

User's Guide

Version 8.0

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Getting Started

Logging in to NerveCenter

NerveCenter supports the latest versions, and one version prior, of the Chrome, Firefox, and Edge browsers.

Before you can access NerveCenter, you must obtain the following from your Administrator:

- NerveCenter server URL
- Username (an OS-level user account that has been added to the ncusers group)
- Password

TO LOG IN TO NERVECENTER

 Open a browser and go to the server URL.
 The login screen appears. The NerveCenter interface defaults to English; you may opt to select German from the list.



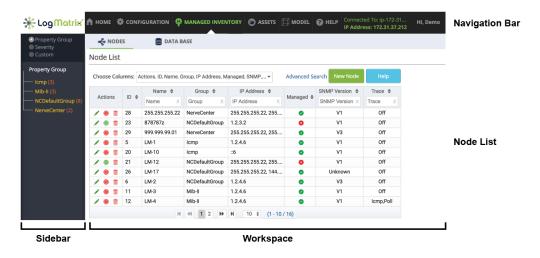
2. Enter your **Username** and **Password**, and then click **Connect**. The NerveCenter Desktop appears, displaying the Node List.

To close your NerveCenter session and log out, click your user name in the upper-right corner of the browser window and then click **Logout**.

Getting Around

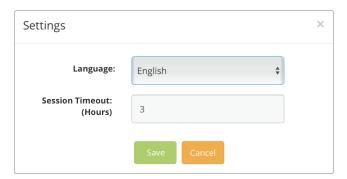
The initial NerveCenter8.0 release is focused on managed node inventory, and the Node List is the central page from which you can work.

- The **Navigation Bar** provides access to major sections of the application; for the current release, the only accessible feature is the Node List (**Managed Inventory > Nodes**). You may also click your username in the upper-right corner to access basic settings or to log out.
- The **Sidebar** displays the NerveCenter Property Groups and a count of the nodes in each. Click a Property Group to display only those nodes in the Node List.
- The **Workspace** displays the Node List or (in edit mode) node configuration settings.



Modifying Session Settings

1. Click your user name in the upper-right corner of the NerveCenter window and click 🍄 Settings.



- 2. Select a Language.
- 3. Enter a **Session Timeout** value in hours, or **0** to disable timeout.
- Click Save to save your changes.

LogMatrix Technical Support

LogMatrix is committed to offering the industry's best technical support to our customers and partners. You can quickly and easily obtain support for NerveCenter, our proactive IT management software.

Professional Services

LogMatrix offers professional services when customization of our software is the best solution for a customer. These services enable us, in collaboration with our partners, to focus on technology, staffing, and business processes as we address a specific need.

Educational Services

LogMatrix is committed to providing ongoing education and training in the use of our products. Through a combined set of resources, we can offer quality classroom style or tailored on-site training.

Contacting the Customer Support Center

For Telephone Support

Phone: Toll Free +1 (800) 892-3646 or Phone +1 (508) 597-5300

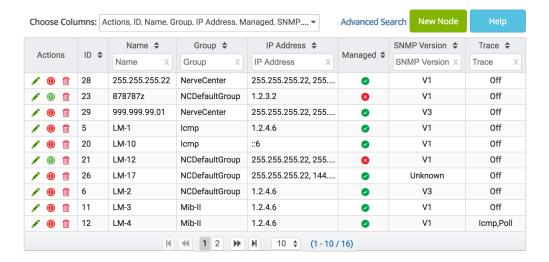
For E-mail Support

E-mail: support@logmatrix.com.

Managing Inventory

About the Node List

The Node List (**Managed Inventory > Nodes**) is your primary tool for monitoring and managing nodes. From here you can also add, modify, and delete nodes.



Item	Description	
Choose Columns	Click the Choose Columns list and select the set of columns you wish to display.	
Advanced Search	Searches the current node listing by specific node attributes.	
New Node	Displays the New Node pop-up.	
Actions	Displays the available node actions:	
	Opens edit mode, from which you can modify various node settings.	
	Deletes the node; click Delete to confirm the deletion.	
ID	Displays the node's ID, which NerveCenter assigned when the node was first created.	
Name	Displays the node name.	
Group	Displays the Property Group in which the node resides.	

