

Chapter 10

Configuring NIC with the SRC CLI

This chapter describes how you can use the SRC CLI to configure the network information collector (NIC). You can use the CLI to configure the NIC on a Solaris platform or on a C-series Controller.

Topics in this chapter include:

- Configuration Statements for the NIC on page 160
- Before You Configure the NIC on page 162
- Configuring the NIC with the SRC CLI on page 163
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- Reviewing and Changing Operating Properties for NIC with the SRC CLI on page 164
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Configuration Statements for the NIC

The SRC CLI provides the following groups of configuration statements for the NIC:

- *Configuration Statements for NIC Operating Properties on page 160*
- *Configuration Statements for NIC Scenarios on page 161*
- *Configuration Statements for NIC Logging on page 162*



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.

Configuration Statements for NIC Operating Properties

Use the following configuration statements to configure the NIC operating properties at the [edit] hierarchy level. These statements are visible at the CLI basic editing level.

```

slot number nic {
    base-dn base-dn;
    java-heap-size java-heap-size;
    snmp-client;
    hostname hostname;
    runtime-group runtime-group;
}

slot number nic initial {
    static-dn static-dn;
    dynamic-dn dynamic-dn;
}

slot number nic initial directory-connection {
    url url;
    backup-urls [backup-urls...];
    principal principal;
    credentials credentials;
    protocol (ldaps);
    timeout timeout;
    check-interval check-interval;
    blacklist;
    snmp-agent;
}

```

```
slot number nic initial directory-eventing {
    eventing;
    signature-dn signature-dn;
    polling-interval polling-interval;
    event-base-dn event-base-dn;
    dispatcher-pool-size dispatcher-pool-size;
}
```

For detailed information about each configuration statement, see the *SRC-PE CLI Command Reference*.

Configuration Statements for NIC Scenarios

Use the following configuration statements to configure the NIC at the [edit] hierarchy level. These statements are visible at the CLI basic editing level.

Which agents you configure depends on the NIC configuration scenario that you use.



NOTE: The CLI also provides configuration statements for consolidator agents, properties agents, and XML agents. At this time, none of the NIC configuration scenarios uses these agents. The following list does not include the configuration statements for these agents.

```
shared nic scenario name
```

```
shared nic scenario name agents name
```

```
shared nic scenario name agents name configuration directory {
    search-base search-base;
    search-filter search-filter;
    search-scope (0 | 1 | 2);
    server-url server-url;
    directory-backup-urls directory-backup-urls;
    principal principal;
    credentials credentials;
}
```

```
shared nic scenario name agents agent configuration sae-plug-in {
    event-filter event-filter;
    number-of-events number-of-events;
}
```

For detailed information about each configuration statement, see the *SRC-PE CLI Command Reference*.

Configuration Statements for NIC Logging

Use the following configuration statements to configure logging for the NIC at the [edit] hierarchy level.

```
shared nic scenario name hosts name configuration logger name syslog {
  filter filter;
  host host;
  facility facility;
  format format;
}
```

```
shared nic scenario name hosts name configuration logger name file {
  filter filter;
  filename filename;
  rollover-filename rollover-filename;
  maximum-file-size maximum-file-size;
}
```

Before You Configure the NIC

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

Before you configure NIC hosts from the CLI:

- 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 *Chapter 9, Locating Subscriber Information with the NIC*.

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

See *Chapter 9, Locating Subscriber Information with the NIC*.

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

See *SRC-PE CLI User Guide, Chapter 9, Controlling the SRC CLI Environment*.

Configuring the NIC with the SRC CLI

Before you configure the NIC, complete the prerequisite tasks.

See *Before You Configure the NIC* on page 162.

To configure the NIC:

1. Start the NIC component.

See *Starting the NIC with the SRC CLI* on page 164.

2. Configure NIC operating properties.

See *Reviewing and Changing Operating Properties for NIC with the SRC CLI* on page 164.

3. Configure NIC replication.

See *Configuring NIC Replication with the SRC CLI* on page 166.

4. (Optional) If you plan to use a configuration scenario other than OnePop (the default), delete any data for the OnePop scenario and configure the local static DN to specify the configuration scenario.

See *Changing NIC Configurations with the SRC CLI* on page 179.

