

## Chapter 11

# Customizing a NIC Configuration

In most cases, you use the network information collector (NIC) configuration scenarios supplied in the sample data. See *Chapter 5, Locating Subscriber Information*. If you need a different resolution scenario, you can customize these scenarios.

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## Before You Customize a NIC Configuration

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We recommend that you customize a NIC configuration by adding components to or removing components from a NIC configuration scenario that is supplied with the sample data.

Before you customize a NIC configuration:

- Review *Chapter 5, Locating Subscriber Information* to determine whether you must use a NIC configuration scenario different from the ones supplied.
- Make sure that you are familiar with the NIC resolution process; see *Chapter 10, NIC Resolution Process*.

## Planning a Custom NIC Configuration

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Typically, you combine components from existing NIC configuration scenarios to create a new one.

To plan how to combine NIC configuration scenarios:

1. Review the NIC configuration scenarios available in the sample data, and decide which scenarios provide resolutions that you want to use. See *Chapter 5, Locating Subscriber Information*.
2. In SDX Admin, review the configuration for each scenario to be used. The configuration scenarios appear under  $l = NIC$ ,  $ou = staticConfiguration$ ,  $ou = Configuration$ ,  $o = Management$ ,  $o = umc$ .

If both scenarios use agents that have the same name, review the agent configuration to see whether or not the configurations are the same.

3. Decide whether a non-Java application is to communicate with NIC host.
4. Make a list of which agents and resolvers (stored under  $l = realms$ ) to use from each configuration scenario.
5. Decide which configuration scenario to use as a base. You will make a copy of this scenario and modify it.

## Creating a Custom NIC Configuration by Adding Components to an Existing Scenario

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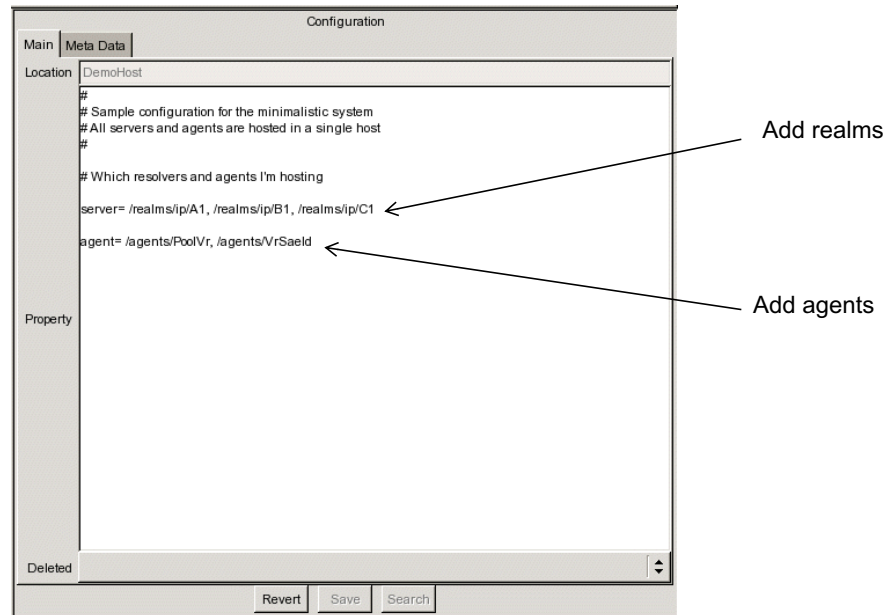
You can create a custom NIC configuration scenario in SDX Admin by copying an existing configuration scenario and modifying it.

To use SDX Admin to customize a NIC configuration:

1. In the navigation pane, select a NIC configuration scenario under  $l = NIC$ ,  $ou = staticConfiguration$ ,  $ou = Configuration$ ,  $o = Management$ ,  $o = umc$  to supply the basic type of resolution.
2. Expand the configuration scenario; then expand the agents item and the realms item for the configuration scenario, and review the configuration for each agent and each realm.
3. In the navigation pane, select a NIC configuration scenario under  $l = NIC$ ,  $ou = staticConfiguration$ ,  $ou = Configuration$ ,  $o = Management$ ,  $o = umc$  that provides other types of resolutions that you want to add to the first configuration scenario.
4. Expand the configuration scenario; then expand the agents item and the realms item for the configuration scenario, and review the configuration for each agent and each realm.

5. Make a copy of the base resolution scenario:
  - a. Right-click the configuration scenario under *l = NIC, ou = staticConfiguration, ou = Configuration, o = Management, o = umc*, and select Copy Tree.
  - b. Right-click the *l = NIC* item, and select Paste (Configuration).
  - c. In the Paste Configuration dialog box, enter the name of the custom scenario in the Location box, and click OK.
  - d. Expand the configuration for the custom scenario and for the agents, hosts, and realms under that scenario.
  
