Step-by-Step Guide to Configuring Node Groups and Node Group Maps

This document steps through a set of recommended steps for configuring node groups and node group maps. The node groups are based on the following geographic hierarchy.

My Network

Europe

USA

Colorado

Note the following:

- It is recommended that you design your node group map layout ahead of time, although this is not required.
- In this example, the only node group that contains nodes is Colorado.
- NNMi provides more than one way to configure node groups and node group maps. After you become familiar with the steps described in this document, you might find more efficient ways to create subsequent node groups and node group maps.
- Some screen captures might be different than those that appear in the NNMi console.

This document guides you through the following steps for configuring node groups and node group maps:

Create Node Groups

- Step 1: Create the My Network Node Group
- Step 2: Create the USA and Europe Node Groups
- Step 3: Create the Colorado Node Group Using Filters
- Step 4: View the Node Group Members to Check the Node Group Filter Results
- Step 5: Set Up the Node Group Hierarchy for the My Network Node Group
- Step 6: Establish the Node Group Hierarchy for the USA Node Group

Parent node groups might not contain any nodes. Instead they contain only child node groups in the definition. In this example, the My Network and USA node groups are parent node groups that contain only child node groups.

Configure Node Group Maps

- Step 1: Create Node Group Maps
- Step 2: View the Node Group Maps
- Step 3: Configure Node Group Status
- Step 4: Configure Node Group Map Ordering
- Step 5: Add a Background Image to a Node Group Map

Create Node Groups

We begin by creating the Node Groups to include in our Node Group maps.

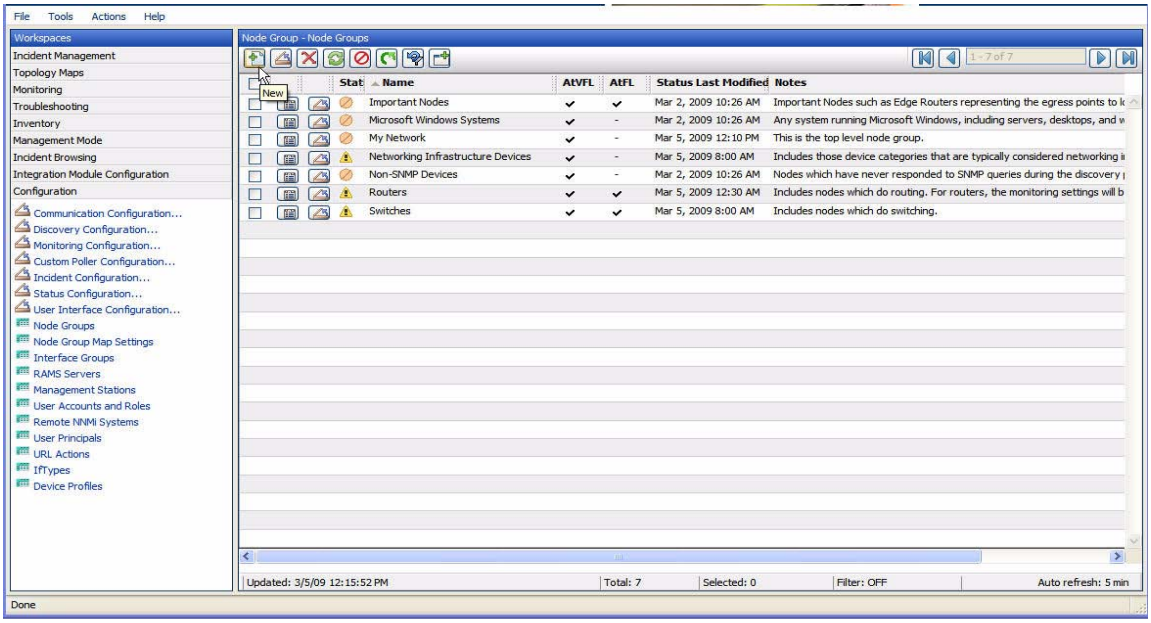
Step 1: Create the My Network Node Group

To create the **My Network** node group:

1 Navigate to the **Configuration** workspace.

2 Select **Node Groups**.

3 Click **New**.

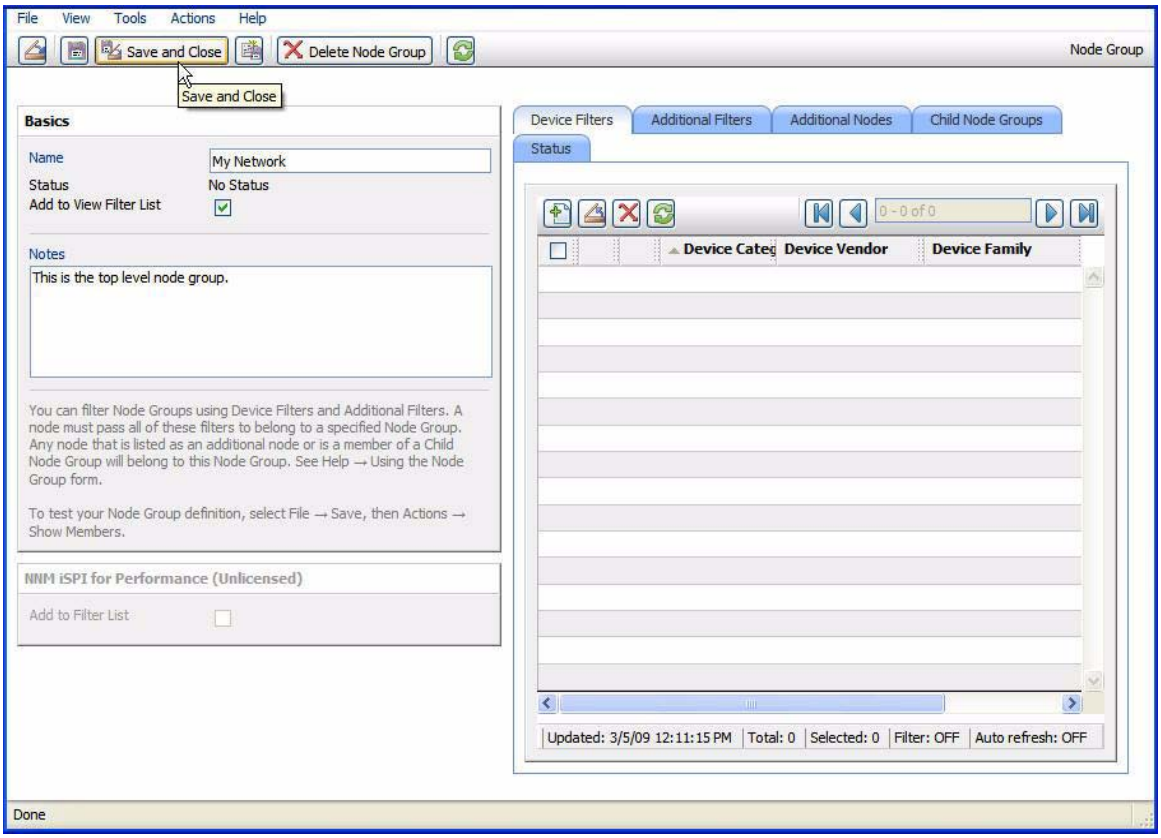


4 In the **Name** attribute, enter: **`My Network`**.

5 In the **Notes** attribute, enter: **`This is the top level node group`**.

6 Click **Save and Close** to save this configuration.

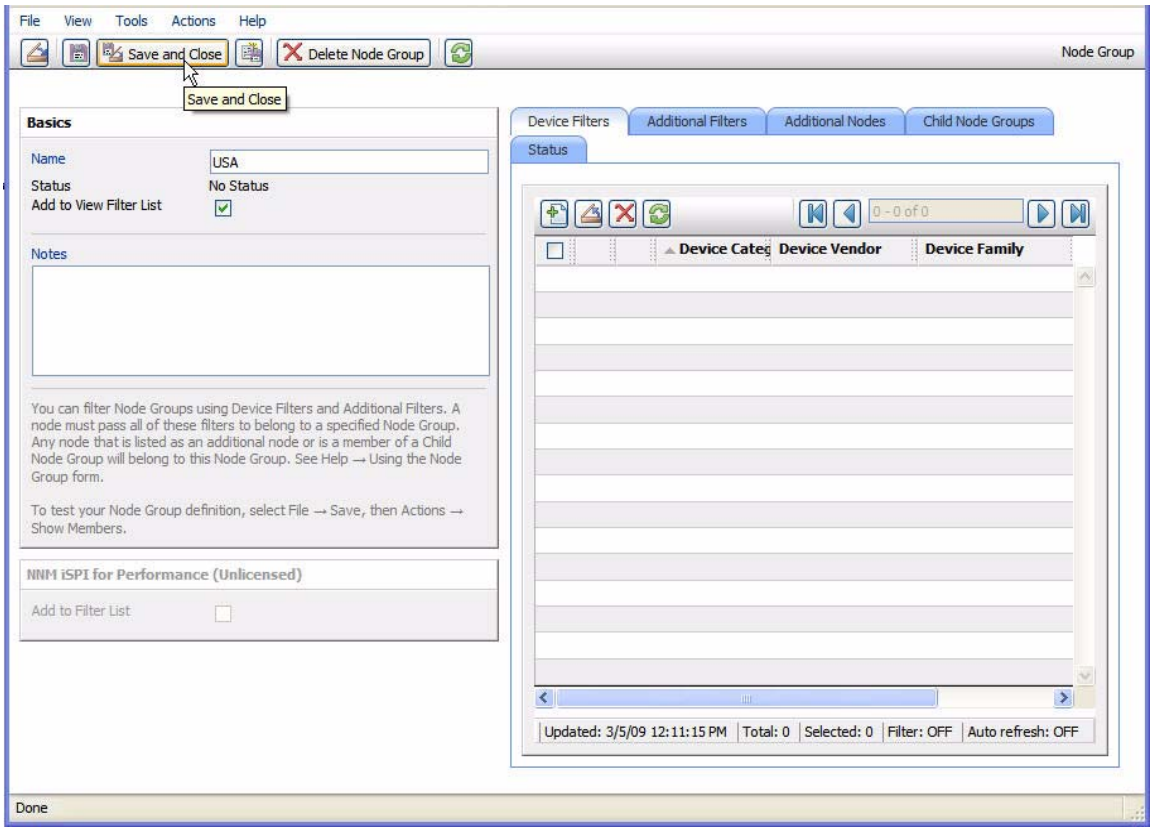
Next, create the **USA** and **Europe** node groups.



Step 2: Create the USA and Europe Node Groups

1. Navigate to the **Configuration Workspace.**
2. Select **Node Groups**.
3. Click **New**.
4. In the **Name** attribute, enter: **USA**.

5 Click **Save and Close** to save this configuration.



6 Click **New**.

7 In the **Name** attribute, enter: **`Europe`**.

8 Click **Save and Close** to save this configuration.

Step 3: Create the Colorado Node Group Using Filters

Now, you are ready to create the **Colorado** node group. To create this node group, use the Filter Editor to establish a filter to select the nodes.

When possible, use the **Additional Filters** tab rather than specifying a list of nodes using the **Additional Nodes** tab. Using a node group filter enables NNMi to automatically place a node into the correct node group as new nodes are added to the network.