5. Configure a NIC scenario.

See *Configuring a NIC Scenario with the SRC CLI* on page 167.

6. Verify the NIC configuration.

See *Verifying Configuration for the NIC with the SRC CLI* on page 176.

Related Topics

- *Chapter 9, Locating Subscriber Information with the NIC*
- *Changing NIC Configurations with the SRC CLI* on page 179
- *Testing a NIC Resolution with the SRC CLI* on page 176

Starting the NIC with the SRC CLI

Start the NIC component before you configure it. When you enable NIC for the first time, it creates the default operating properties for the component.

To start NIC:

- From operational mode, enable the NIC.

```
user@host> enable component nic
Starting NICHOST: may take a few minutes...
```

Related Topics

- *Configuring the NIC with the SRC CLI* on page 163

Reviewing and Changing Operating Properties for NIC with the SRC CLI

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

Reviewing the Default NIC Operating Properties

To review the default NIC operating properties:

1. From configuration mode, access the configuration statement that specifies the configuration for the NIC on a slot.

```
[edit]
user@host# edit slot number nic
```

For example:

```
[edit]
user@host# edit slot 0 nic
```

2. Run the show command.

```
[edit slot 0 nic]
user@host# show
base-dn o=umc;
java-runtime-environment ../jre/bin/java;
java-heap-size 128m;
snmp-agent;
hostname DemoHost;
initial {
  dynamic-dn "ou=dynamicConfiguration, ou=Configuration,
o=Management,<base>";
  directory-connection {
    url ldap://127.0.0.1:389/;
    backup-urls ;
    principal cn=nic,ou=Components,o=Operators,<base>;
    credentials *****;
    timeout 10;
```

```

    check-interval 60;
  }
  directory-eventing {
    eventing;
    signature-dn <base>;
    polling-interval 15;
    event-base-dn <base>;
    dispatcher-pool-size 1;
  }
  static-dn "l=OnePop,l=NIC, ou=staticConfiguration, ou=Configuration,
o=Management,<base>";
}

```

Changing NIC Operating Properties

In most cases you can use the default NIC operating properties. Change the default properties if needed for your environment.

To change NIC operating properties:

1. From configuration mode, access the configuration statement that specifies the configuration for the NIC on a slot.

```

[edit]
user@host# edit slot number nic

```

For example:

```

[edit]
user@host# edit slot 0 nic

```

2. (Optional) If you store data in the directory in a location other than the default, *o = umc*, change this value.

```

[edit slot 0 nic]
user@host# set base-dn base-dn

```

3. (Optional) If you determine that additional memory is needed, change the maximum memory size available to the (Java Runtime Environment) JRE.

```

[edit slot 0 nic]
user@host# set java-heap-size java-heap-size

```

By default, the JRE can allocate 128 MB. Set to a value lower than the available physical memory to avoid low performance because of disk swapping.

If you use an SAE plug-in agent, we recommend that you increase the JVM max heap to a value in the range 400–500 MB.

If you need help to determine the amount of memory needed, contact Juniper Networks Customer Services and Support.

4. (Optional) Enable viewing of SNMP counters through an SNMP browser.

```
[edit slot 0 nic]
user@host# set snmp-agent
```

5. (Optional) Change the name of the NIC host. Use the default name of the NIC host configured for a NIC scenario. In most cases, the NIC host name is DemoHost.

```
[edit slot 0 nic]
user@host# set hostname hostname
```

6. (Optional) Change the initial properties.

See *SRC-PE Getting Started Guide, Chapter 30, Configuring Local Properties with the SRC CLI*.

Related Topics

- *Configuring the NIC with the SRC CLI on page 163*

Configuring NIC Replication with the SRC CLI

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 *Chapter 9, Locating Subscriber Information with the NIC*.
- Identify which NIC hosts are to provide redundancy for each other.
- Select a name for a group for each of these hosts.

