Oracle ASAP™ Cartridge 1.0 for Lucent Stinger-DSLAM

Lucent Stinger 7.11 Cartridge Guide

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Preface

ASAP cartridges are discrete software components that are developed for the ASAP product. An ASAP cartridge offers specific domain behavior on top of the core ASAP software, and provides the configuration that supports a set of services on a network element (NE).

An ASAP cartridge is not a stand-alone component, but operates in conjunction with the ASAP core product. ASAP cartridges offer the following benefits:

◆ **Reduced Time to Market**—time to market of new services is reduced through simplified development, implementation, and extension of cartridges on customer sites.

◆ **Extendable**—cartridges can be extended to include additional services and components that deliver business value, without requiring changes to the original cartridge.

◆ **Simplified Effort**—the effort and technical knowledge that is required to perform customizations is reduced.

◆ **Ease of Installation**—cartridges can be installed into an ASAP environment without interfering with the existing install base.

An ASAP cartridge can be used to configure ASAP to provision the following:

◆ NEs from a specific vendor, such as Nortel or Lucent.

◆ Technologies, such as Asynchronous Transfer Mode (ATM) and Frame Relay switches, or Internet Protocol (IP) routers.

◆ Services that are supported on the NE, such as ATM, IP Virtual Private Networks (VPN), Wireless, or Optical.

Cartridges are designed for a specific technology, software load, and service.

An ASAP cartridge supports a particular set of services on an NE. These services are independent of customer-specific service definitions. Extensions to the cartridge can be performed by Professional Services or systems integrators to support customer-specific requirements.

For more information on extending a cartridge, refer to the *ASAP Cartridge Development Guide for Service Activation*.

Cartridge content

An ASAP cartridge contains the following:

◆ An interface to the NE.
◆ A set of State Table scripts.
◆ A set of atomic actions in the form of Atomic Service Description Layer (ASDL) commands.
◆ A set of Common Service Description Layer (CSDL) commands that form meaningful services.
◆ Sample work orders.
◆ Installation scripts.

Prerequisites

This guide is designed to be used as a reference for system integration teams such as managers, designers, programmers, and testers who are responsible for the adaptation and integration of ASAP-based solutions. It assumes that readers possess the following skills:

◆ A knowledge of ASAP programming concepts.
◆ A thorough understanding of service and network provisioning.
◆ Familiarity with telecommunications.

About this guide

This guide provides a detailed description of the Lucent Stinger 7.11 cartridge. It contains overview and technical information to assist in extending and integrating the cartridge into a customer environment.

The scope of this guide includes ASAP as it pertains to the use of this cartridge. It is not intended to be a complete ASAP reference guide.

For additional information when using this cartridge, refer to the following supporting documentation:

◆ **ASAP documentation set**—for detailed information on the ASAP core product.
◆ **ASAP Cartridge Development Guide for Service Activation**—for information on how to extend a cartridge.

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Cartridge Overview

The Lucent Stinger 7.11 cartridge provides the ASAP service configuration and network element (NE) interface to activate DSL services on Stinger NEs.

Digital Subscriber Line (DSL) services

This cartridge supports one service pack (DSL). This service pack has the following services that could activate a DSL service on the Lucent Stinger DSLAM switch.

Table 1: DSL services

Service	Description
Asynchronous DSL (ADSL) configuration	◆ Enables the ADSL line interface module (LIM) interface on the Lucent Stinger. ◆ Sets up the minimum and maximum bit rate for the upstream and downstream traffic of the ADSL LIM interface. ◆ Disables the ADSL LIM interface on the Lucent Stinger.
Synchronous DSL (SDSL) configuration	◆ Enables the SDSL LIM interface on the Lucent Stinger. ◆ Sets up the maximum data rate and its data rate mode of the SDSL LIM interface. ◆ Disables the SDSL LIM interface on the Lucent Stinger.