1 Navigate to the **Configuration Workspace.**

2 Select **Node Groups**.

3 Click **New**.

4 In the **Name** attribute, enter: **`Colorado`**.

5 Select the **Additional Filters** tab.

6 In the Filter Editor **Attribute** field, select `hostname`.

Selecting hostname specifies that NNMi should match hostname values when determining whether a node belongs to this node group.

7 In the **Operator** field, select `like`.

Selecting like allows you to use wildcard characters in the search.

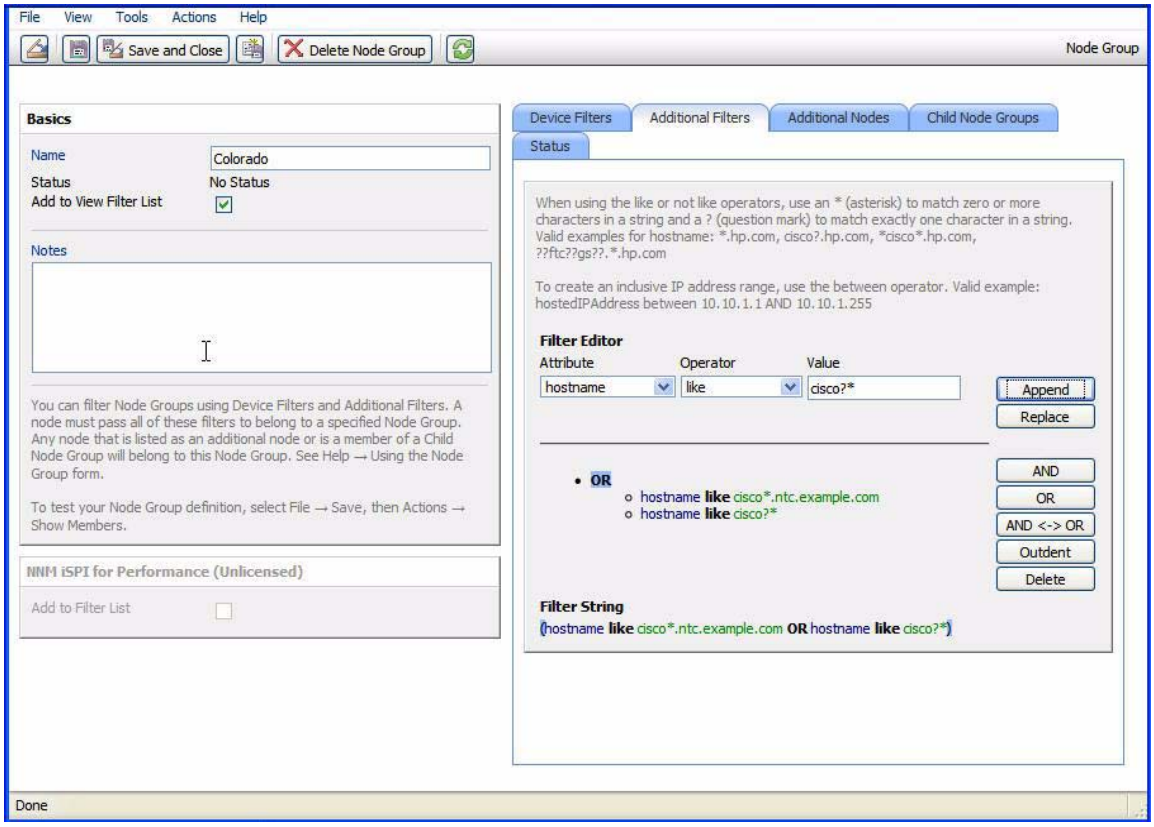
8 In the Value field, enter: **`cisco*.ntc.example.com`**

9 Click **OR** to specify that you want NNMi to match a node if the node matches either of the hostname values you enter.

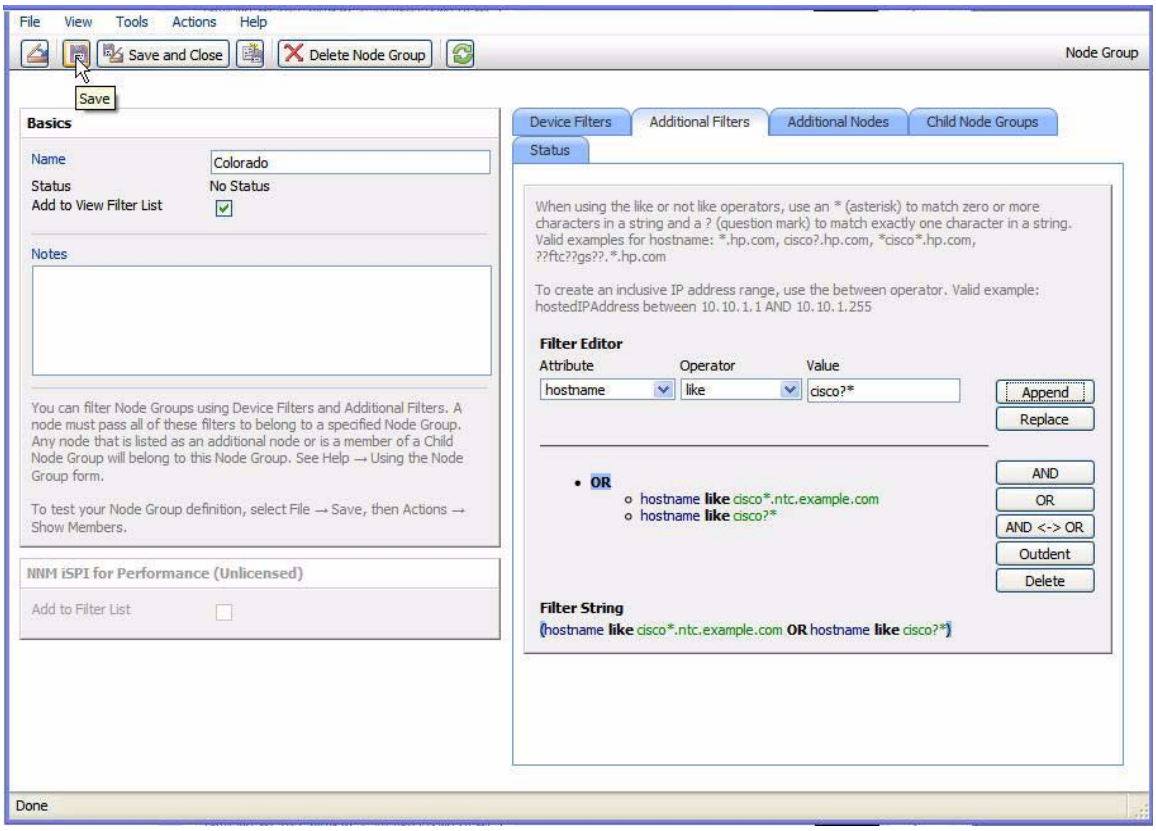
10 In the **Attribute** field, make sure `hostname` is selected.

11 In the **Operator** field, make sure `like` is selected.

12 In the **Value** field, enter **`cisco?*`**



13 Click **Save** to save the node group without closing the window.

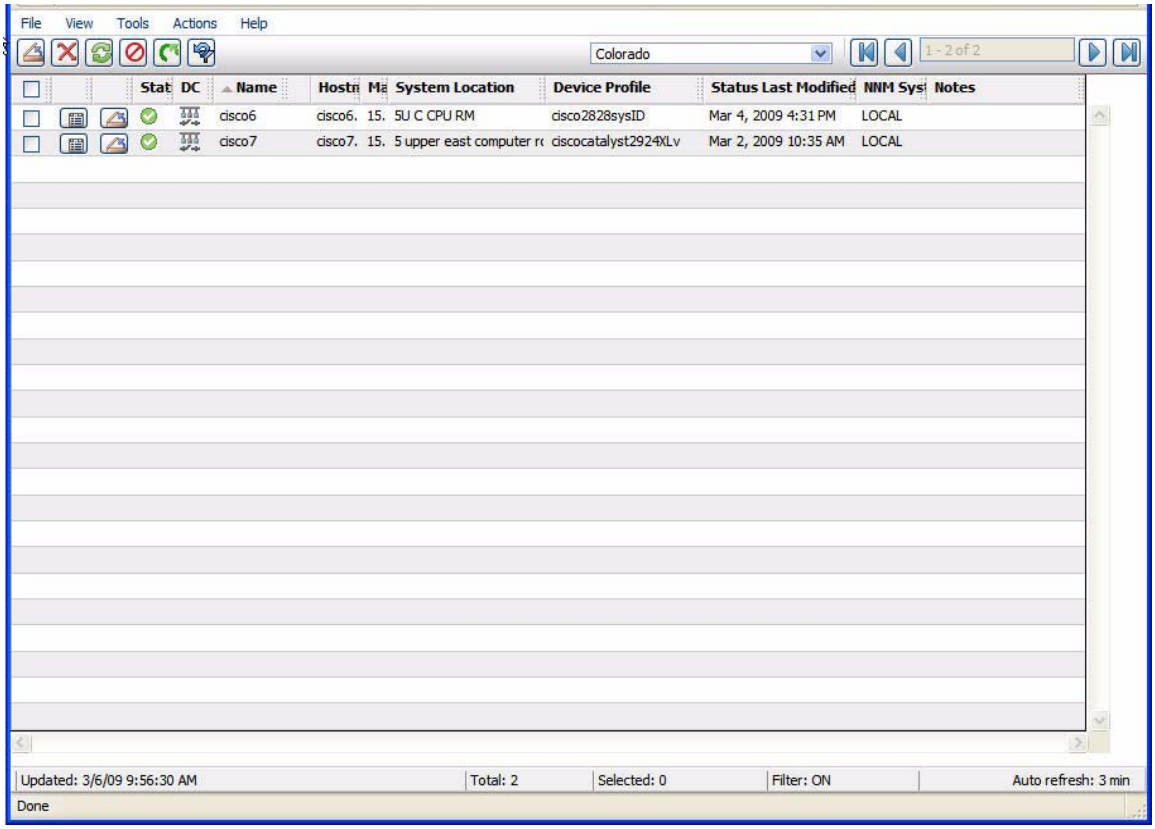


Next, test the filter by viewing the node group members.

Step 4: View the Node Group Members to Check the Node Group Filter Results

To test the node group filter, you can view the members of the node group you just created.

Select **Actions->Show Members** to launch a view containing all of the nodes in the node group.