To configure NIC replication:

1. From configuration mode, access the configuration statement that specifies the configuration for the agent.

```
[edit]
user@host# slot number nic
```

For example:

```
[edit]
user@host# slot 0 nic
```

2. Configure the runtime group for the NIC host.

```
[edit slot 0 nic]
user@host# runtime-group runtime-group
```

For example:

```
[edit slot 0 nic]
user@host# runtime-group group1
```

Related Topics

- *Configuring the NIC with the SRC CLI on page 163*

Configuring a NIC Scenario with the SRC CLI

The OnePop configuration scenario is the default configuration for NIC. If you want to use another configuration scenario, you first clear data for the configuration scenario and change the static DN that identifies the scenario, see *Changing NIC Configurations with the SRC CLI on page 179*.

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.



CAUTION: 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.

To specify a NIC configuration scenario for NIC to use:

1. Make sure that the NIC component is running.

```
user@host> show component
Installed Components
Name          Version          Status
...
nic           Release: 7.0 Build: GATEWAY.A.7.0.0.0168  running
...
```

2. From configuration mode, access the statement that configures a NIC configuration scenario, and specify the name of a scenario.

```
[edit]
user@host# edit shared nic scenario name
```

For example:

```
[edit]
user@host# edit shared nic scenario OnePopLogin
```

3. View the default configuration for the configuration scenario. For example:

```
[edit shared nic scenario OnePopLogin]
user@host# show

hosts {
  DemoHost {
    configuration {
      hosted-resolvers "/realms/login/A1, /realms/login/B1,
/realms/login/C1, /realms/login/D1, /realms/ip/A1, /realms/ip/B1,
/realms/ip/C1";
      hosted-agents "/agents/LoginNameVr, /agents/VrSaeId,
/agents/IpLoginName,
/agents/PoolVr";
    }
  }
  OnePopB0 {
    configuration {
      hosted-resolvers "/realms/login/A1, /realms/login/C1, /realms/ip/A1,
/realms/ip/C1";
      hosted-agents /agents/VrSaeId;
    }
  }
  OnePopH1 {
    configuration {
      hosted-resolvers "/realms/login/B1, /realms/login/D1, /realms/ip/B1";
      hosted-agents "/agents/LoginNameVr, /agents/IpLoginName,
/agents/PoolVr";
    }
  }
}
agents {
  VrSaeId {
    configuration {
      directory {
        search-base o=Network,<base>;
        search-filter (objectclass=umcVirtualRouter);
        search-scope 2;
        server-url ldap://127.0.0.1:389/;
        backup-servers-url ;
        principal cn=nic,ou=Components,o=Operators,<base>;
        credentials *****;
      }
    }
  }
  LoginNameVr {
    configuration {
      sae-plugin {
        event-filter "(&(! (PA_USER_TYPE=INTF)) (! (PA_LOGIN_NAME=[None])))";
        number-of-events-sent-in-a-synchronization-call 50;
      }
    }
  }
  IpLoginName {
    configuration {
      sae-plugin {
        number-of-events-sent-in-a-synchronization-call 50;
      }
    }
  }
  PoolVr {
    configuration {
```

```

    directory {
      search-base o=Network,<base>;
      search-filter (objectclass=umcVirtualRouter);
      search-scope 2;
      server-url ldap://127.0.0.1:389/;
      backup-servers-url ;
      principal cn=nic,ou=Components,o=Operators,<base>;
      credentials *****;
    }
  }
}

```

4. (Optional) Update logging configuration.

See *SRC-PE Monitoring and Troubleshooting Guide, Chapter 3, Configuring Logging for SRC Components with the CLI*.

By default, NIC has the following logging enabled for a NIC host:

```

logger file-1 {
  file {
    filter !ConfigMgr,!DES,/debug;
    filename var/log/nicdebug.log;
    rollover-filename var/log/nicdebug.alt;
    maximum-file-size 10000000;
  }
}
logger file-2 {
  file {
    filter /info-;
    filename var/log/nicinfo.log;
  }
}
logger file-3 {
  file {
    filter /error-;
    filename var/log/nicerror.log;
  }
}

```

5. For each agent that the NIC configuration scenario includes, if needed update NIC agent configuration to define properties specific to your environment, such as directory properties.

