Chapter 13

Configuring NIC with the C-Web Interface

This chapter describes how you can use the C-Web interface to configure the network information collector (NIC).

Topics in this chapter include:

Before You Configure the NIC

When you use the NIC in a client/server configuration, you configure the NIC scenario before you configure the NIC proxies.

Before you configure NIC hosts from the C-Web interface:

- Plan your NIC implementation:

  - Choose the NIC configuration scenario to use.

    The default scenario is OnePop.

    For information about NIC configuration scenarios and NIC agents, see *SRC-PE Network Guide, Chapter 9, Locating Subscriber Information with the NIC*.

- If you are using the C-Web interface on a Solaris platform, install the NIC data. If you are using the C-Web interface on a C-series Controller, the NIC data is already installed.

  For information about installing the NIC sample data on a Solaris platform, see *SRC-PE Getting Started Guide, Chapter 34, Defining an Initial Configuration on a Solaris Platform*.

- Ensure that the appropriate type of router initialization script is configured for the router or network device.

  See *SRC-PE Network Guide, Chapter 9, Locating Subscriber Information with the NIC*.

- Set the editing level for the C-Web interface to basic. This ensures that only the statements that you need to configure are visible.

  > **NOTE:** We recommend that you change only those statements visible at the basic editing level. Contact Juniper Professional Services or Juniper Customer Support before you change any of the NIC statements and options not visible at the basic editing level.

To set the editing level for the C-Web interface to basic:

- Click **Preferences > Level Basic**.

Related Topics

- *SRC-PE Network Guide, Chapter 9, Locating Subscriber Information with the NIC*

- *Configuring the NIC with the C-Web Interface* on page 109

Configuring the NIC with the C-Web Interface

You configure the NIC to enable the SRC software to locate subscriber information for an application.

To configure the NIC:

1. Review NIC operating properties, and change them if needed.

    See *Reviewing and Changing Operating Properties for NIC with the C-Web Interface* on page 109.

2. Configure NIC replication.

    See *Configuring NIC Replication with the C-Web Interface* on page 110.

3. Start the NIC component.

    See *Reviewing and Changing Operating Properties for NIC with the C-Web Interface* on page 109.

4. (Optional) For the initial configuration if you plan to use a configuration scenario other than OnePop (the default), delete any data for the OnePop scenario. If you are changing from one configuration scenario to another, delete the data for the configuration scenario in use.

    See *Changing NIC Configurations with the C-Web Interface* on page 115.

5. Configure a NIC scenario.

    See *Configuring a NIC Scenario with the C-Web Interface* on page 111.

6. Verify the NIC configuration.

    See *Testing a NIC Resolution with the C-Web Interface* on page 114.

Related Topics

■ *SRC-PE Network Guide, Chapter 9, Locating Subscriber Information with the NIC*

■ *Before You Configure the NIC* on page 108

Reviewing and Changing Operating Properties for NIC with the C-Web Interface

Before you configure a NIC configuration scenario, review the default operating properties and change values as needed. Operating properties are configured for a slot.

To review and change the default NIC operating properties:

1. Click **Configure**, expand **Slot**, then a specified slot (for example, slot0), and then expand **NIC > Initial**. Click **Directory Connection**.

    The Directory Connection pane appears.

2. Review the configuration, enter information as described in the Help text in the main pane, and then click **Apply**.

3. In the side pane, click **Directory Eventing**.

    The Directory Eventing pane appears.

4. Review the configuration, enter information as described in the Help text in the main pane, and then click **Apply**.

5. In the side pane, click **NIC**.

    The NIC pane appears.

6. Review the configuration, enter information as described in the Help text in the main pane, and then click **Apply**.

7. In the left pane, click **Commit**.

Related Topics

- *SRC-PE Network Guide, Chapter 9, Locating Subscriber Information with the NIC*

- *Configuring the NIC with the C-Web Interface* on page 109

- *Configuring NIC Replication with the C-Web Interface* on page 110

Configuring NIC Replication with the C-Web Interface

You configure NIC replication to keep the NIC configuration highly available.

Before you configure NIC replication:

- Make sure that you understand how NIC groups are used.

    See *SRC-PE Network Guide, Chapter 9, Locating Subscriber Information with the NIC*.

- Identify which NIC hosts are to provide redundancy for each other.

- Specify a name for a group for each of these hosts.