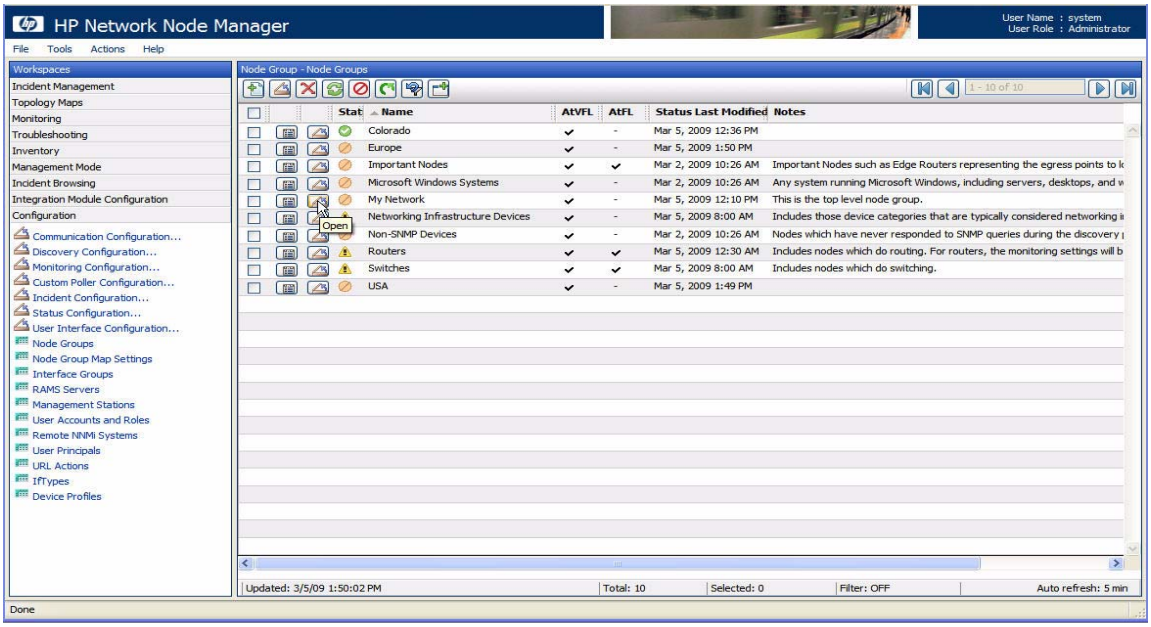
Examine the node group filter definition results until you are confident the node group filter is correct.

Step 5: Set Up the Node Group Hierarchy for the My Network Node Group

Next, establish a hierarchy for the node groups, starting with the top level node group, **My Network**.

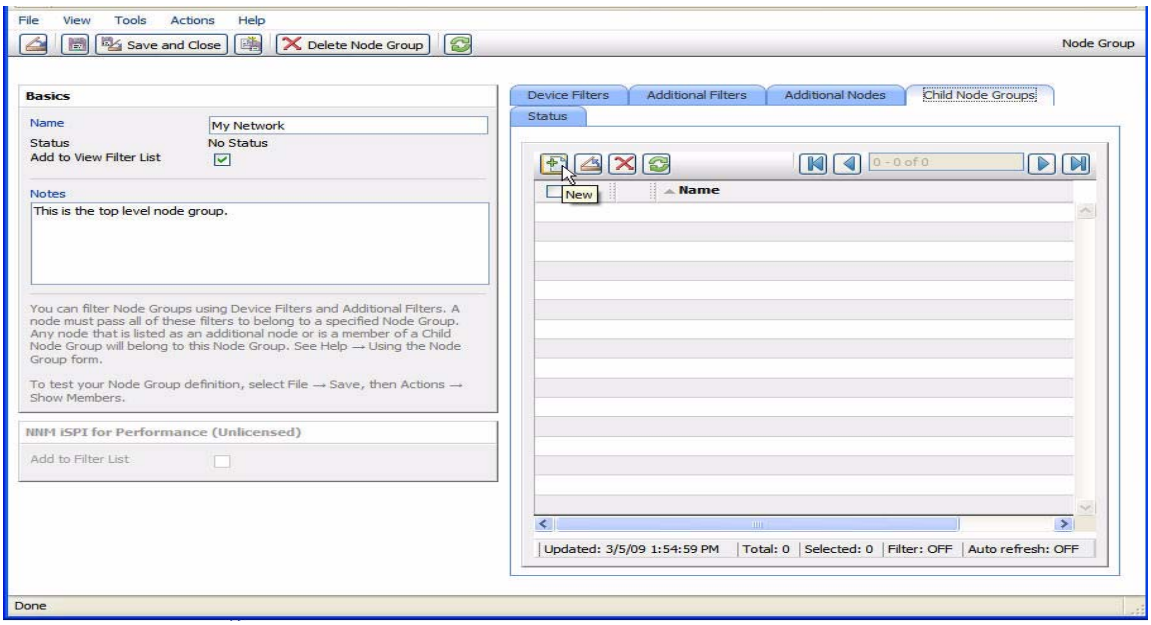
1 Return to the **Node Groups** option in the **Configuration** workspace to view a list of the node groups that have been created.

2 Navigate to the **My Network** node group and click **Open**.



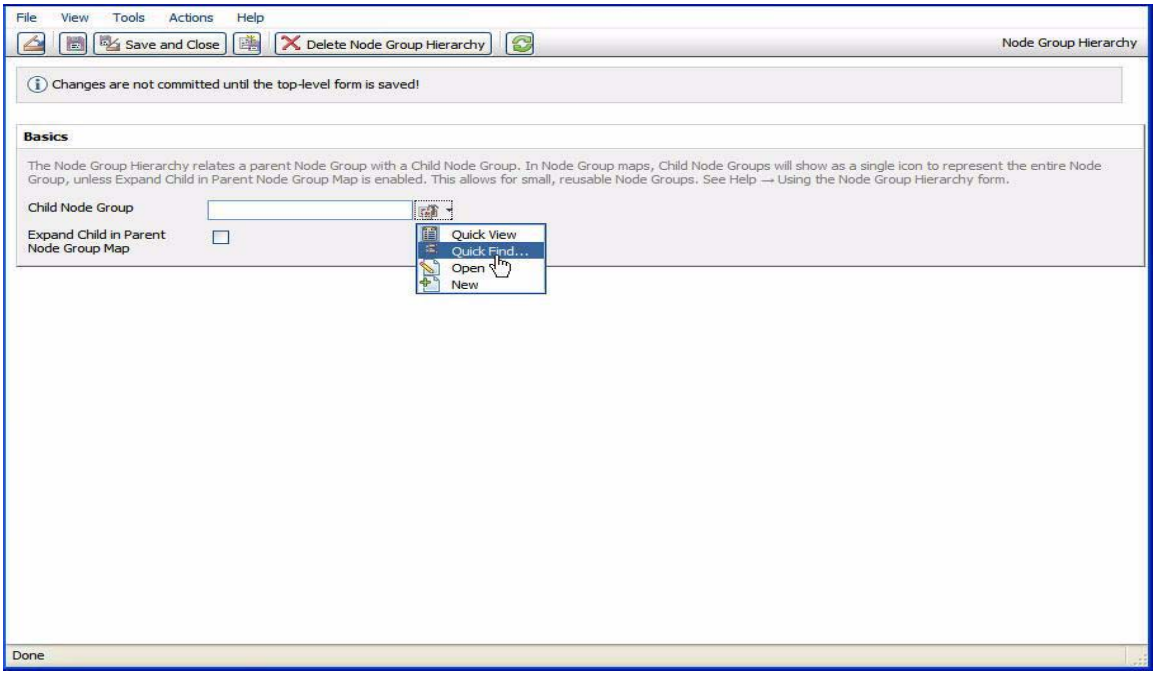
3 Navigate to the **Child Node Groups** tab.

4 Click **New**.

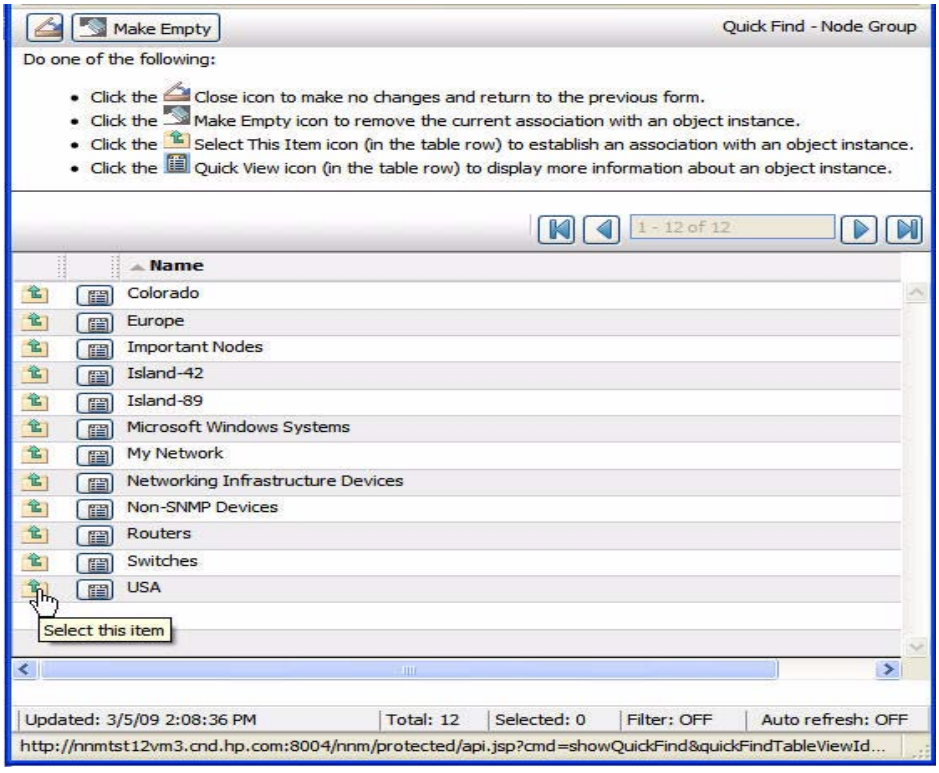


5 In the **Child Node Group** attribute, click the **Lookup** icon and select **Quick Find**.

Use **Quick Find** to select an object, such as a node group, when it already exists.



