to include only those that meet the On or Through Link criteria.



NOTE: To clear the tunnel filter so that all links or tunnels are again displayed, click **Clear Filter** in the lower right corner of the network information table.

Right-click blank space in the topology map pane to access the whole-map functions shown in [Figure 14 on page 31](#) and described in [Table 7 on page 31](#).

Figure 14: Right-Click Options for the Topology Map as a Whole

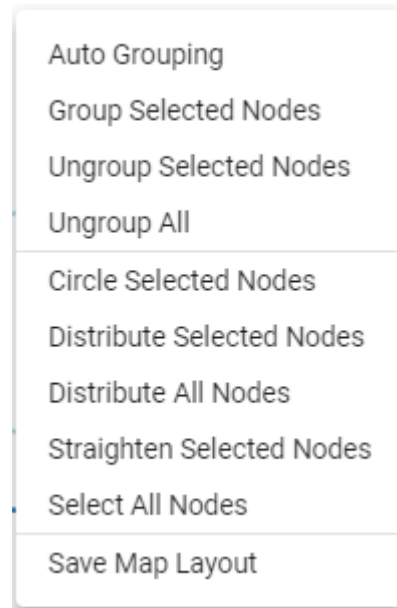


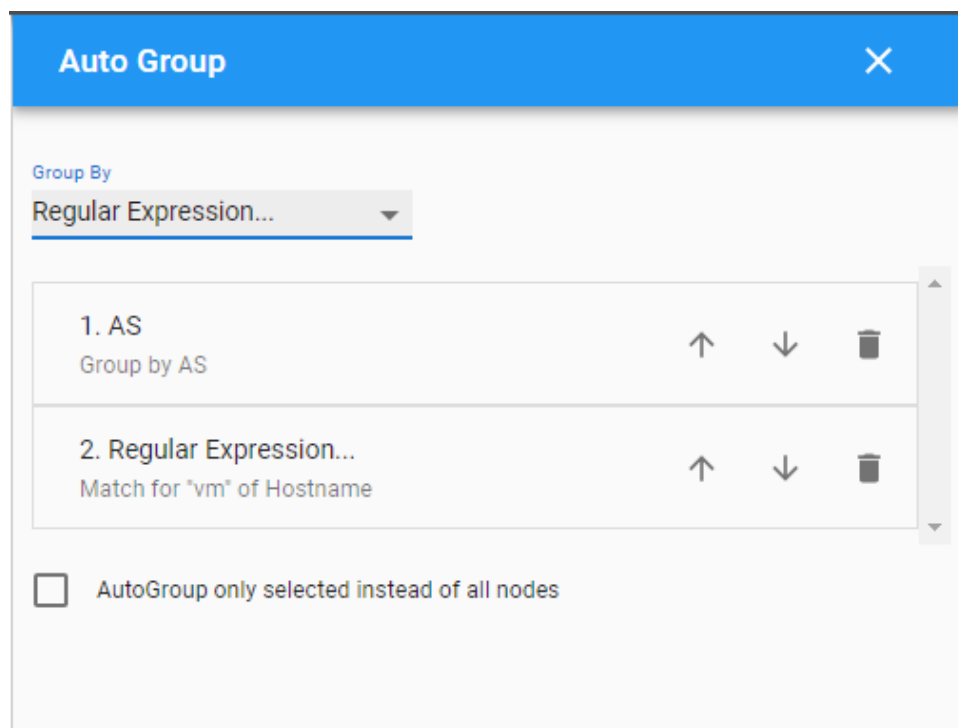
Table 7: Right-Click Options for the Topology Map as a Whole

Option	Function
Auto Grouping	Opens the Auto Group tool window on the right side of the topology view. The Auto Group tool allows you to establish rules for automatic node-grouping. There is more information about this tool later in this topic.
Group Selected Nodes	Prompts you to give the group of selected nodes a name, after which the group can be expanded or collapsed on the topology map.
Ungroup Selected Nodes	Ungroups the nodes in the selected group.
Ungroup All	Ungroups the nodes in all groups.
Circle Selected Nodes	Arranges the selected nodes in a roughly circular pattern with the nodes and links separated as much as possible.
Distribute Selected Nodes	Forces the selected elements away from each other and minimizes overlap.
Straighten Selected Nodes	Aligns the selected nodes in a horizontal pattern.
Select All Nodes	Selects all nodes on the topology map. This is a shortcut to using shift-left-click to create a selection box around all nodes or individually shift-clicking on all nodes.
Save Map Layout	Saves the current map layout (mapview.json) in the server spec directory, which is then displayed the next time you open the same network. You will not see any confirmation that the save was successful.

Auto Group

Launch the Auto Group tool by right-clicking a node in the topology map and selecting **Auto Grouping**. Auto Group allows you to use multiple rules in sequence to group nodes using rule set builder functionality. This is an alternative to creating groups manually. For example, you could set up rules that first group by AS number and then by hostnames that begin with **vm**. [Figure 15 on page 32](#) shows the Auto Group window with that example set up.

Figure 15: Auto Group Window Example



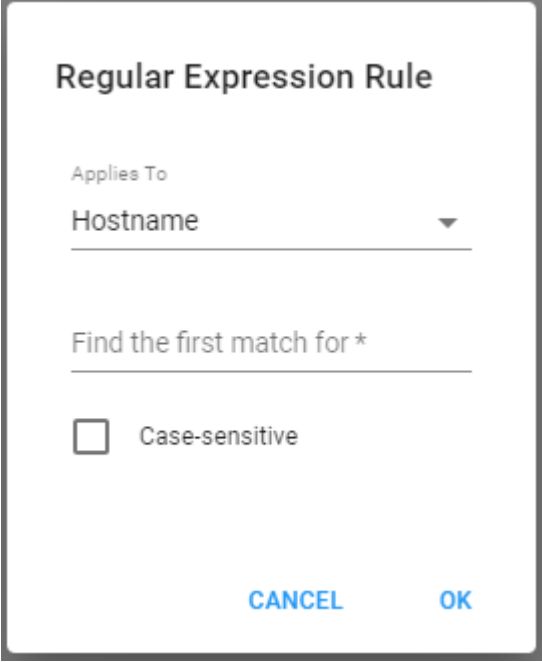
To begin, first click the Group By down arrow and select your first rule. Click the Group By down arrow again to select your second rule, and so on until you have all the rules you need.



NOTE: You can set up a maximum of six rules.

When you select Regular Expression as the rule type, the Regular Expression Rule window is displayed as shown in [Figure 16 on page 33](#).