Table 1: DSL services

Service	Description
Cross-connection	◆ Create a cross connection between an existing LIM and an existing ATM trunk. It cross-connects a virtual path identifier (VPI)/virtual circuit identifier (VCI) on the subscriber side with that of VPI/VCI on the trunk side. Also configures the upstream and downstream traffic contracts. ◆ Deletes the cross-connection established between the LIM and the asynchronous transfer mode (ATM) trunk.
Digital Service 3 (DS3) - ATM trunk interface configuration	◆ Enables the ATM trunk with the DS3 interface on the Stinger NE. ◆ Disables the ATM trunk with the DS3 interface on the stinger NE.
Optical Carrier 3 (OC3) - ATM trunk interface configuration	◆ Enables the ATM trunk with the OC3 interface on the Stinger NE. ◆ Disables the ATM trunk with the OC3 interface on the stinger NE.
Configure LIM bandwidth	Configures the maximum upstream bandwidth and the guaranteed upstream bandwidth of each LIM.
Create traffic contracts that have different bandwidth requirements	Creates traffic contracts that configure the quality of service (QoS) classes such as: ◆ Constant Bit Rate (CBR) ◆ Variable Bit Rate (VBR) ◆ Available Bit rate (ABR) ◆ Unspecified Bit Rate (UBR) and their parameters peak rate kbps, cell delay, sustainable kbps, and maximum burst size. They could later be assigned to the upstream/downstream traffic requirements when a cross-connection is created.
Configuration of VPI/VCI range	◆ Configures the VPI/VCI range for LIM so that they could accept inbound connections from a particular type of modem. ◆ Configures the VPI/VCI range for ATM trunk so that they could accept inbound connections from a particular type of modem.

Table 1: DSL services

Service	Description
Query line side ports	◆ Queries the status of a specified ADSL interface, including the physical interface status and operating statistics. ◆ Queries the status of a specified SDSL interface, including the physical interface status and operating statistics.
Query trunk interface configuration	◆ Queries the status information for a DS3 trunk interface. ◆ Queries the status information for an OC3 trunk interface.
Query cross-connection	◆ Provides the PVC type, the current state of the PVC circuit and the VCC members of the cross-connection. ◆ Provides the name of the PVC and the current state of the circuit and the VCC type.

Hardware and software requirements

The following sections contain the high-level software and hardware environment requirements for provisioning DSL services using this cartridge, including:

◆ Network element (NE) interface

◆ ASAP version

◆ Operating environment

Network element (NE) interface

This cartridge is designed to operate with the following:

◆ Lucent Stinger

◆ Software load 7.11

◆ The cartridge uses CLI (Command Line Interface) over Telnet protocol to connect to the network element.

ASAP version

This cartridge was developed and tested using ASAP 4.6.1

Operating environment

The operating environments that are required to operate this version of ASAP in conjunction with the cartridge are:

◆ **Operating System**—Sun Solaris 2.8

◆ **Database Management System**—Oracle 8.1.7

Connecting to the NE

The Lucent Stinger DSL Services cartridge interfaces with Lucent Stinger NEs using the telnet communication protocol.

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Installing the Cartridge

The following generic installation scripts are provided with the Lucent Stinger 7.11 cartridge:

◆ ReleaseCartridge

◆ ConfigCartridge

◆ LoadCartridge

◆ ShowCartridges

These scripts manipulate the directories and files contained within the cartridge.

ReleaseCartridge

This script searches the cartridge repository directory and returns a list of all available cartridges. When you select the Lucent Stinger 7.11 cartridge from this list, the ReleaseCartridge script copies it into the $ASAP_BASE/Cartridges directory in your ASAP environment. If this location does not currently exist, the ReleaseCartridge script creates it.

ConfigCartridge

The ConfigCartridge installation script creates the service activation request manager (SARM) configuration for the cartridge, and the basic configuration of the Control database. It also picks up environment-specific data such as ASAP server names, and then invokes the install.sh script. The install.sh script provides default settings, and then prompts you to modify the data that is used to configure the ASAP instance and the cartridge.

LoadCartridge

This script adds the cartridge configuration into the ASAP databases, including:

◆ SARM

◆ Network Element Processor (NEP)

◆ Control

◆ Service Request Processor (SRP)

This script does not delete other cartridges or previous service configurations. However, if you reload the cartridge, the current cartridge is overwritten.