Item	Description
IP Address	Displays the node's IP Address[es].
Managed	Indicates whether the node is managed () or unmanaged (). Click () / () in the Actions column to toggle the node between managed & unmanaged, respectively.
SNMP Version	Displays the node's SNMP version support, if known.
Engine ID	Displays the node's SNMPv3 Engine ID.
Trace	Indicates whether Trace is On or Off (default).

SORTING THE NODE LIST

Click the arrow in a column heading to switch between sorting modes.







FILTERING THE NODE LIST

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For top-level filtering, select a Property Group from the Sidebar. To filter the current node listing, type into a column heading to filter the list by that string.



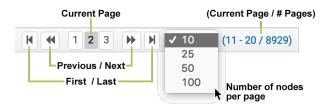
MOVING COLUMNS

Click and drag a column heading to reorder columns.



NAVIGATING THE NODE LIST

Use the controls below the Node List to change or select pages, and to select the number of nodes displayed per page.

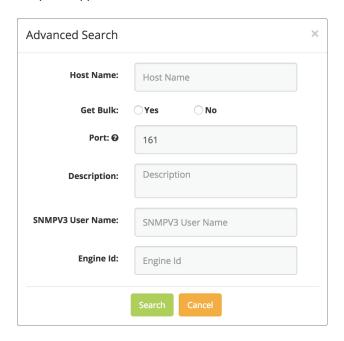


Searching for Nodes

In addition to filtering and sorting the Node List, you can search for nodes directly within the current listing (e.g., if you select a Property Group in the Sidebar, the search applies only to nodes in that group).

TO SEARCH FOR NODES

From the Node List, click the Advanced Search link.
 The Advanced Search panel appears.



2. Enter one or more of the following search criteria:

Item	Description
Host Name	The node's Host Name, if assigned.
Get Bulk	Placeholder for future development
Port	The port via which the node's SNMP agent communicates with NerveCenter.
Description	Text in the node's Description field to search upon.
SNMPv3 User Name	For nodes using SNMPv3, the User Name to search upon.
Engine ID	For nodes using SNMPv3, the Engine ID to search upon.

3. Click Search.

The Node List lists any nodes that meet the search criteria; click **Clear Advanced Search** to reset the Node List.

Adding a Node

You may add new nodes manually, directly from the Node List.

TO ADD A NODE

From the Node List, click New Node.
 The New Node panel appears.



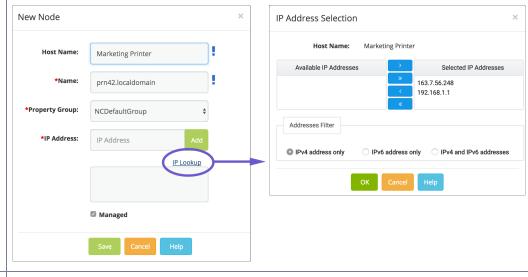
Host Name	Host Name is an optional field; it allows you to record the node's local host name (e.g., prn42.localdomain) while using the Name field for its common name (e.g., Marketing Printer).
Name	The node's common name. This can be the same as the optional Host Name field, if used, but must be unique across nodes.
Property Group	Each node is always a member of a property group; to move it, select a different group name from the list.

IP Address

You must assign at least one IP address to a node before you can create the node. You may enter any combination of IPv4 and IPv6 addresses:

- IPv4 addresses must be in standard decimal notation (e.g., 192.168.1.42).
- IPv6 addresses may be in any short or long form (e.g., ::1, 2600:1408:17:196:2bd1, fe80::d529:1324:df0b:4c9d, or fe80:0000:0000:0000:d529:1324:df0b:4c9d).

Entering a value in the **Host Name** field enables an **IP Lookup** link just above the IP Address list; click the link to display the hostname's DNS resolution so you can select the IP Addresses NerveCenter may use to monitor the node.



Managed

When selected, NerveCenter will actively monitor the node; deselect the box to leave the node unmanaged.

- 2. Enter the node's Name and assign it to a Property Group; Host Name is optional.
- Enter an IP Address and click Add.

You must assign at least one IP address for NerveCenter monitoring; if the node has a Host Name, you may click IP Lookup to select addresses that resolve to that host via DNS.

- 4. Deselect **Managed** if you wish to leave the node unmanaged.
- Click Save.

You may further configure the node by clicking 🖍 in the Actions column.