Figure 16: Regular Expression Rule Window



The dialog box is titled "Regular Expression Rule". It contains a section labeled "Applies To" with a dropdown menu currently showing "Hostname". Below this is a text input field labeled "Find the first match for *". At the bottom left, there is an unchecked checkbox labeled "Case-sensitive". At the bottom right, there are two buttons: "CANCEL" and "OK".

Use the Applies To drop down menu to select Hostname, Name, IP Address, or Type. Enter the text in the **Find the first match for*** field. Standard regular expression syntax is supported, so for example, you could select **Name** and then type `..` and the tool would group nodes whose names start with the same first two digits. Click the check box if you want the match to be case sensitive. Click **OK** to add the rule to your list.

Table 8 on page 33 shows some examples of regular expressions.

Table 8: Regular Expression Examples

Router Names	Regular Expression	Resulting Groups
GERABC1234	...	groups to GER
GERABC1234	<code>^(..)</code>	groups to ER
GERABC1234	<code>^(...)</code>	groups to ERA
GERABC1234	<code>^(....)</code>	groups to ERAB
GERABC1234	<code>...(..)</code>	groups to ABC
GERABC1234	<code>^{3}(...)</code>	groups to ABC
P1_ATL, P2_ATL, P3_ATL, P1_NYC, P2_NYC, P3_NYC, P1_CHI, P2_CHI, P3_CHI	<code>*_([A-Z]*)</code> or <code>..(...)</code>	ATL, NYC, and CHI , each containing 3 routers

In the list of rules you selected/created, use the up and down arrows beside each of the rules to move them up or down in the list. The rules are executed in order, starting with number 1, so order can be significant.

The default is for the auto grouping to be executed for all nodes in the network, but you can click the check box for **AutoGroup only selected instead of all nodes**, if that is your preference. To delete a rule, click the corresponding **Delete** button (trash can icon).

Click **Submit** at the bottom of the Auto Group window to perform the grouping. Check the results in the topology map and in the Node/Groups left pane display.

Topology Menu Bar

On the right side of the topology window is a menu bar offering various topology settings, as shown in [Figure 17 on page 34](#).

Figure 17: Topology Settings Menu Bar



From the menu bar, you can:

- Center the topology in the window (target icon).
- Enlarge the topology in the window (plus symbol).
- Reduce the size of the topology in the window (minus symbol).
- Show paths from a source node to a destination node (map pin icon).
- Access the topology settings window (gear icon).

Show Paths

When you click the show paths icon, a message appears in the upper left corner of the topology map window, prompting you to select a source node. When you click your desired source node on the map, you are prompted to select a destination node. When you click your desired destination node, the Paths window opens on the right side of the topology display, showing you the current route between the selected nodes and giving you the option to hide unrelated nodes on the map.

For this release, only the current route is displayed. In a future release, configured secondary routes will also be selectable using the Paths drop-down menu.

You can also reach the Paths window by right-clicking a tunnel in the Tunnel tab of the network information table.

Topology Settings Window

The Topology Settings window contains many topology display settings, all in one place. [Figure 18 on page 35](#) shows the Topology Settings window.

You can select as many settings as you like by clicking the associated check boxes. When you opt to Show Label for nodes or links, you can select only one label from the corresponding drop-down menu.



NOTE: For readability reasons, NorthStar does not display node or link labels over a certain quantity, even if the Topology Settings call for labels to be displayed.

Figure 18: Topology Settings Window

Topology Settings

Nodes

- ☐ Show Label Hostname
- ☐ Background Shadow
- ☐ Hide Pseudo Node Labels
- ☐ Show only Favorites Labels
- ☐ Hide Isolated Nodes

Links

- ☐ Show Label Interface A::Z
- ☐ Show only if endpoints are in Favorites
- ☒ Show Link Down Marker
- ☒ Draw Down Link as Dashed Line
- ☒ Draw Parallel Links as Curve
- ☒ Wrap Links as Great Arcs
- ☐ Hide Partially Visible Links

Tunnels

- ☐ Draw Path as Curve
- ☐ Draw Path through Layers

Topology View

- ☒ Nodes and Links
- ☐ Clusters and Bundles

Map Style

- ☒ Light
- ☐ Dark
- ☐ Show World Map
- ☐ Graticules
- ☐ Populated Places

General

- ☐ Show Tooltips
- ☒ Show Maintenance Marker
- ☐ Zoom to Selected Node from Table

Label Size: 10



NOTE: Drawing DOWN links as a solid, rather than dashed, line can improve performance when redrawing the topology.

A few of these settings might not be self-explanatory:

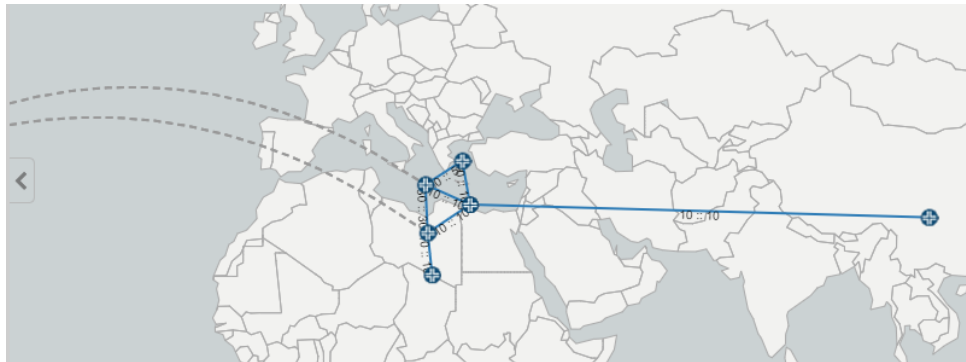
- Hide Partially Visible Links

Removes from the display any links for which both end nodes are not within the field of view. This is useful for focusing on a subset of a large network.

- Wrap Links as Great Arcs

Distinguishes links that would have to wrap around the world map. An example is shown in [Figure 19 on page 36](#).