ShowCartridges

The ShowCartridges script displays the following:

◆ A list of all of the cartridges that have been released into $ASAP_BASE.

◆ A list of all of the cartridges that have been loaded into the ASAP databases.

Preparing for cartridge installation

Complete the following pre-installation tasks before attempting to install the Lucent Stinger 7.11 cartridge:

1. Ensure that the core ASAP product is installed on your system.

   For more information on installing the core ASAP product, refer to the *ASAP Installation and Setup Guide*.

2. Create a cartridge repository directory.

3. Copy the Lucent Stinger 7.11 cartridge from the Lucent Stinger-DSLAM CD image into this repository directory.

Creating a cartridge repository directory

If any cartridge has previously been installed on your system, a cartridge repository directory will already exist and you do not need to complete this procedure. To determine if a cartridge repository exists, type the following command at the Unix prompt:

```
echo $DEV_BASE
```

A cartridge repository directory exists if the $DEV_BASE environment variable:

◆ points to a specific directory

◆ has a different value than the $ASAP_BASE environment variable

Complete the following procedure to create a cartridge repository directory on your system when one of the following scenarios occurs:

◆ The $DEV_BASE variable is set to NULL.

◆ The value of $DEV_BASE is the same as the value of $ASAP_BASE.

To create the cartridge repository directory

1. Select an appropriate location on your system to create a repository directory.

   📄 You can use this repository to store all ASAP cartridges that you want to make available for installation into your ASAP environment.

2. Create the cartridge repository directory by typing the following command at the Unix prompt:

   ```
   mkdir <name of cartridge repository directory>
   ```

3. In the $ASAP_BASE directory, add the following line at the end of the Environment_Profile file:

   ```
   export DEV_BASE=<name of cartridge repository directory>
   ```

   ⚠️ Ensure that you do not change any references to the $DEV_BASE variable that appear in the Environment_Profile file other than the line that you add at the end of this file. Modifying other references may prevent you from restarting ASAP.

4. Save the Environment_Profile file, and then source it by typing:

   ```
   . Environment_Profile
   ```

   The cartridge repository directory is created and configured.

Copying the cartridge into the repository directory

After you created the cartridge repository directory, copy the Lucent Stinger 7.11 cartridge from the cartridge CD image into this repository. The following procedure describes how to copy a cartridge into the repository directory.

To copy the cartridge into the repository directory

1. Copy the LucentStinger-DSLAM711_ASAPCartridge_R1_1_FCS.tar file to the $DEV_BASE directory.

2. Untar the LucentStinger-DSLAM711_ASAPCartridge_R1_0_FCS.tar file by typing:

   ```
   tar -xvf LucentStinger-DSLAM711_ASAPCartridge_R1_0_FCS.tar
   ```

3. In the $DEV_BASE directory, create a scripts directory by typing:

   ```
   mkdir $DEV_BASE/scripts
   ```

4. Copy the following installation scripts from $DEV_BASE/Cartridges to $DEV_BASE/scripts:

   ◆ ReleaseCartridge
   ◆ ConfigCartridge
   ◆ LoadCartridge
   ◆ ShowCartridges

The following directory structure provides an example of how the cartridge may appear in the repository directory:

```
$DEV_BASE/Cartridges/
    ConfigCartridge
    ReleaseCartridge
    LoadCartridge
    ShowCartridges
    Lucent/
        Stinger-DSLAM/
            DSL/
            README
            .cartridge_id
                config/
                    <sample configuration files>
                isql/
                    <.sql files>
                objects/
                    <.so files>
                    <.jar files>
                programs/
                sample_wo/
                    <.wo files>
                    <.tst files>
                scripts/
                    install.sh
                    uninstall.sh
$DEV_BASE/scripts/
    ConfigCartridge
    ReleaseCartridge
    LoadCartridge
    ShowCartridges
```

You can use the $DEV_BASE/Cartridges directory as a repository for any additional cartridges that you want to install in this ASAP environment.