Each type of agent has different configuration properties. The output from the `show` command identifies the type of agent under the `agents` hierarchy. For example:

```

VrSaeId {
  configuration {
    directory {

LoginNameVr {
  configuration {
    sae-plugin {

```

For information about agent configuration, see the following sections:

- *Configuring Directory Agents on page 170*
- *Configuring SAE Plug-In Agents on page 172*

Configuring Directory Agents

Use the following configuration statements to configure NIC directory agents:

```
shared nic scenario name agents agent configuration directory {
  search-base search-base;
  search-filter search-filter;
  search-scope (0 | 1 | 2);
  server-url server-url;
  backup-servers-url backup-servers-url;
  principal principal;
  credentials credentials;
}
```

To configure a directory agent:

1. From configuration mode, access the statement that specifies the configuration for the agent.

```
[edit]
user@host# edit shared nic scenario name agents agent configuration directory
```

For example:

```
[edit]
user@host# edit shared nic scenario OnePopLogin agents VrSaeld configuration directory
```

2. Review the default configuration for the agent. For example:

```
[edit shared nic scenario OnePopLogin agents VrSaeId configuration directory]
user@host# show
search-base o=Network,<base>;
search-filter (objectclass=umcVirtualRouter);
search-scope 2;
server-url ldap://127.0.0.1:389/;
directory-backup-urls ;
principal cn=nic,ou=Components,o=Operators,<base>;
credentials *****;
```

3. (Optional) Change the distinguished name (DN) of the location in the directory from which the agent should read information.

```
[edit shared nic scenario name agents name configuration directory]
user@host# set search-base search-base
```

For example:

```
[edit shared nic scenario OnePop agents PoolVr configuration directory]
user@host# set search-base o=myNetwork,<base>
```

You can use <base> in the DN to refer to the globally configured base DN.

4. (Optional) Change the directory search filter that the agent should use.

```
[edit shared nic scenario name agents name configuration directory]
user@host# set search-filter search-filter
```

For example:

```
[edit shared nic scenario OnePop agents PoolVr configuration directory]
user@host# set search-filter objectclass=umcVirtualRouter
```

5. (Optional) Change the location in the directory relative to the base DN from which the NIC agent can retrieve information.

```
[edit shared nic scenario name agents name configuration directory]
user@host# set search-scope (0 | 1 | 2)
```

where:

- 0—Entry specified in the **search-base** statement
 - 1—Entry specified in the **search-base** statement and objects that are subordinate by one level
 - 2—Subtree of entry specified in the **search-base** statement
6. For an installation on a Solaris platform, specify the location of the directory in URL string format.

```
[edit shared nic scenario name agents name configuration directory]
user@host# set server-url ldap:// host:portNumber
```

For example, to specify the directory on a C-series Controller:

```
[edit shared nic scenario OnePop agents PoolVr configuration directory]
user@host# set server-url ldap://127.0.0.1:389/
```

- List the URLs of redundant directories. Separate URLs with semicolons.

```
[edit shared nic scenario name agents name configuration directory]
user@host# set directory-backup-urls backup-servers-urls
```

- Specify the DN that contains the username that the directory server uses to authenticate the NIC agent.

```
[edit shared nic scenario name agents name configuration directory]
user@host# set principal principal
```

For example:

```
[edit shared nic scenario OnePop agents PoolVr configuration directory]
user@host# set principal cn=nic,ou=Components,o=Operators,<base>
```

- Specify the password that the directory server uses to authenticate the NIC agent.

```
[edit shared nic scenario name agents name configuration directory]
user@host# set credentials credentials
```

- Restart the NIC agent.

```
user@host>request nic restart agent name name
```

Configuring SAE Plug-In Agents

By default, the CORBA naming server on a C-series Controller uses port 2809. The NIC host is configured to communicate with this naming server; you do not need to change JacORB properties.

Use the following configuration statements to configure NIC SAE plug-in agents:

```
shared nic scenario name agents agent configuration sae-plug-in{
  event-filter event-filter;
  number-of-events number-of-events;
}
```

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>

To configure an SAE plug-in agent:

1. From configuration mode, access the statement that specifies the configuration for the agent.

```
[edit]
user@host# edit shared nic scenario name agents agent configuration sae-plug-in
```

For example:

```
[edit]
user@host# edit shared nic scenario OnePopLogin agents LoginNameVr
configuration sae plug-in
```

