Chapter 3
Configuring Logging for SRC Components with the CLI

This chapter describes how to use the SRC CLI to configure logging for SRC components. You can use the CLI to configure logging on a Solaris platform or on a C-series controller. Topics include:

You can also use SRC configuration applications to configure component logging on a Solaris platform. See *Chapter 5, Managing SRC Log Files on a Solaris Platform*.

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Before You Configure Logging

Before you configure logging for SRC components, you should be familiar with the logging filters that you can configure. If you use a syslog log facility, you should be familiar with the syslog protocol. For information about logging filters see, *Chapter 2, Configuring Logging for SRC Components*.

Configuration Statements for Component Logging

Use the following configuration statements to configure logging for SRC components. You access these statements from the hierarchy for a component, such as:

- [edit shared acp configuration]

- [edit shared sae configuration]

- [edit shared nic scenario *scenario-name*]

- [edit snmp agent]

- [edit slot 0 jps]

```
logger name{
    file-logger {
        filter filter;
        filename filename;
        rollover-filename rollover-filename;
        maximum-file-size maximum-file-size;
    }

    syslog-logger {
        filter filter;
        syslog-host syslog-host;
        syslog-facility syslog-facility;
        format format;
    }
}
```

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

Configuring a Component to Store Log Messages in a File with SRC CLI

Use the following statements to configure an SRC component to store log messages in a file:

```
logger name file {
    filter filter;
    filename filename;
    rollover-filename rollover-filename;
    maximum-file-size maximum-file-size;
}
```

When you enable logging to a file, by default SRC components and applications write log files in the */opt/UMC/<component-directory>/var/log* folder for a component, such as */opt/UMC/sae/var/log*.

All log files with the file extension .log in a *var/log* directory are rotated daily. When a new log file is created, the previous day's file is compressed and saved.

If you plan to filter log messages, you should be familiar with severity levels and filters for logging before you configure system logging for a component. See *Chapter 2, Configuring Logging for SRC Components*.

To configure component logging to a file:

1. From configuration mode, access the configuration statement that configures the logging destination for the component.

   [edit]
   user@host# *component-hierarchy* **logger** *name* **file**

   For example:

   [edit]
   user@host# **edit shared sae configuration logger sae-file-log-1 file**

   [edit]
   user@host# **edit snmp agent logger snmp-file-log-1 file**

   [edit]
   user@host# **edit slot 0 jps logger jps-file-log-1 file**

2. Specify the filter to define which event messages the software logs or disregards.

   [edit shared sae configuration logger sae-file-log-1 file]
   user@host# **set filter** *filter*

   If you do not specify a filter, logging to the specified file is disabled.

   Filters can specify the logging level, such as debug, or can specify expressions.

3. Specify the absolute path of the filename that contains the current log files.

   [edit shared sae configuration logger sae-file-log-1 file]
   user@host# **set filename** *filename*

   Make sure that the user under which the J2EE application server or Web application server runs has write access to this folder. If this user does not have write access to the default folder, configure the component or application to write logs in folders to which the user has write access.

4. (Optional)—Solaris platform; not recommended for the C-series controller) Specify the absolute path of the filename that contains the log history.

   [edit shared sae configuration logger sae-file-log-1 file]
   user@host# **set rollover-filename** *rollover-filename*

When the log file reaches the maximum size, the software closes the log file and renames it with the name you specify for the rollover file. If a previous rollover file exists, the software overwrites it. The software then reopens the log file and continues to save event messages in it.

NOTE: On a C-series controller, log files are automatically rotated on a daily basis. Consider whether specifying a rollover filename is needed for SRC software running on a C-series controller. If you do configure a rollover file when files are rotated, the software creates five compressed versions of partial log files, and one uncompressed log file.

5. (Optional)—Solaris platform; not recommended for the C-series controller) Specify the maximum size of the log file and the rollover file.

[edit shared sae configuration logger sae-file-log-1 file]
user@host# **set maximum-file-size** *maximum-file-size*

Do not set the maximum file size to a value greater than the available disk space.

NOTE: On a C-series controller, log files are automatically rotated on a daily basis. Typically you do not specify a maximum file size when log files are rotated.

Configuring System Logging with SRC CLI

Use the following statements to configure the SRC software to send log messages to the system logging facility:

```
logger name syslog {
    filter filter;
    host host;
    facility facility;
    format format;
}
```

You can configure components to send log messages to the system log server (also called a syslog server) on the platform on which the SRC software is running.

If you plan to filter log messages, you should be familiar with severity levels and filters for logging before you configure system logging for a component. See *Chapter 2, Configuring Logging for SRC Components*.

To component logging to the system log server:

1. From configuration mode, access the configuration statement that configures the logging destination for the component. For example:

    [edit]
    user@host# *component-hierarchy* **logger** *name* **syslog**

    For example:

    [edit]
    user@host# **edit shared sae configuration logger sae-sys-1 syslog**

    [edit]
    user@host# **edit snmp agent logger snmp-sys-1 syslog**

    [edit]
    user@host# **edit slot 0 jps logger jps-sys-1 syslog**

2. (Optional) Specify the filter to define which event messages the software logs or disregards.

    [edit shared sae configuration logger sae-sys-1 syslog]
    user@host# **set filter** *filter*

    Filters can specify the logging level, such as debug, or can specify expressions.

3. (Optional) Change the IP address or name of a host that collects event messages by means of a standard system logging daemon.

    [edit shared sae configuration logger sae-sys-1 syslog]
    user@host# **set host** *host*

    By default, the host is loghost for the syslog server on the local host. (Configuration in the */etc/hosts* file sets loghost to localhost.)

    Make sure that the user under which the J2EE application server or Web application server runs has write access to this folder. If this user does not have write access to the default folder, configure the component or application to write logs in folders to which the user has write access.

4. (Optional) Specify the type of system log in accordance with the system logging protocol, a value of 0–23.

    [edit shared sae configuration logger sae-sys-1 syslog]
    user@host# **set facility** *facility*

5. (Optional) Specify the MessageFormat string that indicates how the information in an event message is printed.

[edit shared sae configuration logger sae-sys-1 syslog]
user@host# **set format** *format*

Specify a MessageFormat string as defined in

http://java.sun.com/j2se/1.4.2/docs/api/java/text/MessageFormat.html

The fields available for events are:

- 0—Time and date of the event

- 1—Name of the thread generating the event

- 2—Text message of the event

- 3—Category of the event

- 4—Priority of the event