Installing the cartridge

It is recommended that you read the README files contained in the Lucent Stinger-DSLAM CD image before proceeding with the installation of this cartridge.

It is recommended that you stop ASAP before running the cartridge installation scripts by typing the following command at the Unix prompt:

```
stop_asap_sys
```

To install the cartridge, do the following

1. Release the cartridge into your ASAP environment.

2. Configure the cartridge.

3. Load the cartridge into each of the ASAP databases.

Releasing the cartridge

The following procedure describes the steps required to release the Lucent Stinger 7.11 cartridge into your ASAP environment.

To release the cartridge into your ASAP environment

1. If this is the first cartridge installation in your ASAP environment, copy the cartridge installation scripts from the cartridge repository directory into the ASAP environment by typing:

```
cp  $DEV_BASE/scripts/*Cartridge*  $ASAP_BASE/scripts/
```

The installation scripts are now available throughout your ASAP environment.

📄 If these scripts have already been copied into the ASAP environment, refresh them with the latest version from the cartridge CD image.

2. Run the ReleaseCartridge script by typing:

```
ReleaseCartridge [-h][-s <source_dir>] [-d <dest_dir>]
```

Where:

◆ **[-h]**—provides help by reporting the usage of this installation script.

◆ **[-s]**—is the source directory. By default, this directory is $DEV_BASE/Cartridges.

◆ **[-d]**—is the destination directory. By default, this is the current directory. The recommended <current directory> is $ASAP_BASE/Cartridges.

The ReleaseCartridge script searches the cartridge repository and displays a list of all available cartridges.

3. From the list of available cartridges, select the Lucent Stinger 7.11 cartridge. This cartridge is copied into the designated directory in the ASAP environment.

   📋 If the designated directory does not exist, the ReleaseCartridge script creates it. The cartridge base directory is populated with cartridge-specific data. For example, the <$ASAP_BASE or other path>/Cartridges/Lucent/Stinger-DSLAM/DSL/ directory is created.

   ⚠️ The ReleaseCartridge script uses several default settings. Exercise care when using source and destination directories as they cannot be the same. For example, you cannot use the repository directory as the destination directory.

Configuring the cartridge

The following procedure describes the steps required to configure the Lucent Stinger 7.11 cartridge.

To configure the cartridge

1. Run the ConfigCartridge script by typing:

   ```
   ConfigCartridge [-h] [-d <cartridge base directory>]
   ```

   Where:

   ◆ **[-h]**—provides help by reporting the usage of this installation script.
   ◆ **[-d <cartridge base directory>]**—is the base directory of the cartridge. For example, $ASAP_BASE/Cartridges/Lucent/Stinger-DSLAM/DSL. If the cartridge base directory is not specified, the ConfigCartridge script selects the current directory by default.

   📋 When you run the ConfigCartridge script, the sample_wo files are modified. If you re-run this script without first running the ReleaseCartridge script, refresh the sample_wo files from the repository.

2. When prompted, do one of the following:

   ◆ Accept the default settings provided to configure the ASAP instance and the cartridge.
   ◆ Replace these values with real settings for an actual NE.

   The following table lists the parameters that you will be prompted to either accept or modify:

Table 2: Configuration Parameters

Configuration Parameter	Default Value	Description
NEP name	NEP_S200	Local NE name.
Host login	Admin	Login name for Lucent Stinger.

Table 2: Configuration Parameters

Configuration Parameter	Default Value	Description
Host password	Ascend	Password for Lucent Stinger.
Host IP address	192.168.9.205	IP address of the Lucent Stinger.

If you select the default settings provided during the cartridge installation, you can still configure additional NE instances in your network later. However, you can only use this first NE instance to test the cartridge installation in loopback mode.

For more information on configuring multiple NE instances, see "Configuration example" on page 59.

3. In the ASAP.cfg configuration file, locate the NEP section(s) associated with the NEP(s) that are used by the cartridge, and then set the following variable:

```
export LOOPBACK_ON=1
```

4. Source the Environment_Profile file by typing the following command at the Unix prompt:

```
. Environment_Profile
```

Loading the cartridge

This section describes how to load the Lucent Stinger 7.11 cartridge into the ASAP databases.