To configure NIC replication:

1. Click **Configure > Slot**, then a specified slot (for example, slot0), and then **NIC**.

    The NIC pane appears.

2. Specify a group for NIC replication in the **Runtime Group** box, as described in the Help text; for example, group1.

3. Click **Apply**.

4. In the left pane, click **Commit**.

Related Topics

■   *SRC-PE Network Guide, Chapter 9, Locating Subscriber Information with the NIC*

■   *Configuring the NIC with the C-Web Interface* on page 109

■   *Reviewing and Changing Operating Properties for NIC with the C-Web Interface* on page 109

Starting the NIC with the C-Web Interface

Start the NIC component before you configure a NIC configuration scenario.

To start the NIC component:

1.   Select **Manage > Enable**.

     The Enable pane appears.

2.   In the Component box, select **NIC**, and click **OK**.

Related Topics

■   *Before You Configure the NIC* on page 108

Configuring a NIC Scenario with the C-Web Interface

To use the NIC to locate subscriber configuration, you must configure one of the NIC configuration scenarios provided with the SRC software. Which agents you configure depends on the NIC configuration scenario that you use.

The OnePop configuration scenario is the default configuration for the NIC. If you want to use another configuration scenario, you first clear data for the configuration scenario. Anytime you change the configuration scenario, you first clear data for the configuration scenario in use. See *Changing NIC Configurations with the C-Web Interface* on page 115.

When you select a NIC configuration scenario, the software adds the default configuration for most properties. You can modify the NIC properties, including those for agents.

☞ **NOTE:** We recommend that you change only those statements visible at the basic editing level. Contact Juniper Professional Services or Juniper Customer Support before you change any of the NIC statements not visible at the basic editing level.

☞ **NOTE:** By default, the CORBA naming server on a C-series platform uses port 2809. The NIC host is configured to communicate with this naming server.

To configure a NIC configuration scenario:

1. Click **Configure**, expand **Shared > NIC,** and click the configuration scenario that you want to configure; for example, **Scenario: OnePop**.

2. In the left pane, expand **Agents**.

3. For each directory agent that the NIC configuration scenario includes, review and if needed update NIC agent configuration to define properties specific to your environment, such as server identification and authentication information. For example, for the OnePop configuration scenario:

   a. Click **Agents**, then a specific agent such as Agent:PoolVr, and then **Configuration > Directory**.

   The Directory pane appears.

   b. Enter information as described in the Help text in the main pane, and click **Apply.**

4. For each SAE plug-in agent that the NIC configuration scenario includes, review and if needed update the NIC agent configuration to define properties specific to your environment, such as the event filter and the number of events that the SAE sends to the agent at one time during state synchronization. For example, for the OnePopLogin configuration scenario:

   a. Click **Agents**, then a specific agent such as Agent:LoginNameVr, and then **Configuration > SAE Plug-In**.

   The SAE Plug-In pane appears.

   If you plan to change the event filter for the agent, make sure that you are familiar with:

   ■ Plug-in attributes and values

   See *SRC-PE Subscribers and Subscriptions Guide, Chapter 11, Configuring Accounting and Authentication Plug-Ins with the SRC CLI*.

   ■ Filter syntax

   See the documentation for the SAE CORBA Remote API in the SAE Core API documentation on the Juniper Networks Web site at:

   http://www.juniper.net/techpubs/software/management/sdx/api-index.html

   b. Enter information as described in the Help text in the main pane, and click **Apply**.

Related Topics

■ *SRC-PE Network Guide, Chapter 9, Locating Subscriber Information with the NIC*

■ *Configuring the NIC with the C-Web Interface* on page 109

Configuring the SAE to Communicate with SAE Plug-In Agents for NIC Replication with the C-Web Interface

For each NIC host that uses SAE plug-in agents, configure a corresponding external plug-in for the SAE. By default, the SAE plug-in agents share events with the single SAE plug-in. You must also configure the SAE to communicate with the SAE plug-in agent in each NIC host that you use in the NIC replication.

To configure an external plug-in:

1. Configure an SAE external plug-in.

   See *SRC-PE Subscribers and Subscriptions Guide, Chapter 8, Overview of Plug-Ins Included with the SAE*.

2. Specify the following values for the plug-in:

   - CORBA object reference that has the following syntax:

     host:*port-number*/NameService#*plugInName*

     where:

     - *host*—IP address or name of the machine on which you installed the NIC host that supports the agent

       For local host, use the IP address 127.0.0.1.

