Chapter 21
Setting Up an SAE with the SRC CLI

This chapter describes how to initially configure the SAE and how to create grouped SAE configurations with the SRC CLI.

- To use the SRC CLI to set up an SAE, see *SRC-PE C-Web Interface Configuration Guide, Chapter 8, Setting Up an SAE with the C-Web Interface*.

- To set up the SAE on a Solaris platform, see *Chapter 35, Setting Up an SAE on a Solaris Platform*.

Topics in this chapter include:

- Initially Configuring the SAE on page 155

- Creating Grouped Configurations for the SAE with the SRC CLI on page 156

- Configuring Local Properties for the SAE with the SRC CLI on page 157

- Configuring the RADIUS Local IP Address and NAS ID with the SRC CLI on page 159

- Starting and Stopping the SAE with the SRC CLI on page 159

Initially Configuring the SAE

To initially configure the SAE:

- (Optional) Create a configuration group for the SAE.

  See *Creating Grouped Configurations for the SAE with the SRC CLI* on page 156

- Configure local properties for the SAE.

  See *Configuring Local Properties for the SAE with the SRC CLI* on page 157

- Configure a local IP address and NAS ID that the SAE uses to communicate with RADIUS servers.

  See *Configuring the RADIUS Local IP Address and NAS ID with the SRC CLI* on page 159

- Configure directory connection properties for the SAE.

  See *Configuring Directory Connection Properties* on page 239

- Configure directory eventing properties for the SAE.

  See Configuring Initial Directory Eventing Properties for SRC Components on page 240

Creating Grouped Configurations for the SAE with the SRC CLI

We recommend that you configure the SAE within a group. When you create a configuration group, the software creates a configuration with default values filled in.

Configuration groups allow you to build hierarchies that define different levels of sharing. There is a shared SAE configuration that you configure at the shared sae configuration hierarchy level. The configuration is shared with all SAE instances in the SRC network.

You can then create a grouped SAE configuration that is shared with some SAE instances. For example, if you create an SAE group called region within the shared SAE configuration, you could share the SAE configuration with all SAE instances in a particular region.

You can then create a lower-level group called location in the SAE group region, which could be shared with SAE instances in a particular location.

Configuration options that are defined in a lower-level group override options in a higher-level group. This functionality allows you to define general configuration values (such as plug-in definitions) on a higher level and augment or specialize them on a lower level.

Configuring an SAE Group

Use the shared option of the set slot number sae shared command to add a new group. Use the shared sae group *name* command to configure the group.

To configure a group:

1. From configuration mode, add a group. For example, to add a group called REGION-1 in the path /SAE/:

   [edit]
   user@host# **set slot 0 sae shared /SAE/REGION-1**

2. Commit the configuration.

   [edit]
   user@host# **commit**
   commit complete.

3. Configure the group as you would a shared SAE configuration.

```
[edit]
user@host# edit shared sae group REGION-1 ?
Possible completions:
  <[Enter]>                Execute this command
> configuration
> dhcp-classifier          Configure a DHCP classification script
> group                    Group of SAE configuration properties
> user-classifier          Configure a subscriber classification script
  |                        Pipe through a command
```

Configuring Local Properties for the SAE with the SRC CLI

Use the following configuration statements to configure local properties for the SAE:

```
slot number sae {
    base-dn base-dn;
    real-portal-address real-portal-address;
    java-runtime-environment java-runtime-environment;
    java-heap-size java-heap-size;
    java-new-size java-new-size;
    java-garbage-collection-options java-garbage-collection-options;
    port-offset port-offset;
    snmp-agent;
    shared shared;
}
```

To configure local properties on the SAE:

1. From configuration mode, access the SAE RADIUS configuration. This configuration is under the slot 0 hierarchy.

   [edit]
   user@host# **edit slot 0 sae**

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

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

3. Configure the interface on the SAE that the SAE uses to communicate with the router.

   [edit slot 0 sae]
   user@host# **set real-portal-address** *real-portal-address*

4. (Optional. Solaris platform.) If the Java Runtime Environment (JRE) is not in the default location (*../jre/bin/java*) on a Solaris platform, change the directory path to the JRE.

   [edit slot 0 sae]
   user@host# **set java-runtime-environment** *java-runtime-environment*

5. (Optional) If you encounter problems caused by lack of memory, change the maximum memory size available to the JRE.