Working with Nodes

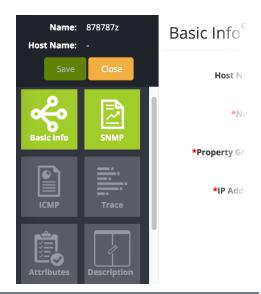
You may edit () or delete (iii) icons via the Actions column of the Node List.

Editing a Node

After clicking in the Actions column, the Sidebar displays icons for each of the node settings categories, and the workspace displays the available settings in each category. You may view, depending upon your screen size, one or two categories at once; you must deselect one from the Sidebar before choosing another.

Any modifications you make, to any panel, are not saved until you click **Save**.

The following table describes each group of node settings.



Panel	Description	
Attributes	Manage user-defined attribute:value pairs.	
Basic Info	Modify basic node settings that were configured when the node was created.	
Description	Enter node-related data in a free-text field.	
ICMP	Modify ICMP Echo (ping) parameters.	
IP Addresses	Assign IP addresses to a node based on the DNS resolution of its Host Name.	
Property Group	Assign the node to a property group.	
SNMP	Configure NerveCenter to communicate with a node's SNMP agent.	
Trace	Manage protocol- and poll-layer logs.	

Deleting a Node

To delete a node, click in the Actions column and then click **Delete** to confirm the deletion.

Node Settings: Attributes

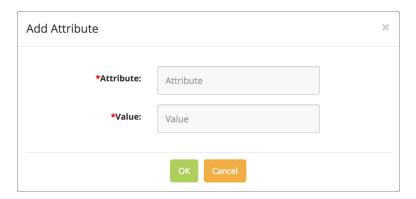
The Attributes panel allows you to manage user-defined node attributes.



TO ADD AN ATTRIBUTE

1. Click Add.

The Add Attribute pop-up appears.

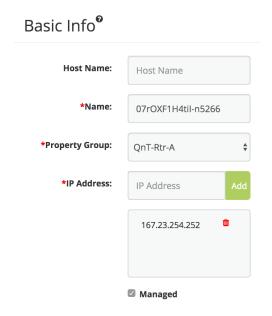


- 2. Enter an Attribute name (no spaces) and its corresponding Value.
- 3. Click OK.
- 4. Add additional attributes as necessary.

You cannot edit an existing attribute; you must click 🗓 to delete it and then re-add it.

Node Settings: Basic Info

The Basic Info panel allows you to modify the settings that were configured when the node was created.



Host Name	Host Name is an optional field; it allows you to record the node's local host name (e.g., prn42.localdomain) while using the Name field for its common name (e.g., Marketing Printer).
Name	The node's common name. This can be the same as the optional Host Name field, if used, but must be unique across nodes.
Property Group	Each node is always a member of a property group; to move it, select a different group name from the list.

IP Address

You must assign at least one IP address to a node before you can save any changes. You may enter any combination of IPv4 and IPv6 addresses:

- IPv4 addresses must be in standard decimal notation (e.g., 192.168.1.42).
- IPv6 addresses may be in any short or long form (e.g., ::1, 2600:1408:17:196:2bd1, fe80::d529:1324:df0b:4c9d, or fe80:0000:0000:d529:1324:df0b:4c9d).

Entering a value in the **Host Name** field enables an **IP Lookup** link just above the IP Address list; click the link to display the hostname's DNS resolution so you can select the IP Addresses NerveCenter may use to monitor the node.

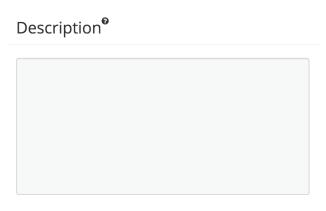


Managed

When selected, NerveCenter is actively monitoring the node; deselect the box to leave the node unmanaged.

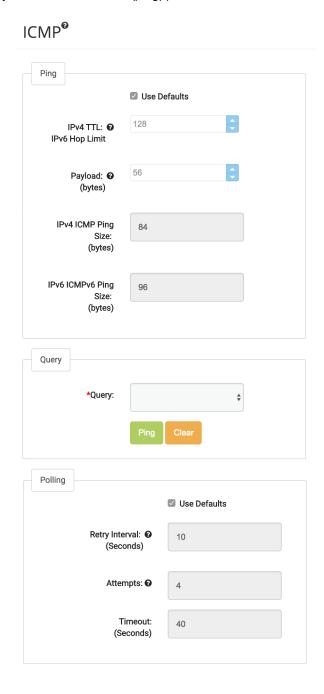
Node Settings: Description

The Description panel is a free-text field in which you can enter any node-related information of interest.