2. Review the default configuration for the agent. For example:

```
[edit shared nic scenario OnePopLogin agents LoginNameVr configuration sae-plug-in]
user@host# show
event-filter "&(! (PA_USER_TYPE=INTF)) (! (PA_LOGIN_NAME=[None]))";
number-of-events-sent-in-a-synchronization-call 50;
```

3. (Optional) Change an LDAP filter that change the events that the agent collects.

```
[edit shared nic scenario name agents agent configuration sae-plug-in]
user@host# set event-filter event-filter
```

Typically, you do not need to change this value. If you do want to filter other events, use the format *pluginAttribute=attributeValue* format for event filters, where:

- *pluginAttribute*—Plug-in attribute name
- *attributeValue*—Value of filter

For example:

```
[edit shared nic scenario name agents agent configuration sae-plug-in]
user@host# set event-filter PA_USER_TYPE=INTF
```

4. Specify the number of events that the SAE sends to the agent at one time during state synchronization.

```
[edit shared nic scenario name agents agent configuration sae-plug-in]
user@host# set number-of-events number-of-events
```

For example:

```
[edit shared nic scenario OnePopLogin agents LoginNameVr configuration sae plug-in]
user@host# set number-of-events 50
```

Configuring the SAE to Communicate with SAE Plug-In Agents When You Use NIC Replication

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.

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*.

To configure an external plug-in:

1. From configuration mode, access the statement that specifies the configuration for an external plug-in for the SAE that communicates with the agent, and assign the plug-in a unique name.

```
[edit]
user@host# shared sae configuration plug-ins name name
```

2. Configure CORBA object reference for the plug-in.

```
[shared sae configuration plug-ins name name external]
user@host# corba-object-reference corba-object-reference
```

For the CORBA object reference, use 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:

```
[shared sae configuration plug-ins name name external]
user@host# set corba-object-reference
corbaname::127.0.0.1:2809/NameService#nicsae/saePort
```

3. Configure 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.

```
[shared sae configuration plug-ins name name external]
user@host# set attr
[( router-name | user-dn | session-id | user-type | user-ip-address | login-name)]
```

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. Do not specify attributes options of the `PAT_OPAQUE` attribute type, such as the option `dhcp-packet`.



NOTE: Do not include attributes that are not needed.

4. Reference the NIC as a subscriber tracking plug-in.

```
[edit shared sae group name configuration plugins event-publishers]
user@host# set subscriber-tracking pool-name
```

For example, for a pool named `nic`:

```
[edit shared sae group name configuration plugins event-publishers]
user@host# set subscriber-tracking nic
```

Obtaining Interface Configuration Information for OnePopStaticRouteIp

If you use the OnePopStaticRouteIp configuration scenario, you must obtain JUNOS interface configuration information for 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 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 Controller.

See *Chapter 12, Obtaining Interface Configuration for OnePopStaticRouteIp on Solaris Platforms*.

Related Topics

- *Configuring the NIC with the SRC CLI* on page 163
- *Testing a NIC Resolution with the SRC CLI* on page 176

Configuring Advanced NIC Features

If you want to configure NIC features not available at the basic editing level, set the editing level to advanced or expert and use the CLI Help to obtain information about statement options. For information about setting the CLI editing level, see *SRC-PE CLI User Guide, Chapter 9, Controlling the SRC CLI Environment*.

Verifying Configuration for the NIC with the SRC CLI

After you complete the NIC configuration, verify the local NIC configuration and the NIC configuration scenario information.

To verify NIC configuration:

1. In configuration mode, run the `show` command at the `[edit slot 0 nic]` hierarchy level.

```
[edit slot 0 nic]
user@host# show
```

2. In configuration mode, run the `show` command at the `[edit shared nic scenario name]` hierarchy level.

For example:

```
[edit shared nic scenario OnePop]
user@host# show
```

Related Topics

- *Configuring the NIC with the SRC CLI on page 163*
- *Testing a NIC Resolution with the SRC CLI on page 176*

Testing a NIC Resolution with the SRC CLI

To test a NIC resolution:

- Run the `test nic resolve` command.

```
user@host> test nic resolve <locator locator> <key key>
```

where:

- *locator*—Name of locator that requests information on behalf of an application
- *key*—Value to be resolved. This value must be of the same NIC data type configured in the NIC locator.