6. Copy agents to be added to this configuration scenario from another configuration scenario. For each agent to be added:
  - a. Right-click the agent in the configuration scenario that is to be copied, and select Copy Tree.
  - b. Right-click the agent item under the configuration scenario, and select Paste (Configuration).
  - c. If the name of the agent does not appear in the list of agents, in the Paste Configuration dialog box keep the name of the Location the same, and click OK.  
  
 If the name of the agent already appears in the list of agents and the configuration for this agent is different, in the Paste Configuration dialog box, enter a new name for the agent in the Location field, and click OK.
  
7. Copy each resolution to be added to the configuration scenario:
  - a. Right-click the resolution under *l = realms* in configuration scenario that is to be copied, and select Copy Tree.
  - b. Right-click *l = realms* under the new configuration scenario, and select Paste (Configuration).
  - c. In the Paste Configuration dialog box, keep the name of the location the same, and click OK.
  
8. If a non-Java application is to use the configuration scenario, copy the NIC locator configuration for each resolution:
  - a. Right-click the NIC locator under *l = nicLocators* in the configuration scenario that is to be copied, and select Copy Tree.
  - b. Right-click *l = nicLocators* under the new configuration scenario, and select Paste (Configuration).
  - c. In the Paste Configuration dialog box, keep the name of the location the same, and click OK.

- Expand hosts, and select DemoHost. In the content pane, add entries for the agents added and the realms added.



If you make changes to a directory entry that result in the entry's being removed from its search filter, stop and then restart the NIC host.

See *Managing Directory Changes for the Directory Agent* on page 194.

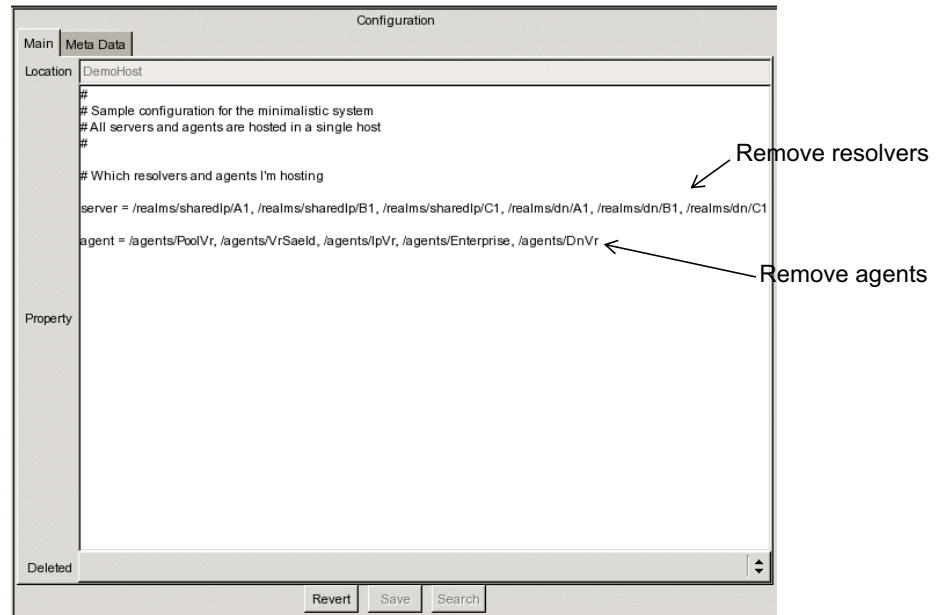
## Creating a Custom NIC Configuration by Removing Components in an Existing Scenario

You can create a custom NIC configuration scenario in SDX Admin by copying an existing configuration and removing components from it. For example, you can remove IP resolution from the OnePopDnSharedIP scenario to create a CustomOnePopDn scenario.

To use SDX Admin to customize a NIC configuration by removing components:

- In the navigation pane, select the NIC configuration scenario under *l = NIC, ou = staticConfiguration, ou = Configuration, o = Management, o = umc*.
- Expand the configuration scenario; then expand the agents item and the realms item for the configuration scenario, and review the configuration for each agent and each realm.
- Delete agents and resolvers that you want to remove by right-clicking the item and selecting Delete.

- Expand hosts, and select DemoHost. In the content pane, remove entries for the agents and the resolvers that were deleted.



If you make changes to a directory entry that result in the entry's being removed from its search filter, stop and then restart the NIC host.

See *Managing Directory Changes for the Directory Agent* on page 194.

## Qualifying NIC Data Types

If a NIC configuration scenario uses the same data type in more than one place in a resolution, you can add an identifier to the data type to clarify the source of the data type.