To load the cartridge into the ASAP databases

Run the LoadCartridge script by typing:

```
LoadCartridge [-h][-w] -s <source_dir>
```

Where:

- ◆ **[-h]**—provides help by reporting the usage of this installation script
- ◆ **[-w]**—loads the sample work orders
- ◆ **-s <source_dir>**—is the base directory of the cartridge. For example, <$ASAP_BASE or other>/Cartridges/Lucent/Stinger-DSLAM/DSL/

The LoadCartridge script adds the cartridge configuration into the ASAP databases, for example, the SARM, NEP, Control, and SRP databases. This script does not delete other cartridges or previous service configurations. However, if you reload the cartridge, the current cartridge is overwritten.

Uninstalling the cartridge

You can uninstall the Lucent Stinger 7.11 cartridge by performing the following procedure.

To uninstall the cartridge

1. Stop ASAP by typing the following command at the Unix prompt:

   ```
   stop_asap_sys
   ```

2. Run the LoadCartridge script by typing:

   ```
   LoadCartridge -u
   ```

   A list of all cartridges that have been released into the $ASAP_BASE/Cartridges directory appears.

3. From the list of available cartridges, select the Lucent Stinger 7.11 cartridge. The cartridge is uninstalled.

   The LoadCartridge script allows you to uninstall additional cartridges until you exit the script.

   A cartridge can only uninstall what was initially installed by the installation process. Additions or modifications performed manually after the initial installation, or by using other scripts or tools, are not handled and may cause an incorrect ASAP configuration.

4. Run the ShowCartridges script by typing:

   ```
   ShowCartridges -v
   ```

   The following appears:

   ◆ a list of all of the cartridges that have been released into $ASAP_BASE
   ◆ a list of all of the cartridges that have been loaded into the ASAP databases

5. Ensure that the cartridge was successfully uninstalled by verifying that the Lucent Stinger 7.11 cartridge does not appear in these lists.

Testing the cartridge installation

Knowledge of the network element (NE), services, and basic ASAP configuration is required to test this cartridge installation. You may need to perform adjustments to provision a service for a specific NE, network, or connectivity configuration.

You can test the cartridge installation using one of the following methods:

◆ **Loopback mode**—does not actually connect to or send commands to the NE.
◆ **Live mode**—connects to and sends commands to a live NE.

Configuring parameters for testing in loopback and live modes

The following sections provide details on the variables you must configure in the ASAP.cfg configuration file for loopback and live testing modes.

Loopback mode

The following table details the parameters that must be set in ASAP.cfg to test the cartridge in loopback mode.

Table 3: Loopback mode parameter settings

Configuration Variable	Parameter Settings	Location in ASAP.cfg
LOOPBACK_ON	1	Global section

Live mode

The following table details the parameters that must be set in ASAP.cfg to test the cartridge in live mode.

Table 4: Live mode parameter settings

Configuration Variable	Parameter Settings	Location in ASAP.cfg
LOOPBACK_ON	0	Global section

Testing the Lucent Stinger 7.11 cartridge installation

It is recommended that you perform the initial test of the cartridge installation in loopback mode. The following procedure describes the steps required to test the cartridge installation in loopback mode.

To test the cartridge installation

1. Stop ASAP by typing the following command at the Unix prompt:

    ```
    stop_asap_sys
    ```

2. In the ASAP.cfg configuration file, ensure that the following parameters are set:

    For State Table-based cartridges:

    LOOPBACK_ON=1—to test in loopback mode

3. Start ASAP by typing:

    ```
    start_asap_sys
    ```

4. Send the sample work orders through the SRP Emulator by typing:

```
run_suite $SRP <ctrl_password> <suite name>
```

You can locate the suite name(s) in the <cartridge base directory>/sample_wo/directory by typing:

```
grep   SUITE * | grep -v END
```

A list of all available suites appears.

For more information on the SRP Emulator, refer to the *ASAP System Configuration and Management Guide*.