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

6. Configure the amount of space available to the JRE when the SAE starts.

   [edit slot 0 sae]
   user@host# **set java-new-size** *java-new-size*

7. Configure the garbage collection functionality of the Java Virtual Machine.

   [edit slot 0 sae]
   user@host# **set java-garbage-collection-options** *java-garbage-collection-options*

8. If you install multiple instances of the SAE on the same host, set a port offset for SAE instances.

   [edit slot 0 sae]
   user@host# **set port-offset** *port-offset*

9. (Optional) Enable the SNMP agent to communicate with the SAE.

   [edit slot 0 sae]
   user@host# **set snmp-agent**

10. (Optional) Configure an SAE group configuration.

    [edit slot 0 sae]
    user@host# **set shared** *shared*

11. (Optional) Verify your configuration.

    ```
    [edit slot 0 sae]
    user@host# show
    base-dn o=UMC;
    real-portal-address 10.10.4.24;
    java-runtime-environment ../jre/bin/java;
    java-heap-size 896m;
    java-new-size 22m;
    java-garbage-collection-options "-Xbatch –XX:+UseConcMarkSweepGC
    -XX:CMSInitiatingOccupancyFraction=80 –XX:+UseParNewGC –XX:SurvivorRatio=1
    -XX:InitialTenuringThreshold=8 –XX:MaxTenuringThreshold=10
    -XX:TargetSurvivorRatio=90 –XX:+UseCMSCompactAtFullCollection
    -XX:CMSFullGCsBeforeCompaction=0  –XX:+CMSPermGenSweepingEnabled
    -XX:+CMSClassUnloadingEnabled –XX:+CMSParallelRemarkEnabled";
    port-offset 0;
    snmp-agent;
    shared /SAE/REGION-1;
    ```

Configuring the RADIUS Local IP Address and NAS ID with the SRC CLI

Use the following configuration statements to set the local RADIUS address and network access server (NAS ID):

```
slot number sae radius {
    local-address local-address;
    local-nas-id local-nas-id;
}
```

To set the local RADIUS address and NAS ID:

1. From configuration mode, access the SAE RADIUS configuration. This configuration is under the slot 0 hierarchy.

    ```
    [edit]
    user@host# edit slot 0 sae radius
    ```

2. Configure the local IP address that the SAE uses to communicate with RADIUS servers.

    ```
    [edit slot 0 sae radius]
    user@host# set local-address local-address
    ```

3. Configure the NAS ID that identifies the SAE when it sends RADIUS authentication and accounting records. Typically, the NAS ID is the name of the SAE host.

    ```
    [edit slot 0 sae radius]
    user@host# set local-nas-id local-nas-id
    ```

4. (Optional) Verify your configuration.

    ```
    [edit slot 0 sae radius]
    user@host# show
    local-address 10.10.4.20;
    local-nas-id SAE.host1;
    ```

Starting and Stopping the SAE with the SRC CLI

You must configure licenses before you start the SAE. When you start the SAE, the software verifies that a valid license is available. If no license is found, the SAE does not start.

To start the SAE:

■   From operational mode, enable the SAE.

    ```
    user@host> enable component sae
    Check license: OK
    Starting sae: may take a few minutes...
    ```

To stop the SAE:

■   From operational mode, disable the SAE.

    user@host> **disable component sae**
    Shutting down the SAE server: done

To verify that the SAE is running:

■   From operational mode, enter the show component command.

```
user@host> show component
Installed Components
Name      Version                                        Status
cli       Release: 7.0 Build: CLI.A.7.0.0.0171           running
acp       Release: 7.0 Build: ACP.A.7.0.0.0174           disabled
jdb       Release: 7.0 Build: DIRXA.A.7.0.0.0176         running
editor    Release: 7.0 Build: EDITOR.A.7.0.0.0176        disabled
redir     Release: 7.0 Build: REDIR.A.7.0.0.0176         disabled
licSvr    Release: 7.0 Build: LICSVR.A.7.0.0.0179        stopped
nic       Release: 7.0 Build: GATEWAY.A.7.0.0.0170       disabled
sae       Release: 7.0 Build: SAE.A.7.0.0.0166           running
www       Release: 7.0 Build: UMC.A.7.0.0.0169           disabled
jps       Release: 7.0 Build: JPS.A.7.0.0.0172           disabled
agent     Release: 7.0 Build: SYSMAN.A.7.0.0.0174        disabled
webadm    Release: 7.0 Build: WEBADM.A.7.0.0.0173        disabled
```