### Qualifying a NIC Data Type from SDX Admin

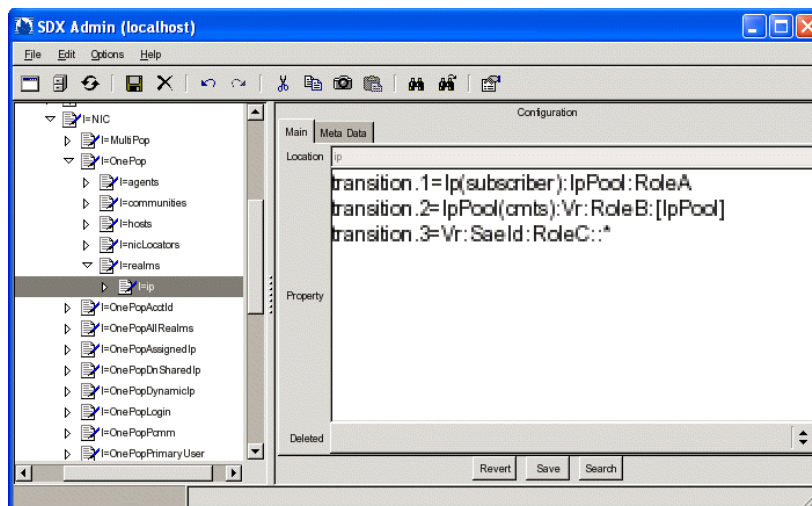
To use SDX Admin to qualify a data type:

1. In the navigation pane, select a resolution for a realm for a NIC configuration under  $l = \text{NIC}$ ,  $ou = \text{staticConfiguration}$ ,  $o = \text{Management}$ ,  $o = \text{umc}$ .

For example;  $l = \text{ip}$ ,  $l = \text{realms}$ ,  $l = \text{OnePop}$ ,  $l = \text{NIC}$ ,  $ou = \text{staticConfiguration}$ ,  $o = \text{Management}$ ,  $o = \text{umc}$ .

2. Directly after a data type, add an identifier for the value by adding the value after the data type in parentheses.

In the following example, subscriber qualifies the IP data type on the transition.1 line, and cmts qualifies the IpPool data type on the transition.2 line.



3. Click Save.

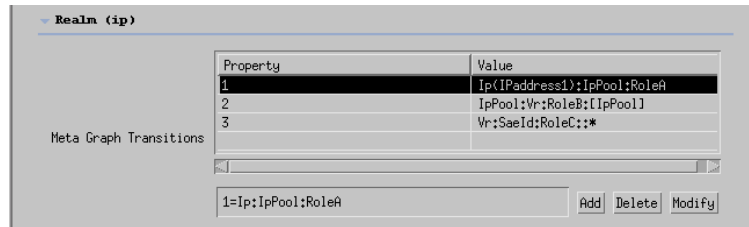
### Qualifying a NIC Data Type from SDX Configuration Editor

To use SDX Configuration Editor to qualify a data type:

1. In the navigation pane, select a NIC configuration file.
2. Select the Realms tab, and expand the Realm <name> section.

3. Select a row that lists a property and the associated value.

The property and value appear in the edit box below the list.

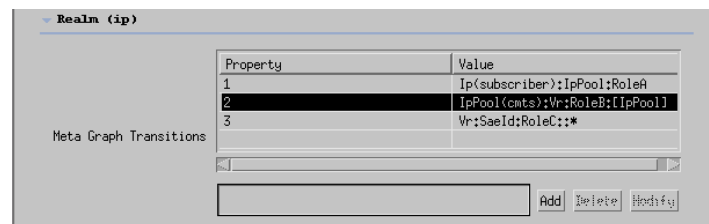


4. Add an identifier for the value by adding the value after the data type in parentheses, and click Modify.

For example, you would add each of the following lines separately:

```
IP(subscriber):IpPool:RoleA
IpPool(cmts):Vr:RoleB[IpPool]
```

After you edit an entry and then click Modify for each entry, the changes appear in the list.



5. Click File > Save.
6. Right-click the configuration file, and select SDX System Configuration > Export to LDAP Directory.

## Managing Directory Changes for the Directory Agent

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The NIC directory agent does not support dynamic changes to a directory entry that result in the entry's being removed from its search filter.

If you require such changes, you must restart the NIC host containing this agent for the changes to take effect. For example, consider the MultiPop scenario provided as part of the NIC sample data. If you remove the POP-Ottawa scope from the directory entry with the following DN:

```
virtualRouterName=default, orderedCimKeys=Ottawa_ERX_Node, o=Network,  
o=umc
```

then the OttawaPoolVr and OttawaVrSaeId agents will not dynamically detect the change. You must restart OttawaHost for the changes to take effect.