6 Select the Child Node Group: **USA**.

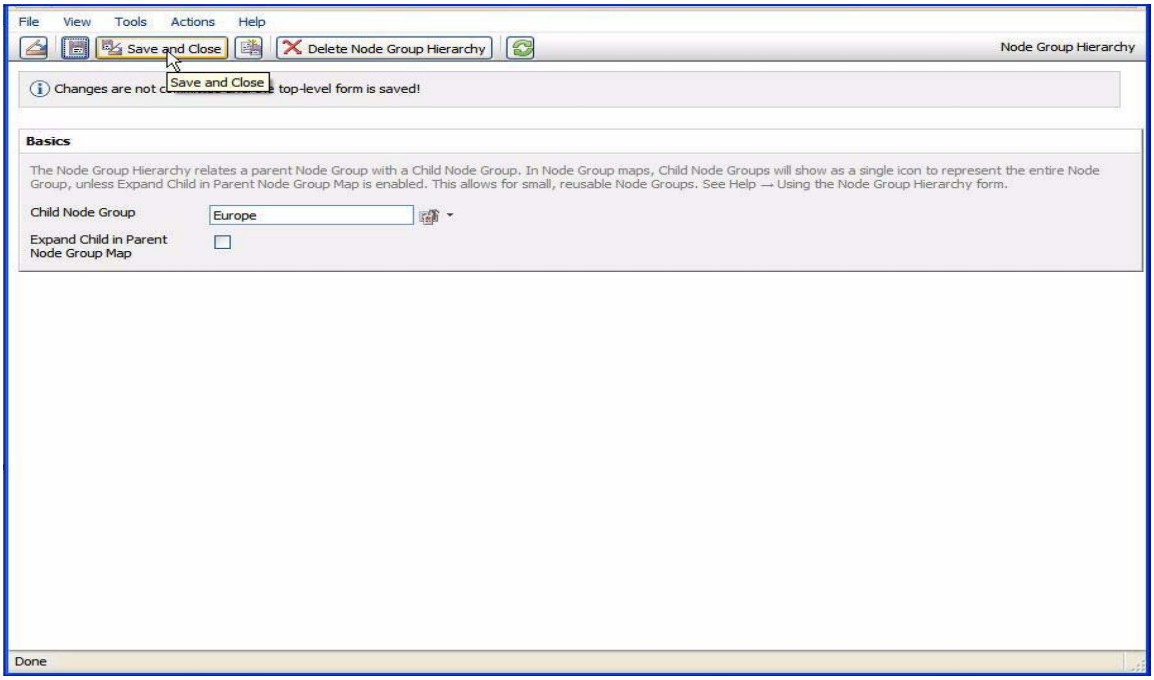


7 Click **Save**.

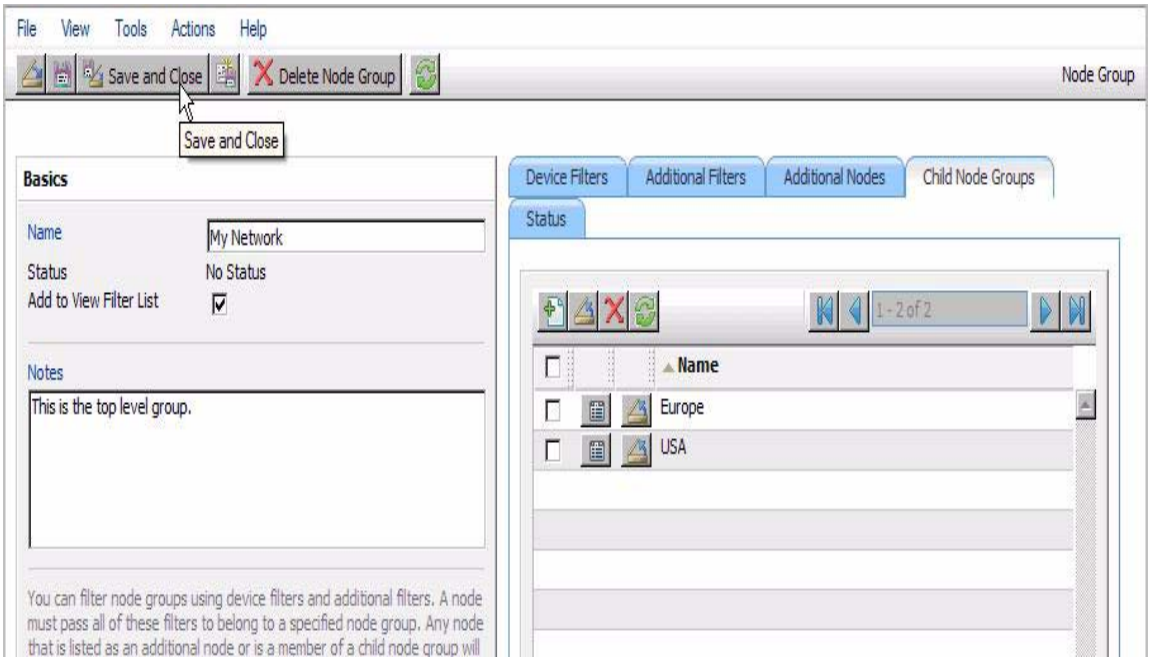
8 Repeat steps 4 and 5.

9 Select the Child Node Group **Europe**.

10 Click **Save and Close** to save your changes and close the **Node Group Hierarchy** form.



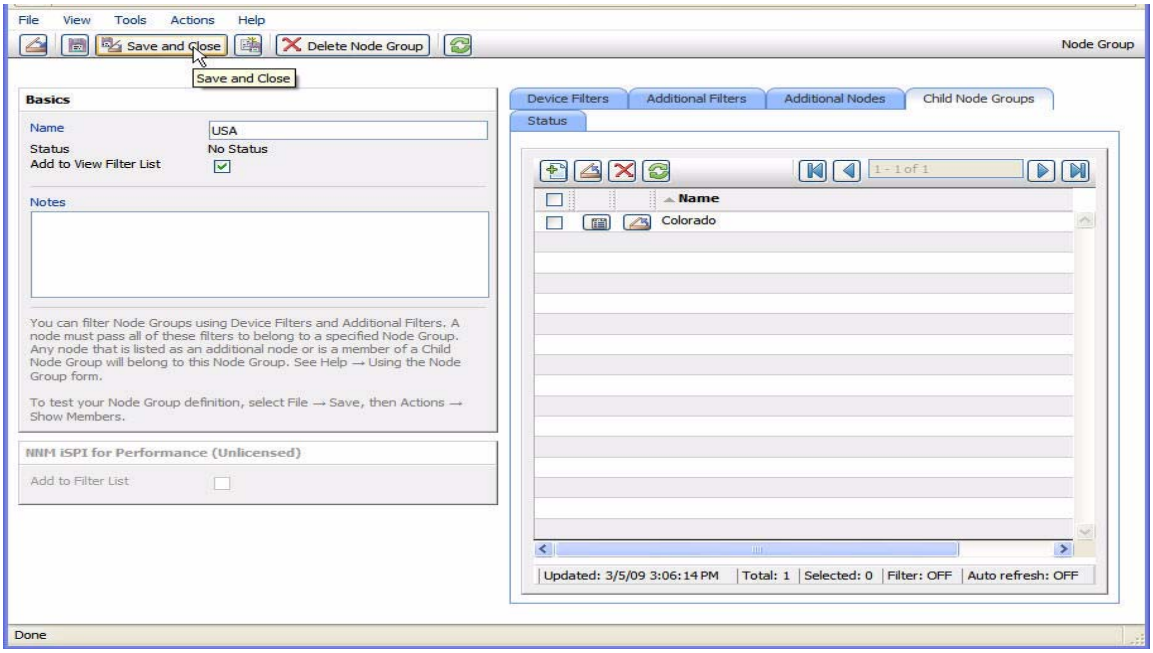
11 Click **Save and Close** to save your changes and close the **Node Group** form.



Step 6: Establish the Node Group Hierarchy for the USA Node Group

Next, establish **Colorado** as a child node group of the **USA** node group. We will repeat the same steps described in **Step 5: Set Up the Node Group Hierarchy for My Network** to make the Colorado node group a child of the USA node group.

1. Return to the **Node Groups** option in the **Configuration** workspace to view a list of the node groups that have been created.
2. Navigate to the **USA** node group and click **Open.**
3. Navigate to the **Child Node Groups** tab.
4. Click **New.**
5. In the **Child Node Group** attribute, click **Lookup** icon and select **Quick Find**.
6. Select the Child Node Group: **Colorado**.
7. Click **Save and Close** to save your changes and close the **Node Group Hierarchy** form.
8. Click **Save and Close** to save your changes and close the **Node Group** form.



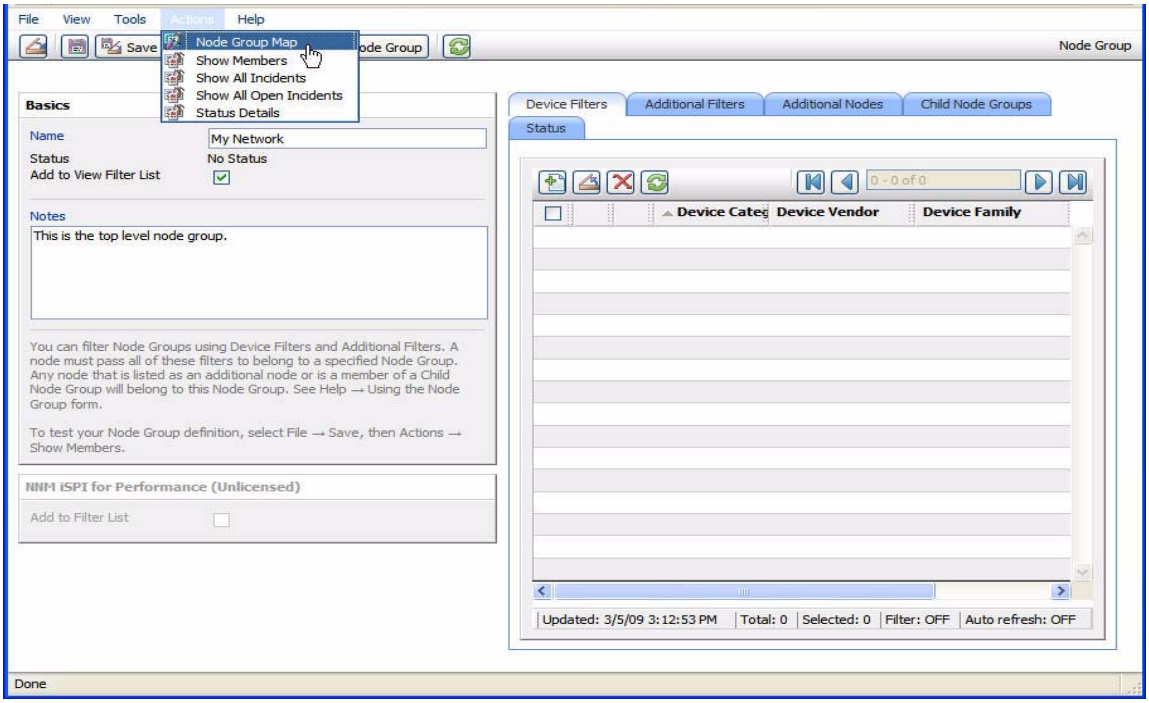
You are ready to create the node group maps for each node group that you created.

Configure the Node Group Maps

Step 1: Create the Node Group Maps

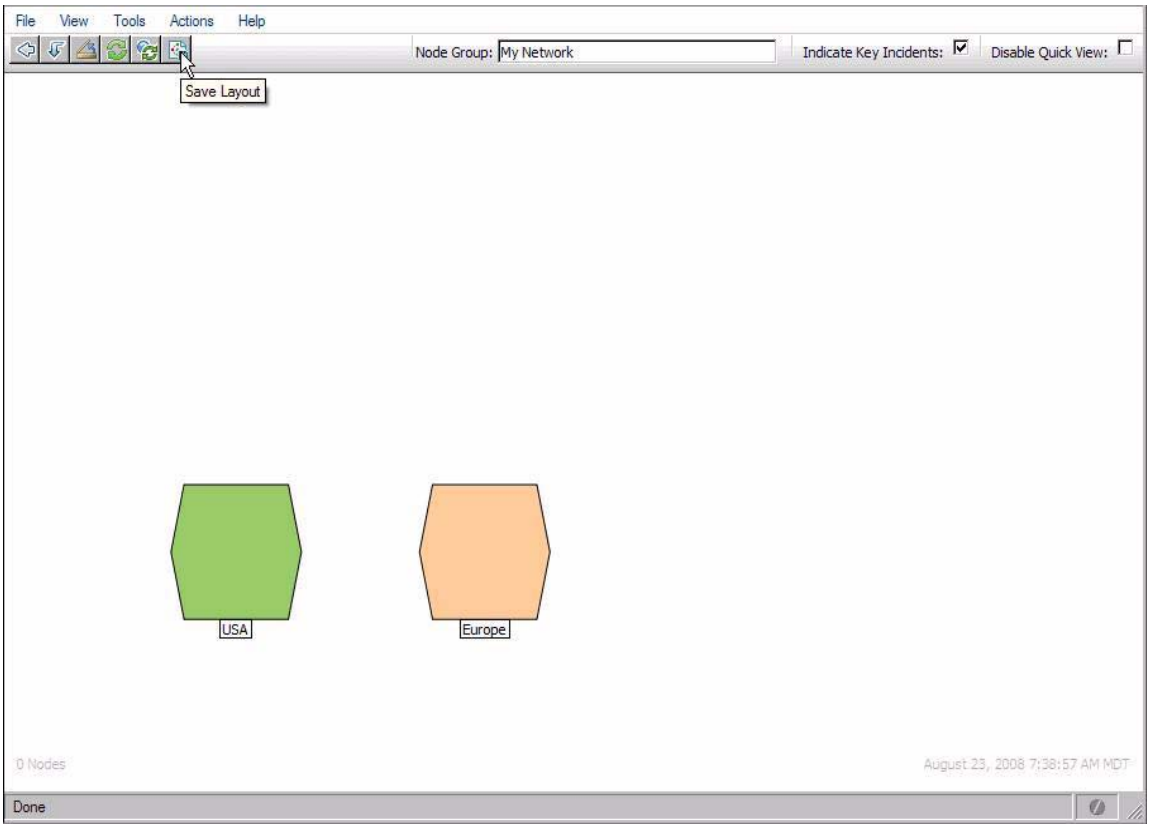
To create the node group maps for each node group, use the **Actions** menu.