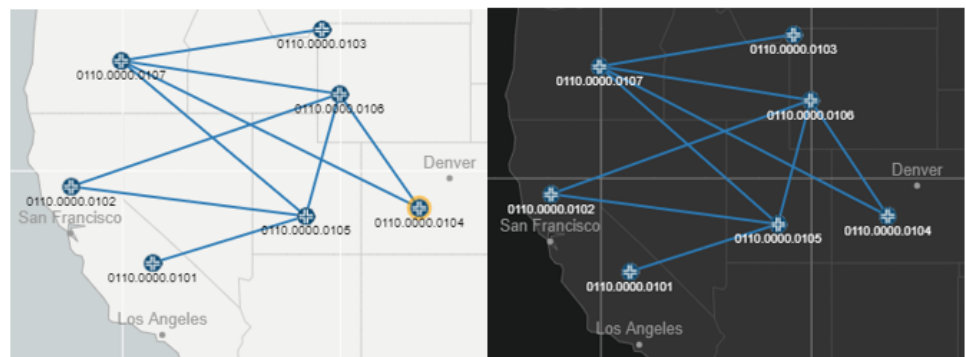
Figure 19: Wrap Links as Great Arcs Example



Map Style section

The Light and Dark options available in this section are mutually exclusive; select one radio button or the other. [Figure 20 on page 36](#) shows an example of the light and dark map styles.

Figure 20: Light and Dark Map Styles



If you select to Show World Map, you can opt to display graticules (a grid of lines parallel to meridians of longitude and parallels of latitude) and labeling of major populated places (both shown in [Figure 20 on page 36](#)).



NOTE: Even if you deselect Show World Map, the topology still behaves according to geographical coordinates in terms of displaying the topology within the field of view.

General section

Select the check boxes for as many of the options in this group as you like:

- **Show Maintenance Marker:** Displays a red M over any link currently part of a maintenance event.
- **Zoom to Selected Node from Table:** With this option enabled, when you click on a node entry in the network information table (Node tab), the topology automatically centers the view on that selected node.

Use the Label Size drop-down menu to select a font size for node and link labels.

Topology View Left Pane Options

The left pane drop-down menu offers several ways to filter the data that is displayed in the NorthStar Planner topology map pane. When you first open a network and display the topology, the initial view shows Protocols. [Table 9 on page 37](#) summarizes the left pane drop-down menu choices.

Table 9: NorthStar Planner Topology View Left Pane Options

Option	Description
Protocols	<p>Lists protocols you can opt to display or hide on the topology map. Nodes configured with selected protocols are displayed. Selecting Default is the same as selecting all the protocols in the network.</p> <p>Click the check boxes corresponding to the protocols you want to select or deselect.</p>
Types	<p>Lists node types you can opt to display or hide on the topology map.</p> <p>Click the check boxes corresponding to the types you want to select or deselect.</p>
AS	<p>Selects autonomous systems (ASs) you can opt to display or hide on the topology map.</p> <p>Click the check boxes corresponding to the ASs you want to select or deselect.</p>
ISIS Areas	<p>Selects ISIS areas you can opt to display or hide on the topology map.</p> <p>Click the check boxes corresponding to the ISIS areas you want to select or deselect.</p>

Table 9: NorthStar Planner Topology View Left Pane Options (continued)

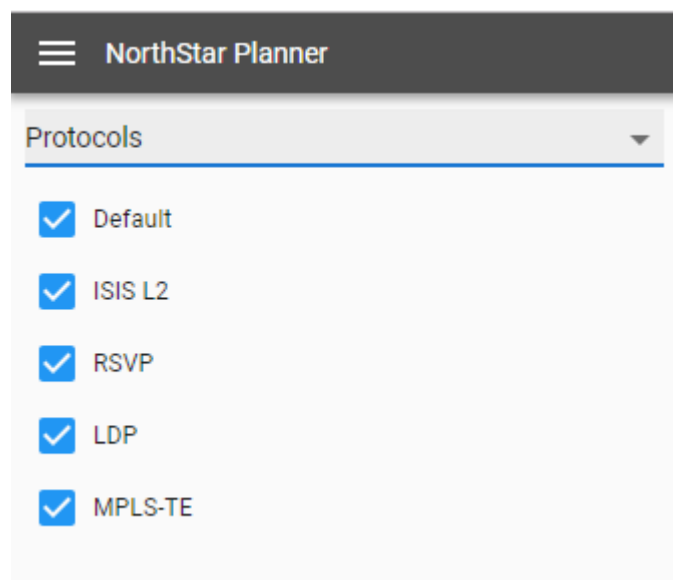
Option	Description
OSPF Areas	Selects OSPF areas you can opt to display or hide on the topology map. Click the check boxes corresponding to the OSPF areas you want to select or deselect.
Nodes/Groups	Displays user-created groups with or without listing the member nodes. Expanded groups are represented on the topology map by individual node icons. Collapsed groups are represented on the topology map by group icons, and the individual member nodes are not displayed. All nodes start out as ungrouped.

The following sections describe the left pane display options:

- [Protocols on page 38](#)
- [Types on page 39](#)
- [AS on page 39](#)
- [ISIS Areas on page 40](#)
- [OSPF Areas on page 40](#)
- [Nodes/Groups on page 41](#)

Protocols

The Protocols list includes all protocols present in the current topology. [Figure 21 on page 38](#) shows an example.

Figure 21: Protocols List

Protocols can be selected or deselected by selecting or clearing the corresponding check boxes. Only network elements that support selected protocols are displayed in the topology map.

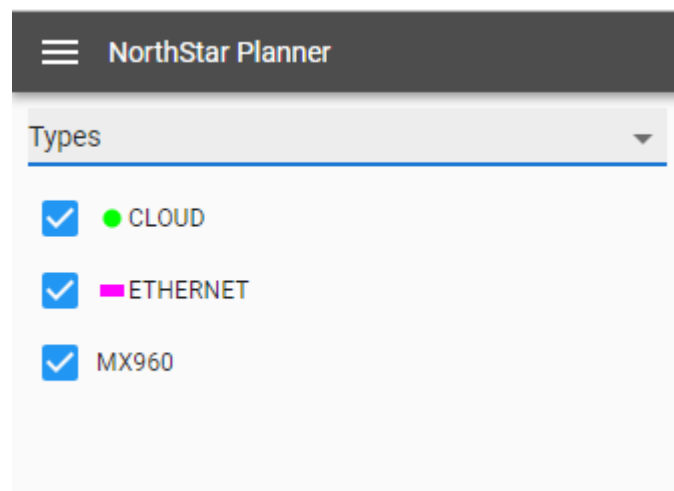


NOTE: Select **Default** to display all protocols on the topology map. If you do not want elements supporting all protocols to be displayed on the topology map, be sure to clear the **Default** check box.

Types

The Types list in the left pane of the Topology view includes categories of nodes and links found in the network. [Figure 22 on page 39](#) shows a sample Types list.

Figure 22: Left Pane Types List



Different types are associated with different icons, which are reflected in the topology map. You can select or deselect a type by checking or clearing the check box beside it. Only selected options are displayed in the topology map.