5. Verify the status of the sample work orders by typing:

```
asap_utils l
```

All successful work orders return the 104 state.

To view the sample work orders provided with this cartridge, refer to the Lucent Stinger-DSLAM CD image.

3

Atomic Service Description Layer (ASDL) Commands

ASDL commands represent a set of atomic actions that can be performed on a network element (NE). ASDLs can be combined together to create meaningful services (CSDLs) within a cartridge.

This chapter presents detailed information on the ASDL parameters that are provided in this cartridge. The following table lists and describes the type of parameter information that is included.

Table 5: ASDL parameter information

Item	Description
Parameter name	Identifies the parameter that is configured for the stated service.
Description	Describes the parameter.
Range	Describes or lists the range of values that can be used to satisfy this parameter.
Default value	Configures a default value for the parameter so that it is not mandatory for the upstream system to provide a value.
Type	Indicates one of the following parameter types: ◆ S—Scalar ◆ C—Compound ◆ I—Indexed
Class	Indicates one of the following parameter classifications: ◆ R—Required ◆ O—Optional

For a detailed description of the required and optional parameter classifications, refer to the *ASAP Product Overview.*

Digital Subscriber Line

This cartridge provides the following ASDL commands:

◆ A_STINGER_7-11_ADD_X-CONNECT
◆ A_STINGER_7-11_ALLOC_LIM-BWDTH
◆ A_STINGER_7-11_CFG_ADSL-BITRATE
◆ A_STINGER_7-11_CFG_SDSL-DATA-RATE
◆ A_STINGER_7-11_CREATE_ATM-QOS
◆ A_STINGER_7-11_DEL_X-CONNECT
◆ A_STINGER_7-11_DISABLE_ADSL
◆ A_STINGER_7-11_DISABLE_DS3-ATM-TRUNK
◆ A_STINGER_7-11_DISABLE_OC3-ATM-TRUNK
◆ A_STINGER_7-11_DISABLE_SDSL
◆ A_STINGER_7-11_ENABLE_ADSL
◆ A_STINGER_7-11_ENABLE_DS3-ATM-TRUNK
◆ A_STINGER_7-11_ENABLE_OC3-ATM-TRUNK
◆ A_STINGER_7-11_ENABLE_SDSL
◆ A_STINGER_7-11_LIB
◆ A_STINGER_7-11_QRY_ADSL-STATUS
◆ A_STINGER_7-11_QRY_DS3-STATUS
◆ A_STINGER_7-11_QRY_OC3-STATUS
◆ A_STINGER_7-11_QRY_PVC-STATUS
◆ A_STINGER_7-11_QRY_SDSL-STATUS
◆ A_STINGER_7-11_QRY_VCC-STATUS
◆ A_STINGER_7-11_SET_VPI-VCI-ATM
◆ A_STINGER_7-11_SET_VPI-VCI-LIM

A_STINGER_7-11_ADD_X-CONNECT

Adds a cross-connection between the LIM and the ATM trunk. It is implemented by the state table program **ST_LUC_STINGER_7-11_ADD_X-CONNECT_T.**

Table 6: A_STINGER_7-11_ADD_X-CONNECT

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R

Table 6: A_STINGER_7-11_ADD_X-CONNECT

Parameter Name	Description	Range	Default Value	Type	Class
CONNECTION_NAME	Name of the ATM connection profile.			S	R
VPI_LIM	VPI for the subscriber side.			S	O
VCI_LIM	VCI for the subscriber side.			S	O
NAILED_GROUP_LIM	Nailed group number interface used by the subscriber side.			S	R
VPI_TM	VPI for the trunk side.			S	O
VCI_TM	VCI for the trunk side.			S	O
NAILED_GROUP_TM	Nailed group number interface used by the trunk side.			S	R
QOS_UPSTREAM_CONTRACT	Traffic contract name used for the upstream traffic on the circuit.			S	O
QOS_DOWNSTREAM_CONTRACT	Traffic contract name used for the downstream traffic on the circuit.			S	O