1. Open the node group for which you want to create a map. For example:
   a. Return to the **Node Groups** option in the **Configuration** workspace to view a list of the node groups that have been created.
   b. Navigate to the node group you want and click **Open.**
2. Select the **Actions** menu, and then select **Node Group Map** to display a node group map.



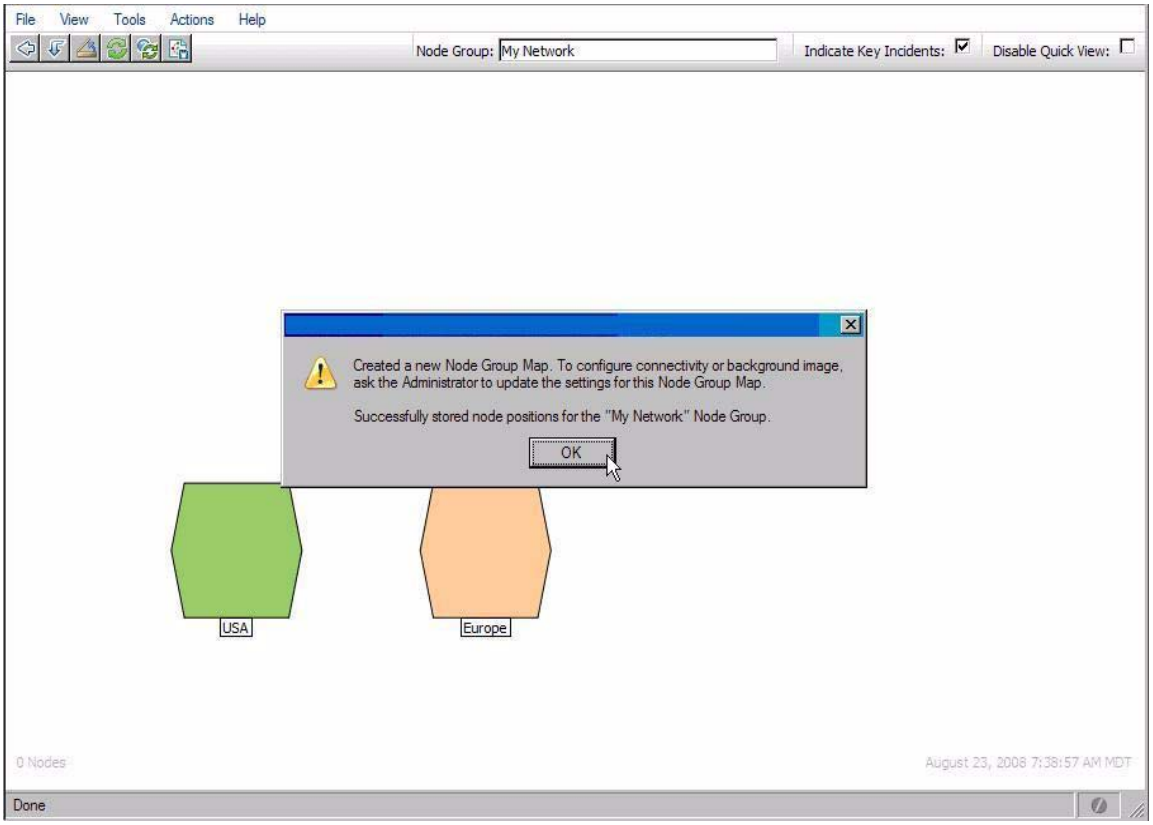
3. Position the nodes and Node Group Map icons.
4. Click **Save Layout** to create the node group map.

Always use **Save Layout** to create the node group map, even if you do not change the node positions. **Save Layout** creates the node group map.



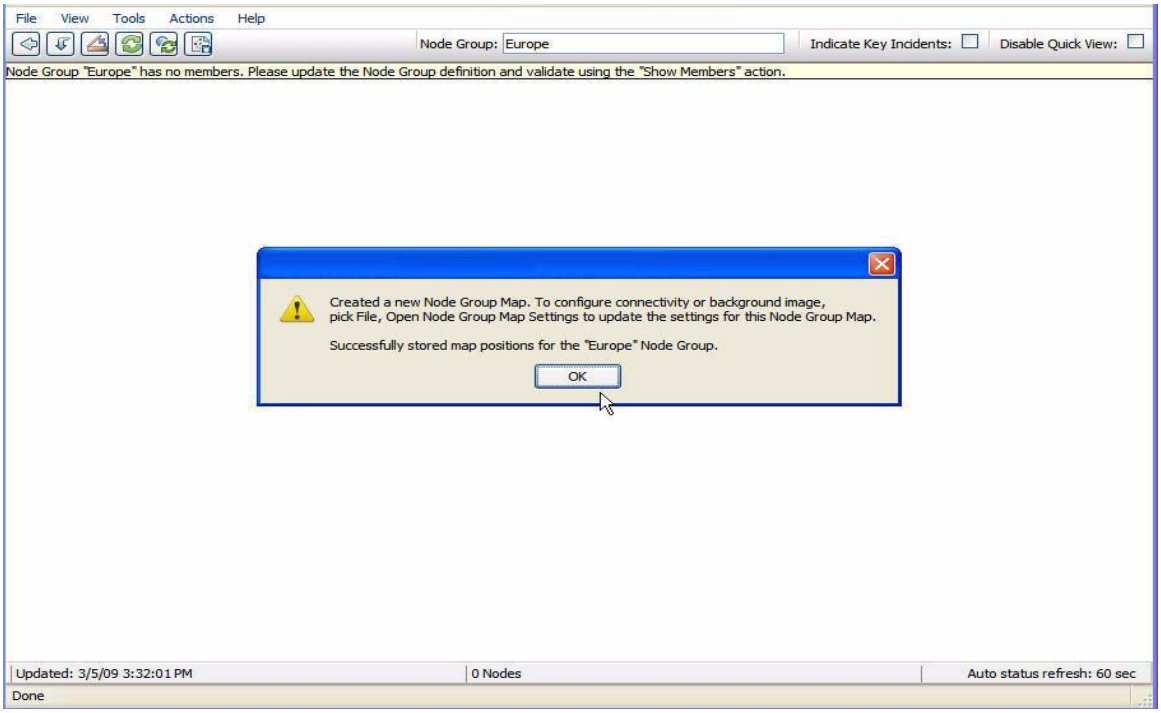
A dialog box appears confirming that the node group map was created.

5 Click **OK**.



6 Repeat steps 1 through 5 for each node group created.

Remember, you must use **Save Layout** to save each node group map, even when the map does not contain nodes.

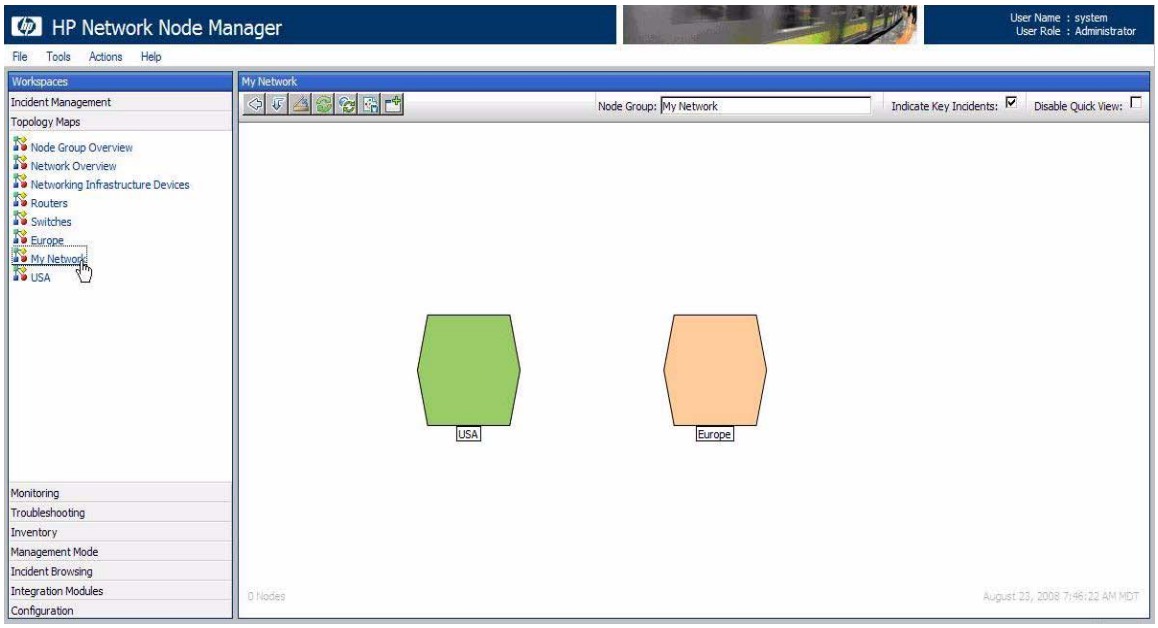


Step 2: View the Node Group Maps

Now that you have created the node group maps, view the maps to check the contents.