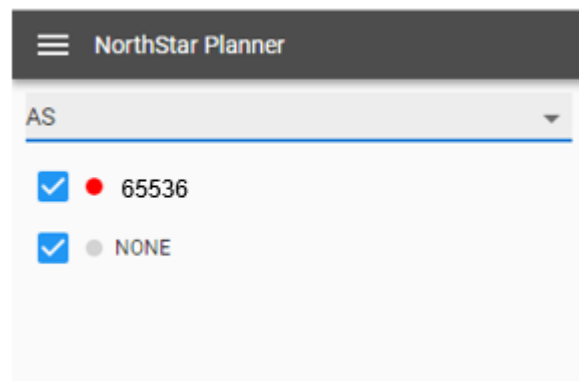


NOTE: All nodes of one type use the same icon.

AS

The autonomous systems (AS) list assigns a color, for purposes of representation on the topology map, for each AS number configured in the network. As noted in [Figure 23 on page 40](#), routers configured with AS 65536 would appear on the topology map as red dots. NONE shows the color assigned to routers with no AS configured.

Figure 23: AS List

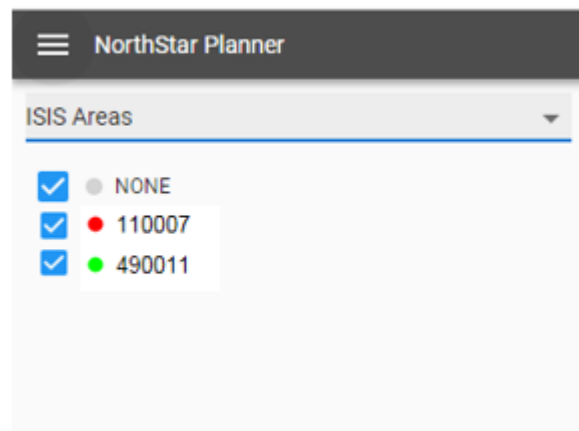


Select or deselect AS numbers by selecting or clearing the corresponding check boxes. Only selected AS numbers are displayed in the topology map.

ISIS Areas

The ISIS Areas list assigns a color, for purposes of representation on the topology map, for each IS-IS area identifier configured in the network. The area identifier is the first three bytes of the ISO network entity title (NET) address. As noted in [Figure 24 on page 40](#), routers whose NET addresses include area identifier 11.0007 appear on the topology map as red dots. Those with area identifier 49.0011 appear as green dots. NONE shows the color assigned to routers with no NET address configured.

Figure 24: ISIS Areas List



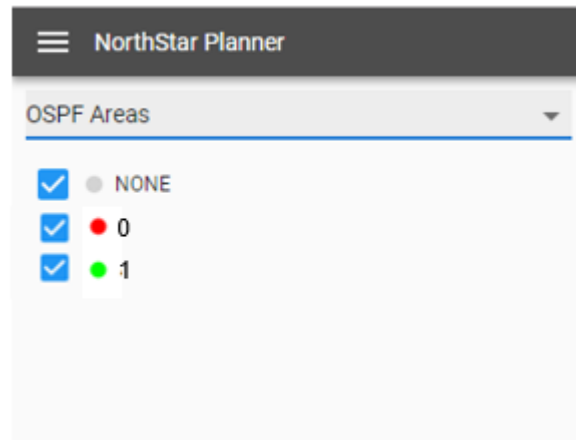
Select or deselect ISIS area identifiers by selecting or clearing the corresponding check boxes. Only selected area identifiers are displayed in the topology map.

OSPF Areas

The OSPF Areas list assigns a color, for purposes of representation on the topology map, for each OSPF area configured in the network. NONE shows the color assigned to routers with no OSPF area configured.

As noted in [Figure 25 on page 41](#), routers with OSPF area 0 configured appear on the topology map as red dots. Those with OSPF area 1 appear as green dots. NONE shows the color assigned to routers with no OSPF area configured.

Figure 25: OSPF Areas List



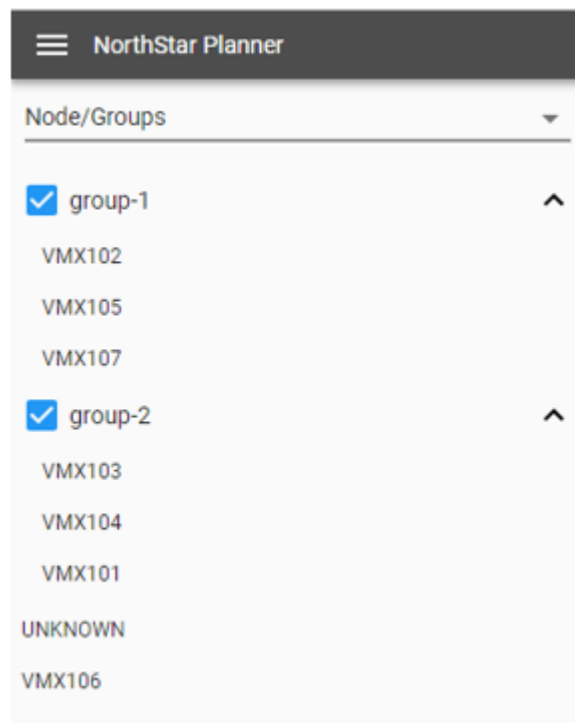
Select or deselect OSPF areas by selecting or clearing the corresponding check boxes. Only selected areas are displayed in the topology map.

Nodes/Groups

You can create groups of nodes by selecting nodes and using the right-click topology map functions. Nodes can also be auto-grouped using criteria that you provide. Once you have groups in your topology, the Node/Groups list in the left pane of the Topology view shows all your node groups, and lists all nodes not included in any group.

When you expand a group listing using the down arrow next to the group name, all the member nodes are listed. When you collapse a group listing using the up arrow next to the group name, only the group name appears in the list. In [Figure 26 on page 42](#), group-1 and group-2 are expanded. The nodes listed below group-2 are ungrouped.

Figure 26: Example Node/Groups List



The topology map reflects the expansion and collapse of the groups in the groups list. For an expanded group, all individual nodes are displayed in the topology map, without indication of which group they belong to. For a collapsed group, the individual node icons are collectively represented by a group icon. Hover over or click on the group icon in the map to display the group name.

Network Information Table Overview

Network information is displayed in the pane at the bottom of the Topology view, below the topology map. An example of the table is shown in [Figure 27 on page 42](#).