     - *port-number*—Port on which the name server runs

       The default port number is 2809.

     - *plugInName*—Name under which the agent is registered in the naming service

     Use the format **nicsae_***groupname***/saePort,** where *groupname* is the name of the replication group. (When replication is not used, the format is **nicsae/saePort**.)

     For example: **corbaname::127.0.0.1:2809/NameService#nicsae/saePort**

   - Attributes that are sent to the external plug-in for a NIC host. Because the SAE plug-in agents share the event by default, you configure only one for a NIC host.

     Specify the plug-in options that the agent uses. You must specify the options **session-id** and **router-name**, and other options that you specified for the agent's network data types and the agent's event filter. Specify attributes options of the PAT_OPAQUE attribute type, such as the option **dhcp-packet**, only if you are using IPv6 addressing.

     👉 **NOTE:** Do not include attributes that are not needed.

   - NIC reference as a subscriber tracking plug-in.

Related Topics

- *SRC-PE Network Guide, Chapter 9, Locating Subscriber Information with the NIC*

- *Configuring NIC Replication with the C-Web Interface* on page 110

- For information about configuring an external plug-in for the SAE, see *SRC-PE Subscribers and Subscriptions Guide, Chapter 11, Configuring Accounting and Authentication Plug-Ins with the SRC CLI.*

Obtaining Interface Configuration Information for OnePopStaticRouteIp

If you use the OnePopStaticRouteIp configuration scenario, you must obtain JUNOS interface configuration information for the NIC. To get this information, you must run Network Publisher on a Solaris platform to gather the interface information.

To run Network Publisher on a Solaris platform:

1. Install the NIC on a Solaris platform.

   See *SRC-PE Getting Started Guide, Chapter 33, Installing the SRC Software on a Solaris Platform*.

2. On the Solaris platform, edit the */opt/UMC/nic/etc/networkPublisher/config.properties* file and run Network Publisher. When you specify the directory configuration in the file, configure the connection to the directory on a C-series platform.

   See *SRC-PE Network Guide, Chapter 12, Obtaining Interface Configuration for OnePopStaticRouteIp on Solaris Platforms*.

Related Topics

- *Configuring a NIC Scenario with the C-Web Interface* on page 111

Testing a NIC Resolution with the C-Web Interface

To test a NIC resolution:

1. Click **Diagnose > NIC > Resolve**.

2. Enter information as described in the Help text in the main pane, and click **OK**.

Related Topics

- *Configuring a NIC Scenario with the C-Web Interface* on page 111

Stopping a NIC Host on a C-series Controller with the C-Web Interface

If you run the NIC in client/server mode, you can stop the NIC host independently of the NIC proxy.

To stop a NIC host:

1. Click **Manage > Disable**.

2. In the Component list in the main pane, select **NIC**, and click **OK**.

Related Topics

■ *Restarting the NIC with the C-Web Interface* on page 115

Restarting the NIC with the C-Web Interface

To restart a NIC host:

1. Click **Manage > Restart**.

2. In the Component list in the main pane, select **NIC**, and click **OK**.

Related Topics

■ *Stopping a NIC Host on a C-series Controller with the C-Web Interface* on page 115

Changing NIC Configurations with the C-Web Interface

If you change the type of NIC resolution that you use in your network (for example, from the OnePop configuration scenario to the OnePopAllRealms configuration scenario), delete any existing data and specify a static DN that identifies the DN for the new NIC configuration scenario; otherwise, the new NIC configuration may not perform resolutions correctly.

To change the type of NIC resolution that you use in your network:

1. Disable the NIC:

   a. Click **Manage > Disable**.

   b. In the Component list in the main pane, select **NIC**, and click **OK**.

2. Delete the NIC configuration data for the existing configuration scenario from the directory.

    a. Click **Manage > Request > NIC > Clear > Scenario Data**.

        The Scenario Data pane appears.

    b. In the **Slot** box, enter the number of the slot that contains the NIC scenario configuration (typically, slot 0), and click **OK**.

3. Restart the NIC host:

    a. Click **Manage > Restart**.

    b. In the Component list in the main pane, select **NIC**, and click **OK**.

4. Configure the new NIC scenario.

Related Topics

■ *SRC-PE Network Guide, Chapter 9, Locating Subscriber Information with the NIC*

■ *Configuring a NIC Scenario with the C-Web Interface* on page 111