Node Settings: ICMP

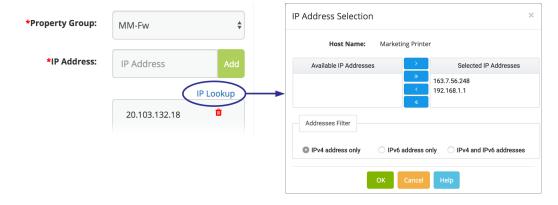
The ICMP panel allows you to set ICMP Echo (ping) parameters.



Ping			
Use Defaults	When checked, the default settings are used to ping this node. Deselect this box to modify the Hop Limit and Payload fields.		
IPv4 TTL / IPv6 Hop Limit	The maximum number of hops a ping request can make to be considered successful. Custom settings may range from 1 to 255; the default is 128.		
Payload	The size of the data buffer (in bytes) to include in an ICMP Echo message.		
IPv4 ICMP Ping Size	Displays the sum (in bytes) of the Payload field and IPv4 header.		
IPv6 ICMPv6 Ping Size	Displays the sum (in bytes) of the Payload field and IPv6 header.		
Query	Query		
Query Ping Clear	Placeholder for future development		
Polling			
Use Defaults	When checked, the default settings are used to poll this node. Deselect this box to enter a custom value for Retry Interval or Attempts.		
Retry Interval	The interval, in seconds, between ping attempts. Custom settings may range from 1 to 600; the default is 10.		
Attempts	The number of ping attempts to make, if a prior attempt was unsuccessful. Custom settings may range from 1 to 11; the default is 10.		
Timeout	Displays the product of Retry Interval and Attempts, which is the maximum amount of time that may pass before a ping attempt fails.		

Node Settings: IP Addresses

You must assign at least one IP address to each node when you create it or modify its Basic Info. If you provide a Host Name, you can select multiple addresses via the **IP Lookup** link that appears above the IP Addresses list.

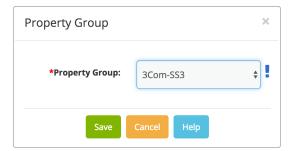


TO ASSIGN MULTIPLE IP ADDRESSES

- 1. Select one of the Address Filter options to refresh the Available IP Addresses column.
- 2. Select an address in the left column and click to move it into the Selected IP Addresses column; click to select all available addresses.
 - Conversely, use the and buttons, respectively to move one or all nodes back to the left column.
- 3. Click **OK** to assign the selected set of addresses to the node.

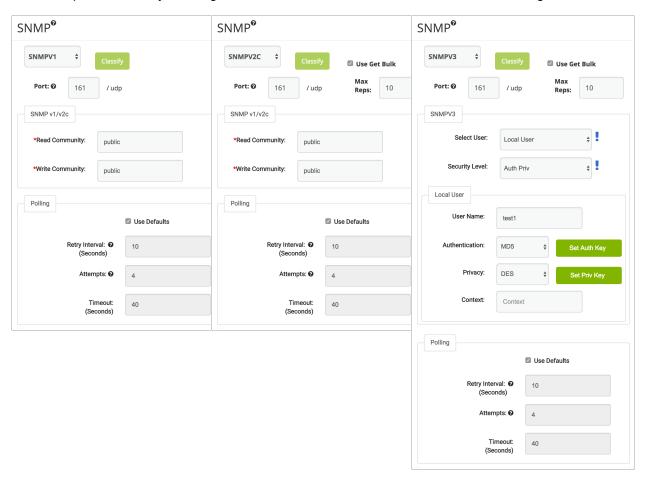
Node Settings: Property Group

Each node must belong to a property group; you may assign it from the New Node or Basic Info panels, or right-click on a node in the Node List to reassign it.



Node Settings: SNMP

The SNMP panel is where you configure NerveCenter to communicate with a node's SNMP agent.