Figure 27: Network Information Table

Nodes			Links		Tunnels		Interfaces	
	Name	Hostname	Type	Layer	OS	AS	ISIS ...	Management IP
<input type="checkbox"/>	VMX102	vmx102	11.0...	MX960	IP	JUNOS	11	172.16.18.102
<input type="checkbox"/>	VMX105	vmx105	11.0...	MX960	IP	JUNOS	11	172.16.18.105
<input type="checkbox"/>	VMX106	vmx106	11.0...	MX960	IP	JUNOS	11	172.16.18.106
<input type="checkbox"/>	VMX103	vmx103	11.0...	MX960	IP	JUNOS	11	172.16.18.103
<input type="checkbox"/>	VMX107	vmx107	11.0...	MX960	IP	JUNOS	11	172.16.18.107
<input type="checkbox"/>	VMX104	vmx104	11.0...	MX960	IP	JUNOS	11	172.16.18.104
<input type="checkbox"/>	VMX101	vmx101	11.0...	MX960	IP	JUNOS	11	172.16.18.101

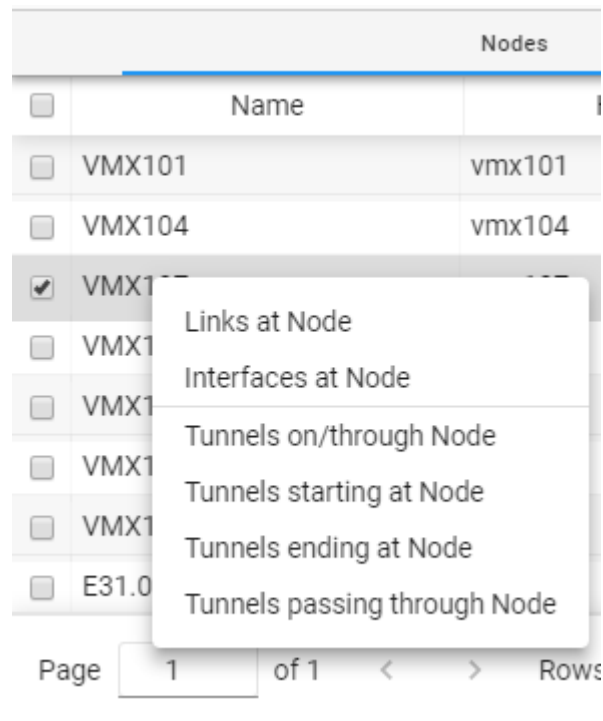
Page 1 of 1 < > Rows per page: 50

Tabs appear across the top of the network information table. The columns of information change according to the tab you select (Nodes, Links, Tunnels, Interfaces). Within the tables, each row represents an element. When you select one or more elements in the network information table, the corresponding elements are highlighted in the topology

map. You can filter the elements (rows) that are included in the table using the right-click functions on the topology map or in the table itself.

For example, if you right-click a node in the Nodes tab of the table, you have the options shown in [Figure 28 on page 43](#).

Figure 28: Right-Click Options Example



See [“Sorting and Filtering Options in the Network Information Table” on page 43](#) for details on the filtering options available from the network information table.

The options available in the tool bar across the bottom of the network information table are described in [“Network Information Table Bottom Tool Bar” on page 47](#).

- Related Documentation**
- [Sorting and Filtering Options in the Network Information Table on page 43](#)
 - [Network Information Table Bottom Tool Bar on page 47](#)

Sorting and Filtering Options in the Network Information Table

This topic describes the sorting and filtering options that are available in the network information table at the bottom of the topology view.

Sorting from Column Headings

You have the option to sort the display of network elements in the network information table by any column heading. Click in the column heading to sort ascending and click

again to sort descending. The up or down arrow in the column heading tells you which sort order is displayed. [Figure 29 on page 44](#) shows an example of the arrow.



NOTE: You only see the up or down arrow when you click in the column heading.

Figure 29: Sort Arrow in Table Column Heading

Nodes		
<input type="checkbox"/>	Name	↓
<input type="checkbox"/>	VMX107	vmx107
<input type="checkbox"/>	VMX106	vmx106

Filtering from Table Rows

Right-click on a table row under any of the table tabs (Nodes, Links, Tunnels, Interfaces) to see the filtering options that are available from that network element. For example, if you right-click a node in the Nodes tab of the table, you have the options shown in [Figure 30 on page 44](#).

Figure 30: Right-Click Filtering Options Example

Nodes		
<input type="checkbox"/>	Name	
<input type="checkbox"/>	VMX101	vmx101
<input type="checkbox"/>	VMX104	vmx104
<input checked="" type="checkbox"/>	VMX107	vmx107
<input type="checkbox"/>	VMX108	vmx108
<input type="checkbox"/>	VMX109	vmx109
<input type="checkbox"/>	VMX110	vmx110
<input type="checkbox"/>	VMX111	vmx111
<input type="checkbox"/>	E31.0	

Links at Node
Interfaces at Node
Tunnels on/through Node
Tunnels starting at Node
Tunnels ending at Node
Tunnels passing through Node

Page 1 of 1 < > Rows

[Table 10 on page 45](#), [Table 11 on page 45](#), and [Table 12 on page 45](#) describe the options available when right-clicking an element in the Nodes, Links, and Interfaces tabs.

Right-clicking a tunnel in the Tunnels tab launches the Show Path tool, which is addressed in the next section.



NOTE: To clear a filter so that all network elements are again displayed, click **Clear Filter** in the lower right corner of the network information table (only visible when a filter is in effect).

Table 10: Right-Click Filtering Options in the Nodes Tab

Option	Function
Links at Node	Switches the display to the Links tab and shows only those links that have the selected node as Node A or Node Z.
Interfaces at Node	Switches the display to the Interfaces tab and shows only those interfaces with the selected node.
Tunnels on/through Node	Switches the display to the Tunnels tab and shows only those tunnels that start, end, or run through the selected node.
Tunnels starting at Node	Switches the display to the Tunnels tab and shows only those tunnels that start at the selected node.
Tunnels ending at Node	Switches the display to the Tunnels tab and shows only those tunnels that end at the selected node.
Tunnels passing through Node	Switches the display to the Tunnels tab and shows only those tunnels that pass through the selected node.

Table 11: Right-Click Filtering Options in the Links Tab

Option	Function
Nodes on Link	Switches the display to the Nodes tab and shows only those nodes that are on the selected link.
Interfaces on Link	Switches the display to the Interfaces tab and shows only those interfaces that are on the selected link.
Tunnels on/through Link	Switches the display to the Tunnels tab and shows only those tunnels that run on or through the selected link.

Table 12: Right-Click Filtering Options in the Interfaces Tab

Option	Function
Link at Interface	Switches the display to the Links tab and shows only those links that have the selected interface.