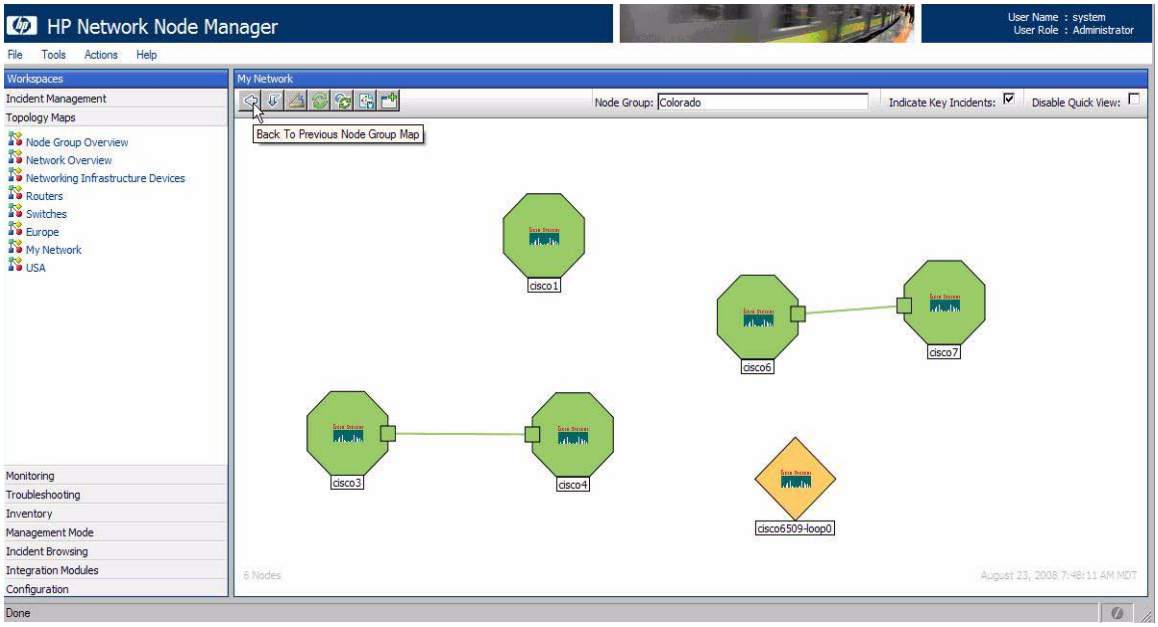
1 Navigate to the **Topology Maps** workspace.

2 Select the top level map: **My Network**.



3 Navigate to the child node group maps by double clicking its icon.

4 Use the **Back** button to return to the previous map.



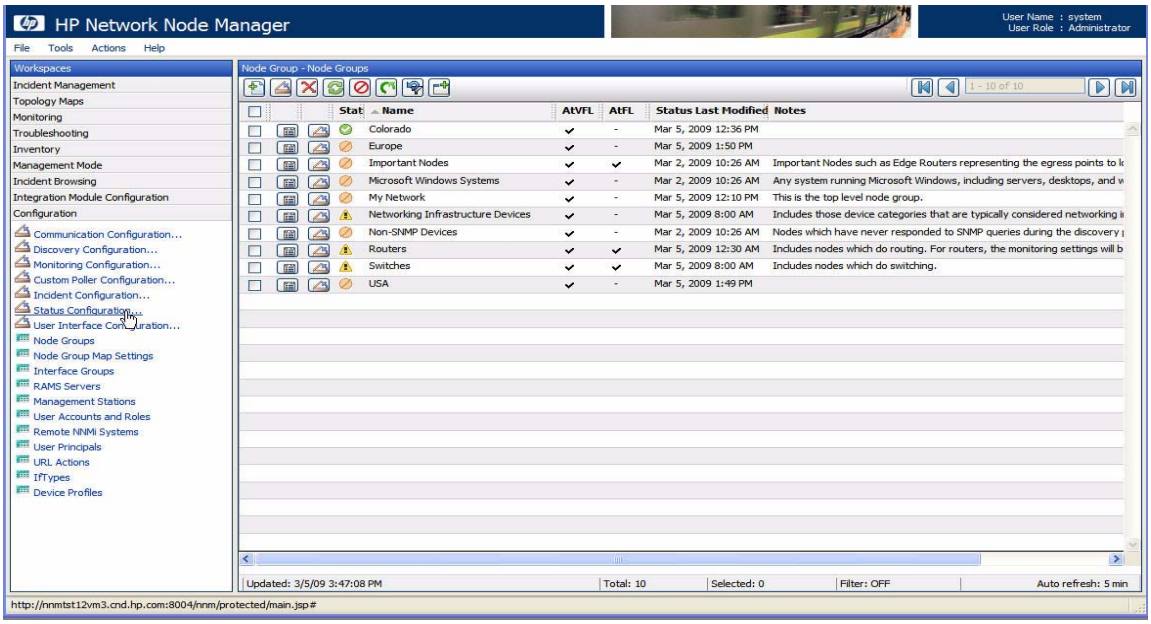
Step 3: Configure Node Group Status

NNMi enables you to configure how status is calculated for a node group. When you configure node group status, you determine which of the following method NNMi should use:

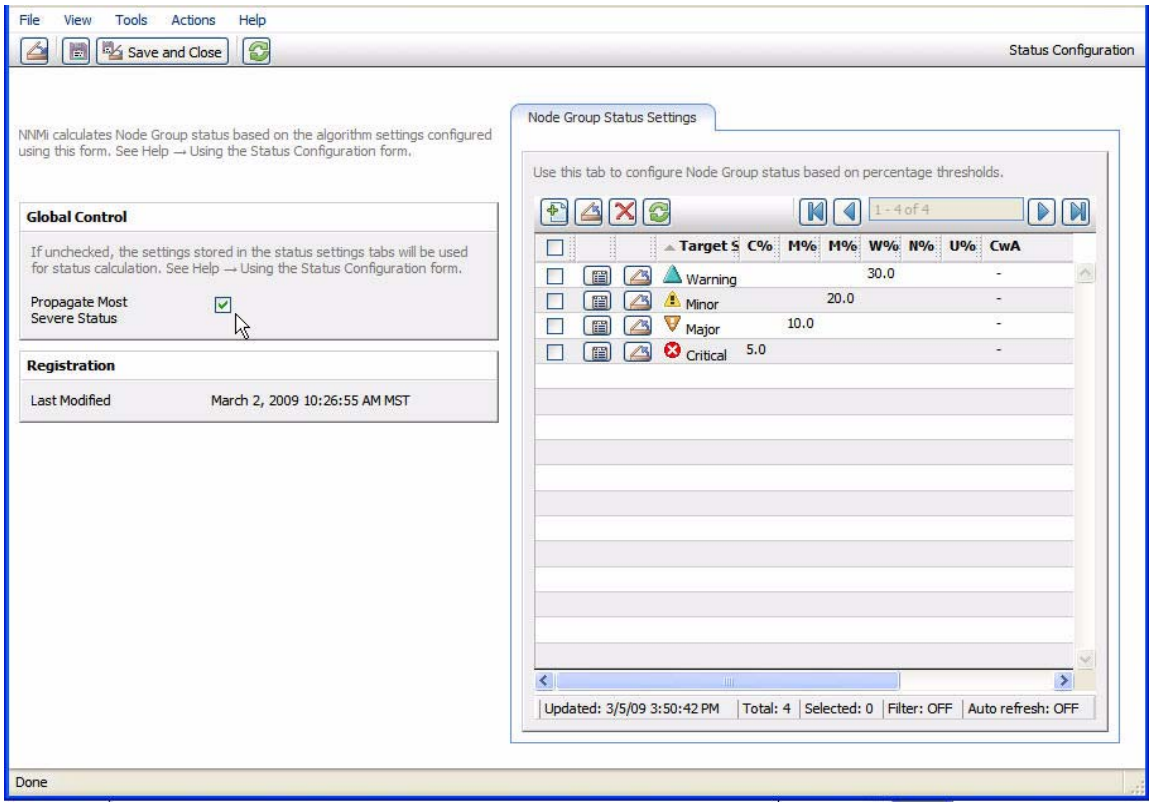
- Use the most severe status of the nodes in the node group.
- Specify the percentage calculation NNMi should use.

Status Configuration is a global configuration. By default, NNMi uses the most severe status of the nodes in the node group.

1. Navigate to the **Configuration** workspace.
2. Select **Status Configuration**.



3 Examine the **Status Configuration** form to become familiar with the default percentages. To use percentages, you must click to clear the **Propagate Most Severe Status** option.



Step 4: Configure Node Group Map Ordering

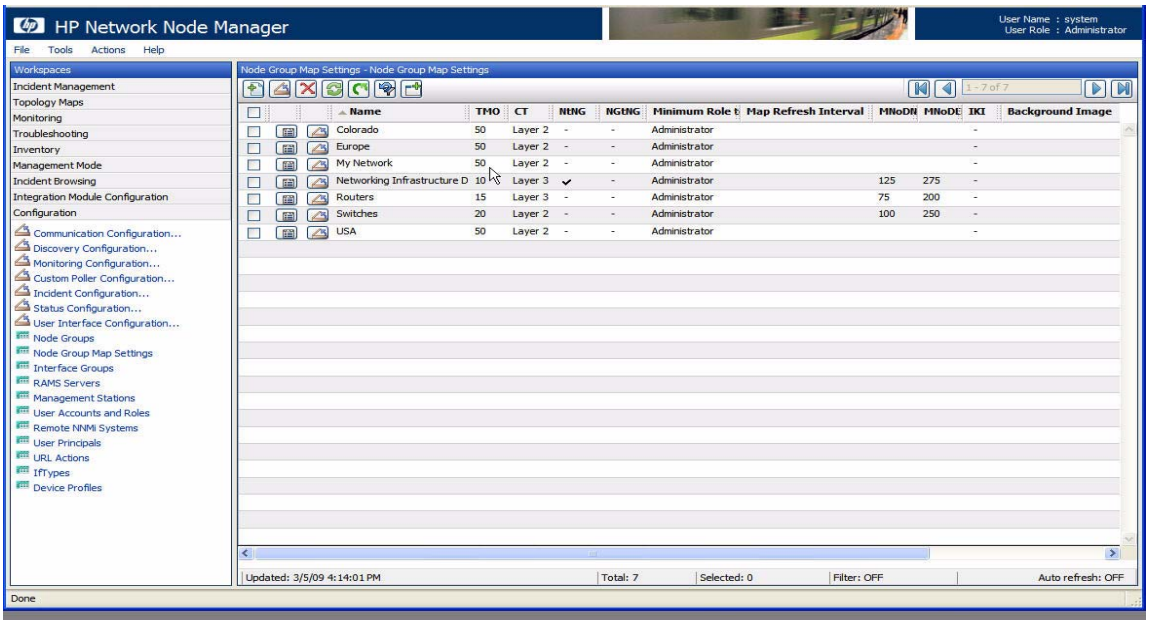
Node group map ordering is used to help determine in what order a map is displayed under the **Topology Maps** workspace.

In this example, we use node group map ordering to specify that the **My Network** node group map should appear first in the list in the **Topology Maps** worksapce.

1 Navigate to the **Configuration** workspace.

2 Select **Node Group Map Settings**.

As shown in the following example, the default **Topology Maps Ordering** value is `50` for all user-defined maps.



To indicate that NNMi should list **My Network** as the first map under the **Topology Maps** workspace, change the **Topology Maps Ordering** value to a number that is less than the **Topology Maps Ordering** value for any other maps in the list; for example **5**.