A_STINGER_7-11_ALLOC_LIM-BWDTH

Distributes the total bandwidth between LIMs. It is implemented by the state table program **ST_LUC_STINGER_7-11_ALLOC_LIM-BWDTH_T.**

Table 7: A_STINGER_7-11_ALLOC_LIM-BWDTH

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
LIM_NUM	LIM number on the Stinger.			S	R
MAX_BWDTH	Maximum upstream bandwidth for the slot, expressed in Kbps. Valid values are from 0 to 155520 (155.52 Mbps, which is OC3 speed).		◆ 70 Mbps for each LIM ◆ 1 Mbps for each CM	S	O

Table 7: A_STINGER_7-11_ALLOC_LIM-BWDTH

Parameter Name	Description	Range	Default Value	Type	Class
GUARANTEED _BWDTH	Guaranteed upstream bandwidth for the slot, expressed in Kbps.		44 Mbps for each LIM, which distributes the sum of 622 Mbps across the 14 LIM slots.	S	O

A_STINGER_7-11_CFG_ADSL-BITRATE

Configures the minimum and maximum bit rate for upstream and downstream. It is implemented by the state table program **ST_LUC_STINGER_7-11_CFG_ADSL-BITRATE_T.**

Table 8: A_STINGER_7-11_CFG_ADSL-BITRATE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SHELF_NUM	Shelf number of LIM in Stinger.			S	R
SLOT_NUM	Slot number of LIM in Stinger.			S	R
PORT_NUM	Port number of LIM in Stinger.			S	R
ADSL_MIN_BI TRATE_UP	Minimum bit rate for upstream traffic.			S	O
ADSL_MIN_BI TRATE_DOWN	Minimum bit rate for downstream traffic.			S	O
ADSL_MAX_BI TRATE_UP	Maximum bit rate for upstream traffic.			S	O
ADSL_MAX_BI TRATE_DOWN	Maximum bit rate for downstream traffic.			S	O

A_STINGER_7-11_CFG_SDSL-DATA-RATE

Configures the maximum data rate and its mode. It is implemented by the state table program **ST_LUC_STINGER_7-11_CFG_SDSL-DATA-RATE_T.**

Table 9: A_STINGER_7-11_CFG_SDSL-DATA-RATE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SHELF_NUM	Shelf number of LIM in Stinger.			S	R
SLOT_NUM	Slot number of LIM in Stinger.			S	R
PORT_NUM	Port number of LIM in Stinger.			S	R
SDSL_MAX_RATE	Maximum data rate for the line, expressed in bits per second. The loop can be set to support up to 2.32 Mbps.			S	O
SDSL_DATA_RATE_MODE	Per-session SDSL data-rate mode. Must be set to single baud, which causes the LIM to train to a single data rate, even if the modem can train at a higher or lower data rate.			S	O

A_STINGER_7-11_CREATE_ATM-QOS

Creates the QoS parameter that suports different types of ATM traffic. It is implemented by the state table program **ST_LUC_STINGER_7-11_CREATE_ATM-QOS_T.**

Table 10: A_STINGER_7-11_CREATE_ATM-QOS

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
CONTRACT_NAME	A unique name for the contract (a text string of up to 16 characters). The name is used to apply the specified traffic settings to any number of connections.			S	R

Table 10: A_STINGER_7-11_CREATE_ATM-QOS

Parameter Name	Description	Range	Default Value	Type	Class
QOS_CLASS	ATM service category. Supported values are CBR (Constant Bit Rate), Real-Time-VBR (Real-Time Variable Bit Rate), Non-Real-Time-VBR (Non-Real-Time Variable Bit Rate), ABR (Available Bit Rate), and UBR (Unspecified Bit Rate).			S	R
PEAK_RATE_KBPS	Peak bit rate per second in Kbps. For CBR traffic, this setting specifies the static bit rate. For ABR, it is the maximum explicit rate. For VBR, it is the upper boundary of the variable bit rate.			S	O
CELL_DELAY	Cell delay variation in microseconds. This setting is related to the jitter tolerance of the application. For example, the ideal delay variation would be zero for an application such as voice.		20 milliseconds is a reasonable jitter threshold for most applications with a low tolerance for delay (CBR and real-time VBR traffic, for example). A higher value could be used for non real-time VBR and other applications that are not delay sensitive	S	O
SUSTAINABLE_RATE_KBPS	Sustainable cell rate (SCR) is the average cell transmission rate allowed over a given period of time on a given circuit. The value is read-only. It is calculated from the Sustainable-Rate-Kbits-Per-Sec setting and used in the internal ATM configuration.			S	O