Filtering Using the Search Function

The search function is available on the Nodes and Links tabs. Open the search tool by clicking on the search icon (magnifying glass) in the bottom tool bar of the table.



NOTE: The search icon is grayed out on the Tunnels and Interfaces tabs, but will be available in a future release.

A search field opens just under the tab headings as shown in [Figure 31 on page 46](#). After entering search text where it says, “Filter this report...”, click the **Filter** button on the far right or press **Enter** to execute the search.

Figure 31: Search Field

Nodes

Links

Tunnels

Interfaces

Filter this report...

FILTER

<input type="checkbox"/>	Name	Type	...	Node A	Node Z	Inte
<input type="checkbox"/>	VMX101_GE...	ET10M	⬆ Up	vmx102	vmx101	ge-0/0

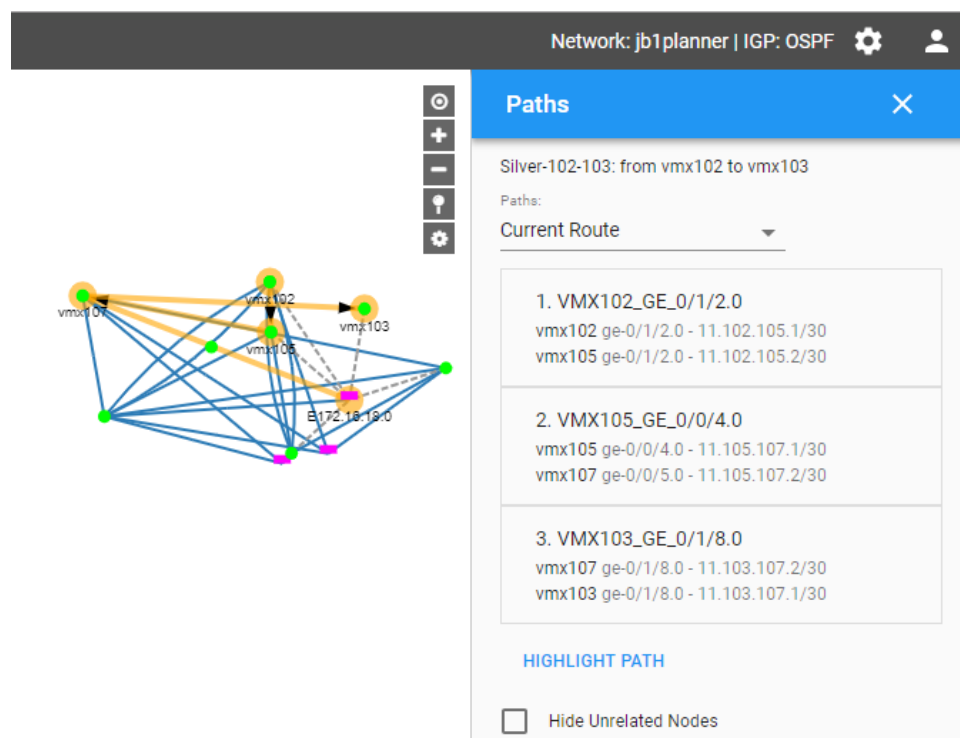
The rows are filtered to display only those elements satisfying the search criteria. This does not change the topology map.

To clear this kind of filter so that all network elements are again displayed, delete all text from the search field and click the **Filter** button again.

Using the Show Path Tool from the Tunnels Tab

To launch the Show Path tool, right-click a tunnel in the Tunnels tab of the network information table, and select **Show Path**. The Paths window opens to the right of the topology map, displaying the current route for the selected tunnel, hop by hop. An example is shown in [Figure 32 on page 47](#).

Figure 32: Paths Window



Note that the path is highlighted in the topology map. You can click **Highlight Path** if the path is not already highlighted, which it might not be if you clicked to a different network information table tab and then clicked back to Tunnels.

In Release 4.3, only the current route can be displayed. A future release will support secondary route display from the Paths drop-down menu to the right of the Current Route heading.

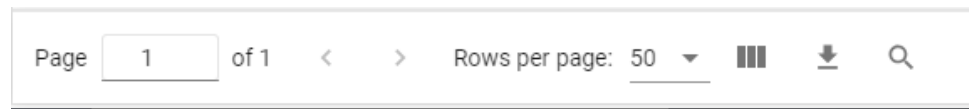
At the bottom of the display is an option to Hide Unrelated Nodes on the topology map. Click the check box to select or deselect this option.

Related Documentation

- [Network Information Table Overview on page 42](#)
- [Network Information Table Bottom Tool Bar on page 47](#)

Network Information Table Bottom Tool Bar

The bottom tool bar in the network information table has tools for navigating through pages of network element data, selecting columns to display, downloading data, and searching for data. [Figure 33 on page 48](#) shows the bottom tool bar.

Figure 33: Network Information Table Bottom Tool Bar

Navigation Tools

The navigation tools in the network information table bottom tool bar are available to help you navigate through rows and pages of data, and change the number of rows per loaded page. These tools are especially useful for large models with many elements.

[Table 13 on page 48](#) describes the navigation tools in the bottom tool bar.

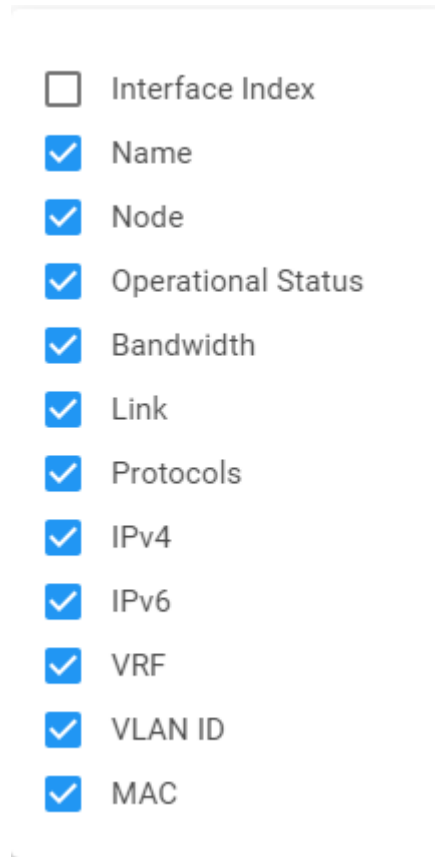
Table 13: Navigation Tools in the Network Information Bottom Tool Bar

Tool or Button	Description
Page __ of <total pages>	Shows which page of data is currently displayed. You can use the up and down arrows that appear when you click in the page box to page forward or backward.
<	Displays the previous page of data.
>	Displays the next page of data.
Rows per page	Click the down arrow to select the number of rows per page (10, 50, 100, 500, or 1000)

Column Chooser

The Column Chooser tool is available for all network information tabs. Launch the tool by clicking the columns icon (vertical bars). The resulting list of available columns is different, depending on the table tab. [Figure 34 on page 49](#) shows the list of columns available in the Interfaces tab, for example.