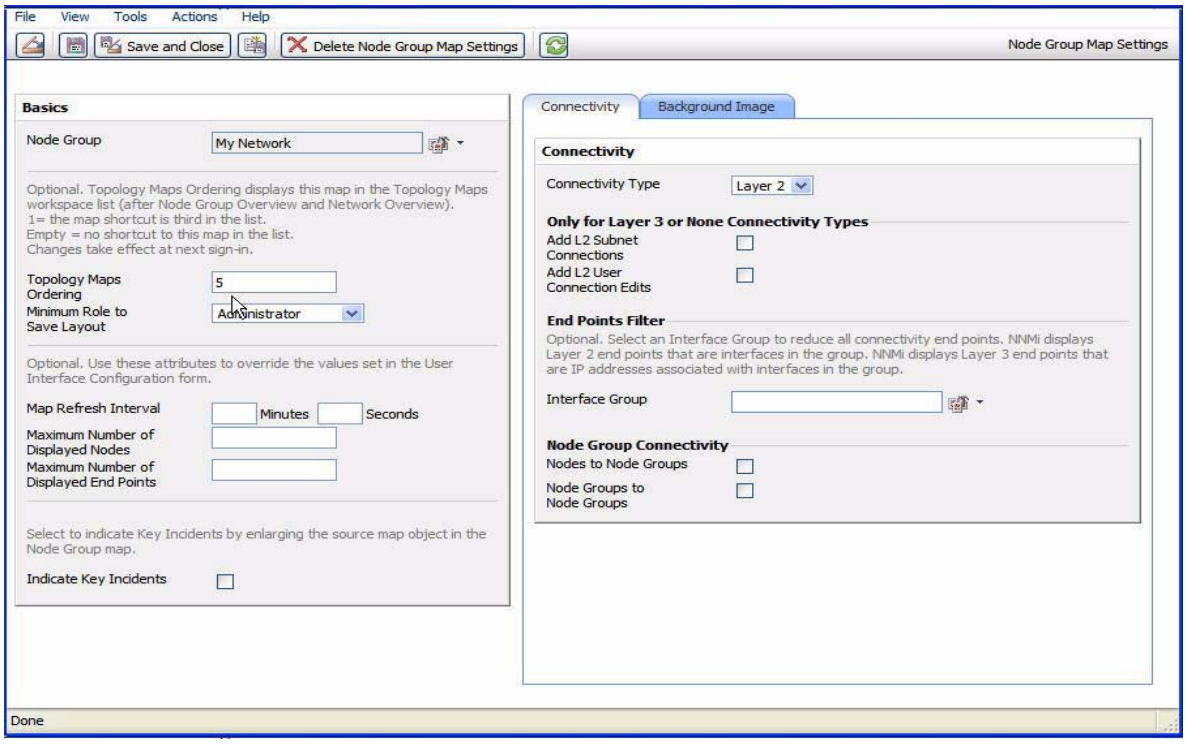
1 Navigate to **Configuration** workspace.

2 Select **Node Group Map** Settings.

3 Click the **Open** icon that precedes the **My Network** node group map.

4 In the **Topology Maps Ordering** attribute, change the value to **5**.

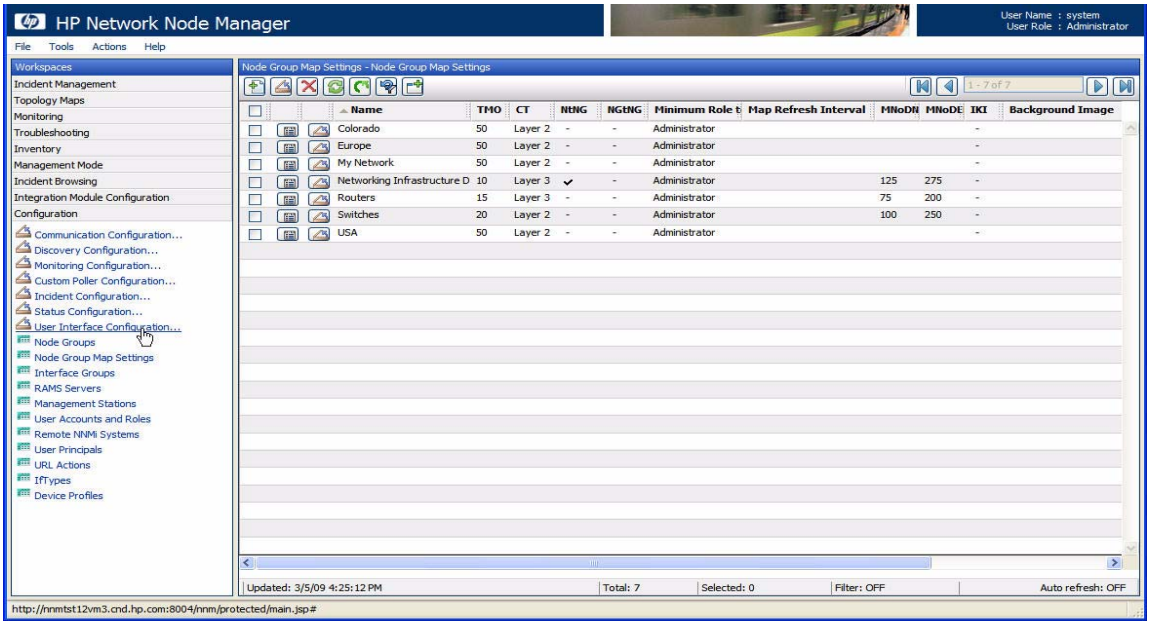
5 Click **Save and Close** to save your changes and close the form.



You can also specify whether the map is initially displayed in the NNMi console. To do so, use the **User Interface Configuration** option from the **Configuration** workspace.

1 Navigate to the **Configuration** workspace.

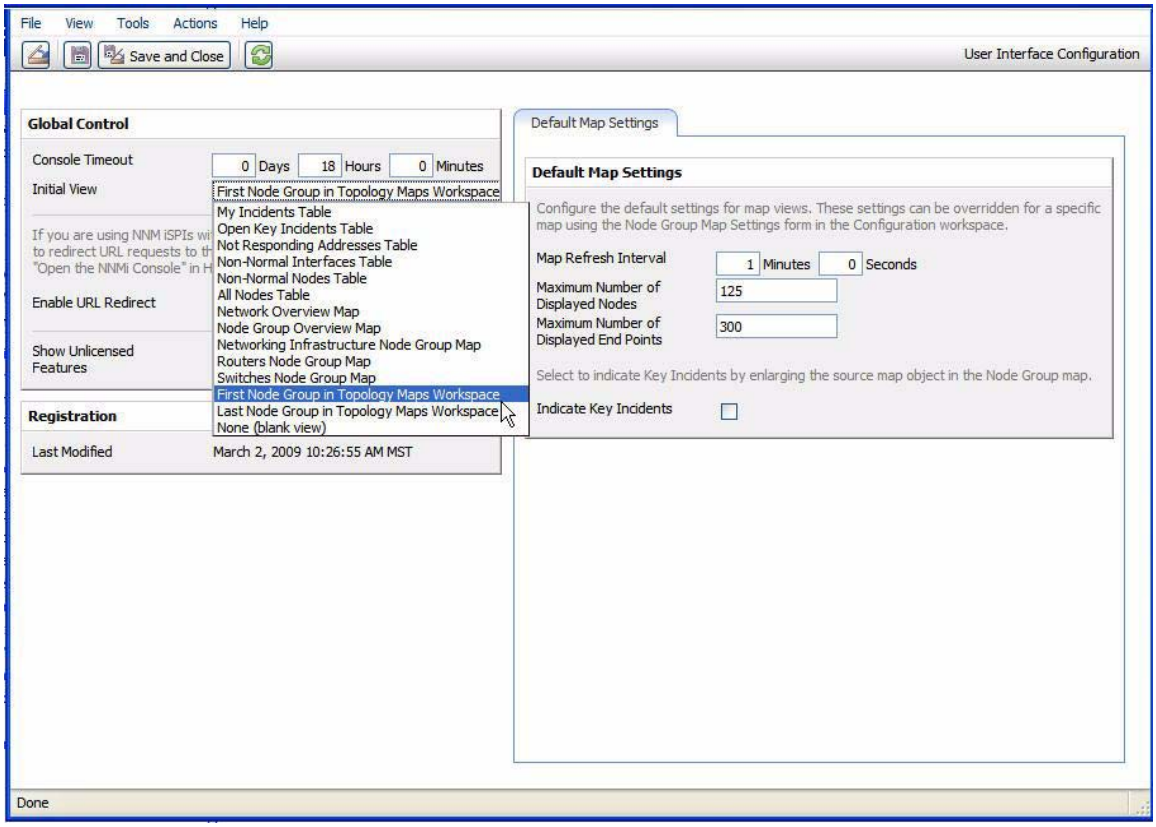
2 Select **User Interface Configuration**.



3 In the **Initial View** attribute, use the drop-down menu to select **First Node Group in Topology Maps Workspace**.

This will make the **My Network** map the initial view.

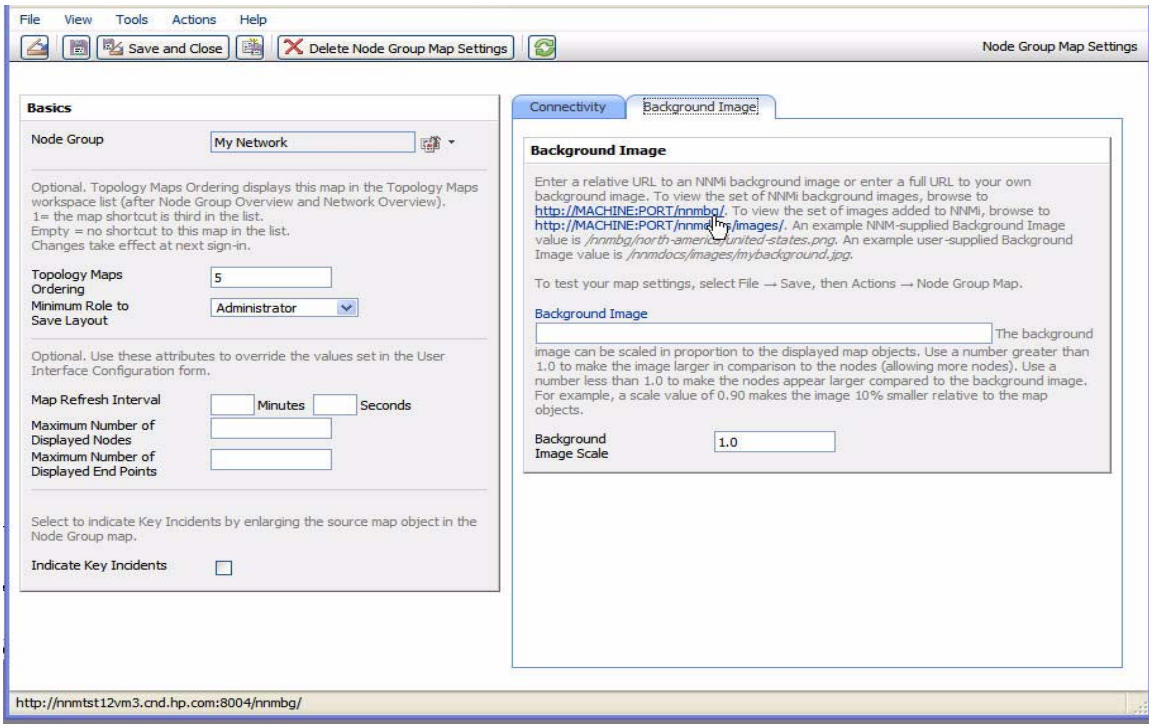
To verify the initial view, sign out of NNMi and sign back in. The **My Network** map should be the view you see in the NNMi console.



Step 5: Add a Background Image to a Node Group Map

To include a background graphic on a map, use the **Node Group Map Settings** form for the selected node group map.