For example:

```
user@host> test nic resolve locator /nicLocators/ip key 10.10.10.10
```

Example: Testing a NIC Resolution

The following example shows a successful resolution for an IP key that has the value 192.168.8.2:

```
user@host> test nic resolve locator /nicLocators/ip key 192.168.8.2
IOR:
000000000000003549444C3A736D67742E6A756E697065722E6E65742F7361652F5365727669
636541637469766174696F6E456E67696E653A312E3000
00000000000010000000000006800010200000000F3137322E32382E3233302E31323000
0022610000000000107372632D382F736165504F412F53
41450000000200000000000008000000004A41430000000010000001C000000000010001
0000000105010001000101090000000105010001
user@host>
```

The following example shows an unsuccessful resolution for an IP key that has the value 192.168.8.2:

```
user@host> test nic resolve locator /nicLocators/ip key 192.168.3.2
Failed to resolve key 192.168.3.2 for resolver /nicLocators/ip due to
net.juniper.smgmt.gateway.nic.protocol.NICExc
IDL:net/juniper/smgmt/gateway/nic/protocol/NICException:1.0
user@host>
```

Related Topics

- *Configuring NIC Test Data with the SRC CLI on page 205*

Stopping a NIC Host on a C-series Controller with the SRC CLI

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

To stop a NIC host:

- From operational mode, disable the NIC.

```
user@host> disable component nic
```

Related Topics

- *Restarting the NIC with the SRC CLI on page 178*
- *Restarting a NIC Agent with the SRC CLI on page 178*
- *Restarting a NIC Resolver with the SRC CLI on page 179*

Restarting the NIC with the SRC CLI

To restart a NIC host:

- From operational mode, restart the NIC.

```
user@host> request restart nic
```

You can also restart the NIC at the slot level.

Related Topics

- *Stopping a NIC Host on a C-series Controller with the SRC CLI on page 177*
- *Restarting a NIC Agent with the SRC CLI on page 178*
- *Restarting a NIC Resolver with the SRC CLI on page 179*

Restarting a NIC Agent with the SRC CLI

You can restart a NIC agent to have the agent read all data in the directory again. Restart a NIC agent if the agent is not synchronized with the directory, or if you switch from one directory to another.

To restart a NIC agent:

- From operational mode, restart the agent.

```
user@host>request nic restart agent name name
```

You can restart all NIC agents by omitting an agent name for the `request nic restart agent` command.

You can also restart a NIC agent at the slot level.

Related Topics

- *Stopping a NIC Host on a C-series Controller with the SRC CLI on page 177*
- *Restarting the NIC with the SRC CLI on page 178*
- *Restarting a NIC Resolver with the SRC CLI on page 179*

Restarting a NIC Resolver with the SRC CLI

In rare instances, such as when you are troubleshooting a NIC configuration, you may want to restart a NIC resolver.

To restart a NIC resolver:

- From operational mode, restart a resolver.

```
user@host>request nic restart resolver name name
```

You can restart all NIC resolvers by omitting a resolver name for the **request nic restart resolver** command.

You can also restart a NIC resolver at the slot level.

Related Topics

- *Stopping a NIC Host on a C-series Controller with the SRC CLI on page 177*
- *Restarting the NIC with the SRC CLI on page 178*
- *Restarting a NIC Agent with the SRC CLI on page 178*

Changing NIC Configurations with the SRC CLI

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. Set the editing level for the CLI to expert.

```
user@host> set cli level expert
```

2. Disable the NIC:

```
user@host> disable component nic
```

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

```
user@host> request nic clear scenario-data
```

4. Navigate to the [edit slot 0 nic] hierarchy level.

5. Change the value of the **static-dn** for the local configuration to identify the location of the DN for the new configuration scenario. For example:

```
[edit slot 0 nic]
```

```
user@host# set initial static-dn "l=OnePopSharedIp, l=NIC,  
ou=staticConfiguration, ou=Configuration, o=Management,<base>"
```

6. Return to operational mode, and restart the NIC host.

```
user@host>request nic slot number restart
```

7. Set the editing level for the CLI to expert.

```
user@host> set cli level basic
```

8. Configure the new NIC scenario.

Related Topics

- *Configuring the NIC with the SRC CLI on page 163*