Figure 34: Column Chooser for the Interfaces Tab



<input type="checkbox"/>	Interface Index
<input checked="" type="checkbox"/>	Name
<input checked="" type="checkbox"/>	Node
<input checked="" type="checkbox"/>	Operational Status
<input checked="" type="checkbox"/>	Bandwidth
<input checked="" type="checkbox"/>	Link
<input checked="" type="checkbox"/>	Protocols
<input checked="" type="checkbox"/>	IPv4
<input checked="" type="checkbox"/>	IPv6
<input checked="" type="checkbox"/>	VRF
<input checked="" type="checkbox"/>	VLAN ID
<input checked="" type="checkbox"/>	MAC

Click the check boxes to select or deselect the columns.

Download Data Tool

The Download Data tool is available for all network information table tabs. Launch the tool by clicking the download icon (down arrow). A csv file is created that contains all the data from the table tab.

The data is downloaded the way you have it sorted and filtered in the network information table.

Search Function

The search function, available only for the Nodes and Links tabs, is fully described in [“Sorting and Filtering Options in the Network Information Table” on page 43](#).

It allows you to use search criteria to filter the rows in the table to display only those elements satisfying the search criteria.



NOTE: To clear this kind of filter so that all network elements are again displayed, delete all text from the search field and click the Filter button again.

- Related Documentation**
- [Network Information Table Overview on page 42](#)
 - [Sorting and Filtering Options in the Network Information Table on page 43](#)

CHAPTER 3

Simulation View

- [Simulation on page 51](#)

Simulation

When you click the menu icon (horizontal bars) in the upper left corner of the Planner and select Simulation, the Simulation tool opens in the main window (a network must be open for this option to be available). The Simulation tool allows you to run failure analysis using path provisioning that simulates the hardware's implementation of bandwidth allocation and demand routing on the existing topology. This tool walks you through creating a simulation, step by step.



NOTE: After selecting at least one element in Step 1, you are not restricted to progressing through these steps in order. You can click on any Step number directly to go backward and forward rather than using the Next or Back buttons.

Using this tool, you can design a simulation that uses a single, double, or triple exhaustive failure combination, using network element types of your choice.



NOTE: NorthStar web UI Planner runs modeling and simulation in Tunnel / Layer 2.

An exhaustive single failure simulation fails all network elements of a given type, one at a time. For example, an exhaustive node failure fails every node in the network, one at a time. For an exhaustive double failure simulation, two elements are failed at once. For example, if you select Node and Link for a Double exhaustive failure, the simulation would then fail all node and node, node and link, and link and link combinations. An exhaustive triple failure fails three elements at once.

The tool also allows you to select a routing method to use for the simulation, either Normal, Fast Reroute (FRR), or both (the default). Fast Reroute is a mechanism that can be used to protect MPLS traffic engineering LSP tunnels in the event of node or link failures. It accomplishes this with SONET-like restoration times by locally repairing the LSPs at the point of failure, using backup tunnels that bypass the failure while waiting

for the head-end routers to establish a new LSP. The short restoration times are especially desirable for real-time applications such as voice over IP, which often cannot tolerate high delays. “Normal” routing method means “without FRR.”

To design and execute a simulation, use the following procedure.

1. In Step 1, shown in [Figure 35 on page 52](#), select the exhaustive failure combination from the drop-down menu (Single, Double, or Triple) and click the check boxes corresponding to the network elements to be included in the simulation.

Figure 35: Simulation, Step 1

The screenshot displays the 'Failure Simulation' configuration page in the NorthStar Planner. The top navigation bar shows 'NorthStar Planner' and 'Network: jb1planner | IGP: OSPF'. The main content area is divided into two panels. The left panel, titled 'Failure Simulation', contains a vertical progress indicator with four steps: '1 Setup Simulation' (highlighted with a blue circle), '2 Advanced Settings Optional', '3 Create Additional Reports Optional', and '4 Run Simulation'. Below the progress indicator are 'BACK' and 'NEXT' buttons. The right panel, titled 'Setup Simulation', contains a dropdown menu for 'Exhaustive Failure Combination' with 'Single' selected. Below this is a section 'Elements to simulate *' with five checkboxes: 'Node', 'Link', 'Site', 'SRLG', and 'Parallel Links', all of which are currently unchecked. A small asterisk note '* Required' is located at the bottom of this section.

The default exhaustive failure combination is Single. No network elements are selected by default. You must select at least one network element type. When the form is complete, click **Next**.

2. In Step 2, shown in [Figure 36 on page 53](#), you can accept the default routing method (Normal and FRR) or use the drop-down menu to select an alternative (Normal alone or FRR alone).

Figure 36: Simulation, Step 2

Failure Simulation

- ✓ Setup Simulation
- 2 Advanced Settings
Optional
- 3 Create Additional Reports
Optional
- 4 Run Simulation

BACK NEXT

Advanced Settings

Routing Method

Normal and FRR

Click **Next**.

- In Step 3, shown in [Figure 37 on page 53](#), click the check boxes for any additional reports you would like generated.

Figure 37: Simulation, Step 3

Failure Simulation

- ✓ Setup Simulation
- ✓ Advanced Settings
Optional
- 3 Create Additional Reports
Optional
- 4 Run Simulation

BACK RUN SIMULATION

Create Additional Reports

☐ Include Simulation Events in Peak Link Utilization Report

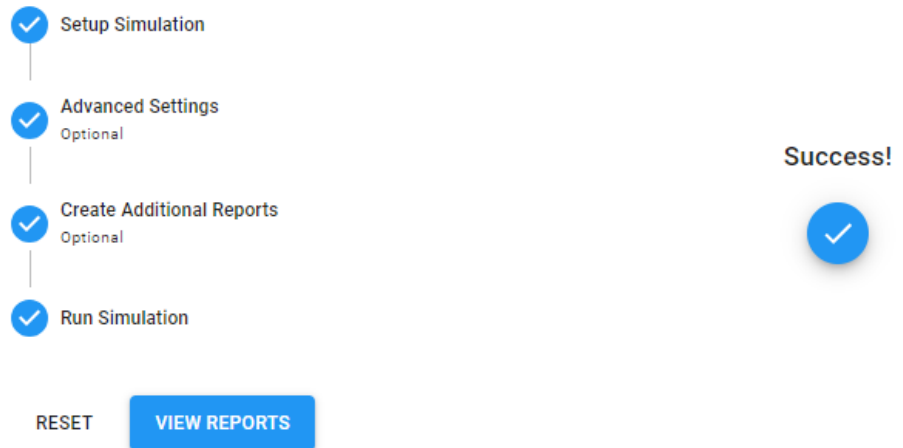
☐ Detailed Reroute Report

Click **Run Simulation**.