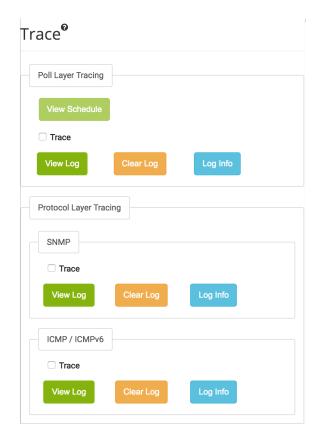
Item	Description
Version	Select the SNMP version you want to use when polling the node's SNMP agent (SNMPv1, SNMPv2c, or SNMPv3). Selecting Unknown disables SNMP polling.
Classify	Placeholder for future development
Port	If the node's SNMP agent is not listening on UDP Port 161 (the default), enter the port number on which the SNMP agent monitors incoming requests (Get, GetNext, GetBulk, Set messages); you may enter a value from 0-65535.
Get Bulk (v2/v3 only)	When selected, allows GetBulk requests for reading multiple variable bindings from a device.
Max Reps (v2/v3 only)	When Get Bulk is selected, determines the maximum number of variable bindings per request that should be returned from the device.

Item	Description	
SNMP v1/v2c		
SNMP v1/v2c	These settings can be used for nodes of version Unknown, SNMPv1, or SNMPv2c:	
	 Read Community: This text is used when polling the node with Get, GetNext and GetBulk queries. Write Community: This text is used when issuing a Set command to the node. 	
SNMPv3		
Select User	Select the mode to use for all SNMPv3 communication with the node. You may select User #1 or User #2 to use those global templates, or Local User to use the node-specific configuration in the Local User section.	
	You may configure	the User #1 and User #2 templates via the NCAdmin application.
Security Level	Select the security	setting to use when communicating with this node:
	■ No Auth No	Priv (no authentication and no privacy)
	■ Auth No Pri	v (authentication with no privacy)
	■ Auth Priv (authentication and privacy)	
	An incorrect setting	may prevent NerveCenter from communicating with the node.
Local User	setting. In order for	lds are for configuring For SNMPv3 nodes that use the Local User communication between NerveCenter and the node to be settings must match the values of the node's SNMP agent.
	User Name	The SNMPv3 username to use for authentication purposes.
	Authentication	If the Security Level is set to Auth no Priv or Auth Priv, select an authentication method (MD5, SHA-1, SHA-224, SHA-25, SHA-384 or SHA-512). Most SNMPv3 agents support MD5 and SHA-1.
		To configure authentication click Set Auth Key , enter the key in both fields, and click OK .
	Privacy	If the Security Level is set to Auth Priv, select the protocol used to encrypt messages to and from the node (DES, 3DES, AES-128, AES-192, or AES-256). Most SNMPv3 agents support DES; those that support AES typically use AES-128.
		To configure privacy click Set Priv Key , enter the key in both fields, and click OK .
	Context	Placeholder for future development
		If necessary, enter the snmpEngineID and contextName .

Item	Description
POLLING	
Polling	NerveCenter, by default, makes up to 4 polling attempts at 10-second intervals, with a 40-second timeout. Deselect the check box to enter custom values.

Node Settings: Trace

The Trace panel allows you to schedule and manage poll layer tracing logs, and to manage protocol layer trading logs for SNMP and ICMP.



Item	Description
Poll Layer Tracing	
Poll Layer Tracing	When checked, NerveCenter will record logical layer polling activity to a log file.
View Schedule	Placeholder for future development

Item	Description
Protocol Layer Tracing (SNMP)	When checked, NerveCenter will record the following types of SNMP traffic when polling nodes: SNMP Get, GetNext, GetBulk, Set, Response, Report messages, and timeout events. This setting does not record SNMP Trap nor Inform messages.
Protocol Layer Tracing (ICMP)	When checked, NerveCenter will record the following types of ICMP traffic when polling nodes: ICMP Echo, Echo Response, Destination Unreachable messages, and timeout events. This setting does not record unsolicited ICMP messages (incoming Echo requests, Router advertisements, etc.).
View Log	Placeholder for future development
	NerveCenter log files reside in /var/opt/NerveCenter/log/protocol/ and /var/opt/NerveCenter/log/polling/.
Clear Log	Placeholder for future development
Log Info	Placeholder for future development

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