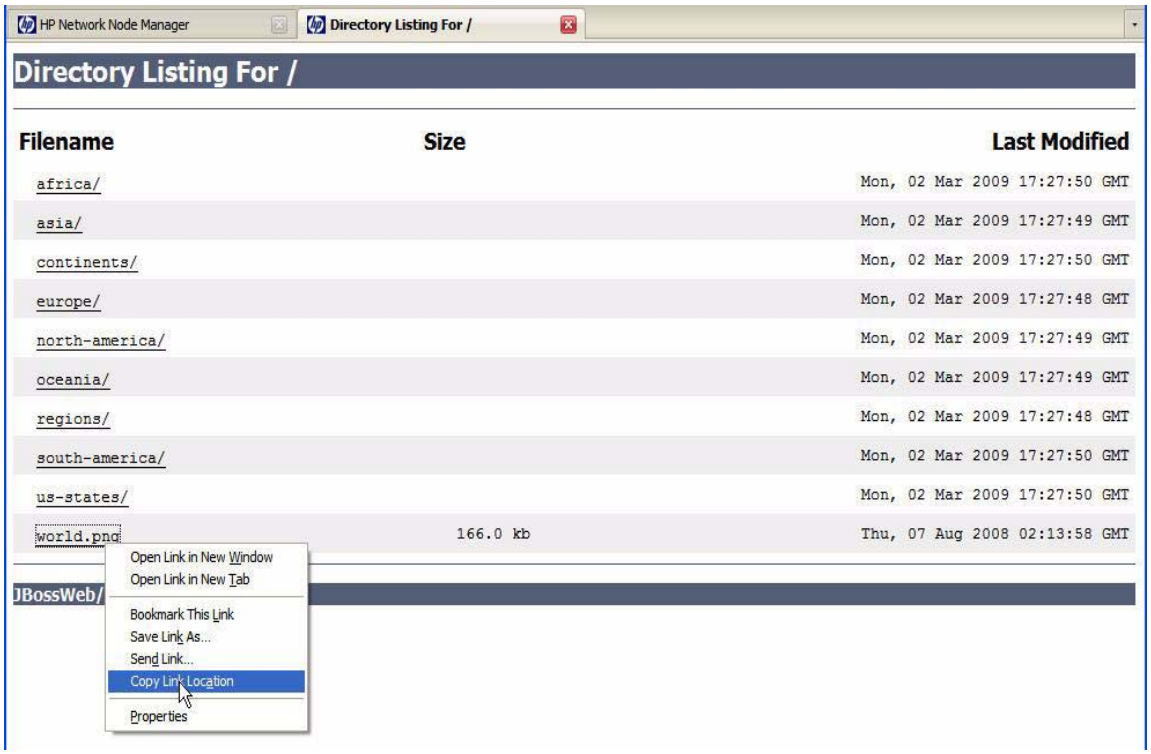
1. Navigate to the **Configuration** workspace.
2. Select **Node Group Map Settings**.
3. Open the **My Network** node group map.
4. Navigate to the **Background Image** tab.
5. Click http://MACHINE:PORT/nnmbg.



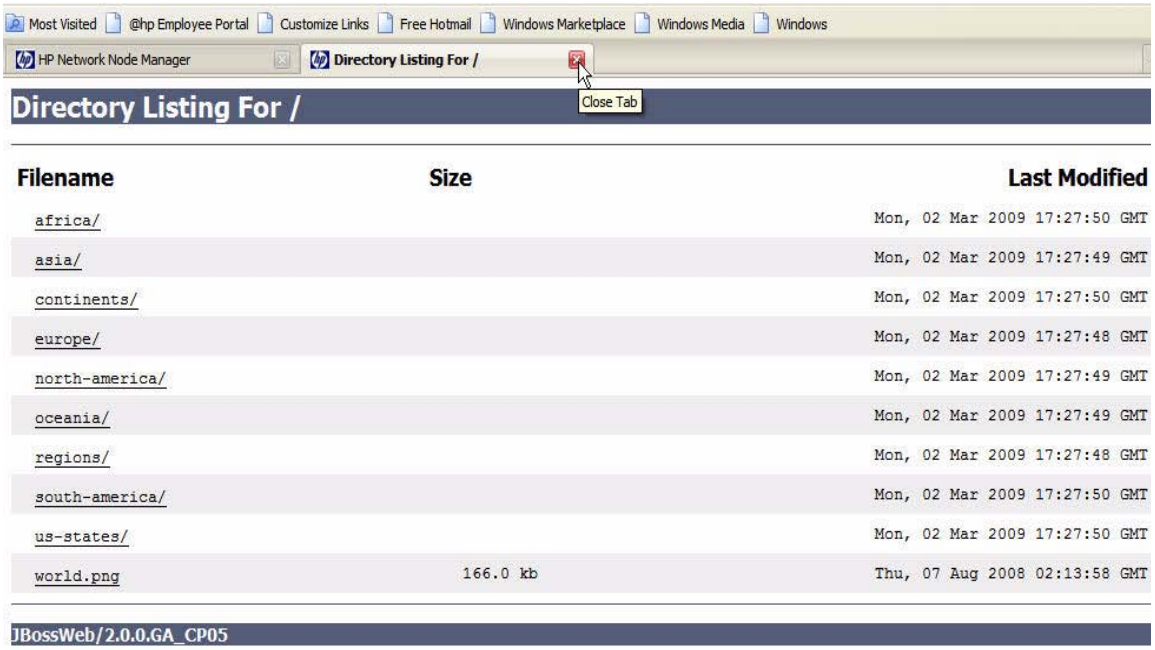
NNMi displays a list of HP supplied graphics.

6 Right click the **world.png** link.

7 Select **Copy Link Location**.



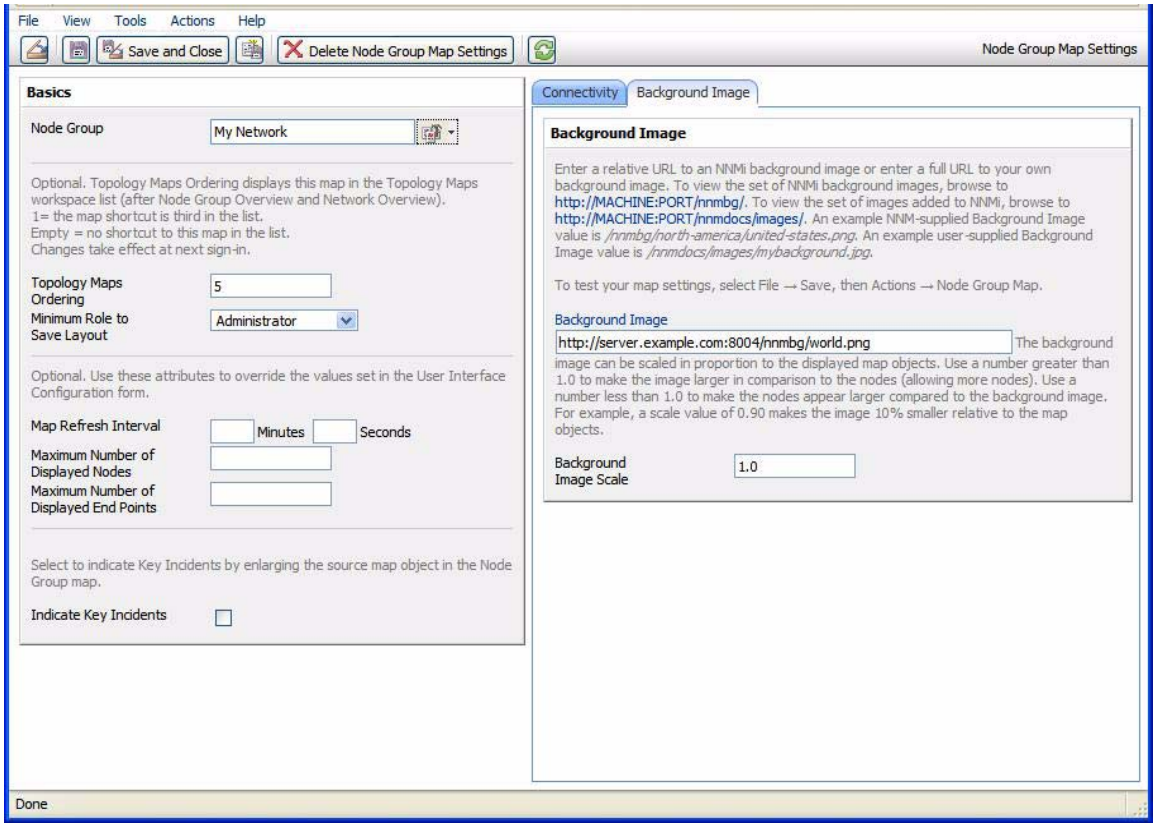
8 To close the directory listing window, use the **Close Tab** option as shown in the following example:



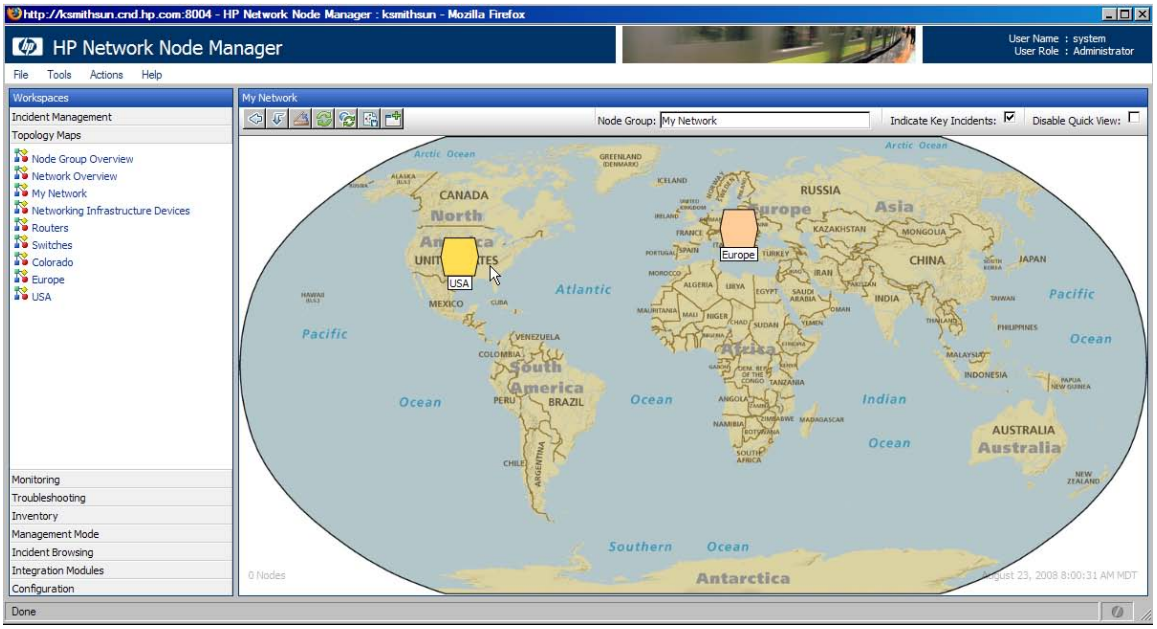
Paste the copied link into the Background Image attribute.

Note the Background Image Scale value in case you want to change it later.

9 Click **Save and Close** to save your changes.



10 Navigate to the **Topology Maps** workspace and select **My Network** to view your new map with the background graphic.



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