- A success message indicates the simulation was executed, as shown in [Figure 38 on page 54](#).

Figure 38: Simulation, Step 4

Failure Simulation



Click **View Reports** to go to the Report Manager where you can access all the simulation reports that were generated. Click **Reset** to begin another simulation.

In the Report Manager, simulation reports are overwritten by the next simulation, so be sure to use the download tool (down arrow icon in the bottom tool bar) to download any reports you want to keep. The Report Manager is fully documented in [“Report Manager” on page 55](#).

Related Documentation

- [Report Manager on page 55](#)

CHAPTER 4

Report Manager View

- [Report Manager on page 55](#)

Report Manager

To reach the Report Manager in the NorthStar Planner web UI, click the menu icon (horizontal bars) in the upper left corner of the Planner and select **Report Manager** (a network must be open for this option to be available).

A list of reports is displayed on the left side of the window and the contents of the selected report displays on the right side. Any report name that is grayed out has not been generated for the network. Reports that are available have a relative time stamp beside them. For example, 2h indicates the report was generated two hours ago. Reports can generate with no content if there is no applicable data for the report. [Figure 39 on page 56](#) shows an example of the Report Manager with the contents of a selected report displayed on the right.

Figure 39: Report Manager Overview

Router	Hostn...	Interfa...	ε	Type	Level ...
VMX103_SET1	vmx103-set1	ge-0/0/0.37	11.1...	L2	N/A
VMX103_SET1	vmx103-set1	lo0.0	11.0...	L2	N/A
VMX102_SET1	vmx102-set1	ge-0/0/0.12	11.1...	L2	N/A
VMX102_SET1	vmx102-set1	ge-0/0/0.25	11.1...	L2	N/A
VMX102_SET1	vmx102-set1	ge-0/0/0.26	11.1...	L2	N/A
VMX102_SET1	vmx102-set1	ge-0/0/0.112	11.1...	L2	N/A
VMX102_SET1	vmx102-set1	lo0.0	11.0...	L2	N/A
VMX101_SET1	vmx101-set1	ge-0/0/0.12	11.1...	L2	N/A
VMX101_SET1	vmx101-set1	ge-0/0/0.15	11.1...	L2	N/A
VMX101_SET1	vmx101-set1	ge-0/0/0.112	11.1...	L2	N/A
VMX101_SET1	vmx101-set1	lo0.0	11.0...	L2	N/A
VMX101_SET1(P105)	vmx101-set...	ge-0/0/0.56	11.1...	L2	N/A
VMX101_SET1(P105)	vmx101-set...	ge-0/0/0.57	11.1...	L2	N/A
VMX101_SET1(P105)	vmx101-set...	ge-0/0/1.15	11.1...	L2	N/A
VMX101_SET1(P105)	vmx101-set...	ge-0/0/1.25	11.1...	L2	N/A
VMX101_SET1(P105)	vmx101-set...	lo0.105	11.0...	L2	N/A
VMX101_SET1(P106)	vmx101-set...	ge-0/0/0.67	11.1...	L2	N/A
VMX101_SET1(P106)	vmx101-set...	ge-0/0/1.26	11.1...	L2	N/A
VMX101_SET1(P106)	vmx101-set...	ge-0/0/1.46	11.1...	L2	N/A
VMX101_SET1(P106)	vmx101-set...	ge-0/0/1.56	11.1...	L2	N/A

Available Reports

Configuration reports are available after running **Administration > Task Scheduler > Device Collection** in the NorthStar Controller (Operator). Collection Options must be set to include **Configuration** as shown in [Figure 40 on page 57](#).

Figure 40: Report Manager Overview

Create New Task - Device Collection

Task Options | **Collection Options**

Data to be collected or processed

☐ Select All ☐ Deselect All

Collect

Configuration ☒

Interface ☒

Tunnel Path ☒

Transit Tunnel ☒

Switch CLI ☐

Equipment CLI ☐

step 2 of 3 Previous Next

Simulation reports are available after running a simulation in NorthStar Planner.

Sorting Report Data by Column

By clicking in any report column heading, you can sort the report data by that column, either ascending or descending. The report data remains sorted if you download the report.





Report Manager Bottom Tool Bar

At the bottom of the right pane in the Report Manager, there is a tool bar with several useful functions, described in [Table 14 on page 58](#). These tools can help you navigate through pages of report data and filter the columns of data that are displayed. [Figure 41 on page 57](#) shows the tool bar.

Figure 41: Report Manager Bottom Tool Bar

Page of 2 < > Rows per page: 50 ⓘ ☰ ⬇ 🔍 1 - 50 of 60

Table 14: Tools in the Report Manager Bottom Tool Bar

Tool or Button	Description
Page __ of <total pages>	Shows which page of data is currently displayed and the total number of pages. If you click in the page box, up and down arrows appear which you can use to page forward or back.
<	Displays the previous page of data.
>	Displays the next page of data.
Rows per page	Click the down arrow to select the number of rows per page (10, 50, 100, 500, or 1000).
	Click the Information icon to display some additional information about the selected report, including the date and time the report was generated.
	Click the Columns icon to launch the Column Chooser tool. The resulting list of available columns is different, depending on the selected report. Click the check boxes to select or deselect the columns for display. If you download the report, your selections remain intact.
	Click the Download icon to download the selected report in a csv file to your local downloads location. Any sorting or filtering you performed remains intact in the downloaded version.
	<p>Click the Search icon to open a search field above the selected report window. Type your search text where it says, "Filter this report..." and either click the Filter button at the far right or press Enter. The report rows are filtered to include only those that conform to your search criteria. If you download the report, this filtering remains intact.</p> <p>To clear this kind of filter so that all report rows are again displayed, delete all text from the search field and click the Filter button again.</p>
X - Y of Z	Number of rows displayed on the current page and the total number of rows in the report. 1-50 of 60, for example.

- Related Documentation**
- [Simulation on page 51](#)
 - *Scheduling Device Collection for Analytics* (NorthStar Controller User Guide)