Table 10: A_STINGER_7-11_CREATE_ATM-QOS

Parameter Name	Description	Range	Default Value	Type	Class
MAX_BURST_SIZE	Maximum burst size (MBS) is the maximum number of cells that can be transmitted at PCR before the Stinger unit determines that the connection is exceeding the traffic contract and begins discarding or tagging cells. This value is expressed relative to the PCR (as a cell rate, not Kbps). It applies only to VBR traffic.			S	O

A_STINGER_7-11_DEL_X-CONNECT

Deletes the cross-connection between the LIM and the ATM trunk. It is implemented by the state table program **ST_LUC_STINGER_7-11_DEL_X-CONNECT_T.**

Table 11: A_STINGER_7-11_DEL_X-CONNECT

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
CONNECTION_NAME	Name for the connection profile.			S	R

A_STINGER_7-11_DISABLE_ADSL

Disables the ADSL configuration. It is implemented by the state table program **ST_LUC_STINGER_7-11_DISABLE_ADSL_T.**

Table 12: A_STINGER_7-11_DISABLE_ADSL

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SHELF_NUM	Shelf number of LIM in Stinger.			S	R
SLOT_NUM	Slot number of LIM in Stinger.			S	R

Table 12: A_STINGER_7-11_DISABLE_ADSL

Parameter Name	Description	Range	Default Value	Type	Class
PORT_NUM	Port number of LIM in Stinger.			S	R

A_STINGER_7-11_DISABLE_DS3-ATM-TRUNK

Disables the DS3 ATM trunk configuration. It is implemented by the state table program **ST_LUC_STINGER_7-11_DISABLE_DS3-ATM-TRUNK_T.**

Table 13: A_STINGER_7-11_DISABLE_DS3-ATM-TRUNK

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SHELF_NUM	Shelf number of trunk in Stinger.			S	R
SLOT_NUM	Slot number of trunk in Stinger.			S	R
PORT_NUM	Port number of trunk in Stinger.			S	R

A_STINGER_7-11_DISABLE_OC3-ATM-TRUNK

Disables the OC3 ATM trunk configuration. It is implemented by the state table program **ST_LUC_STINGER_7-11_DISABLE_OC3-ATM-TRUNK_T.**

Table 14: A_STINGER_7-11_DISABLE_OC3-ATM-TRUNK

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SHELF_NUM	Shelf number of trunk in Stinger.			S	R
SLOT_NUM	Slot number of trunk in Stinger.			S	R
PORT_NUM	Port number of trunk in Stinger.			S	R

A_STINGER_7-11_DISABLE_SDSL

Disables the SDSL configuration. It is implemented by the state table program **ST_LUC_STINGER_7-11_DISABLE_SDSL_T.**

Table 15: A_STINGER_7-11_DISABLE_SDSL

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SHELF_NUM	Shelf number of LIM in Stinger.			S	R
SLOT_NUM	Slot number of LIM in Stinger.			S	R
PORT_NUM	Port number of LIM in Stinger.			S	R

A_STINGER_7-11_ENABLE_ADSL

Enables the ADSL configuration. It is implemented by the state table program **ST_LUC_STINGER_7-11_ENABLE_ADSL_T.**

Table 16: A_STINGER_7-11_ENABLE_ADSL

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
ADSL_NAME	Name of the interface.			S	O
SHELF_NUM	Shelf number of LIM in Stinger.			S	R
SLOT_NUM	Slot number of LIM in Stinger.			S	R
PORT_NUM	Port number of LIM in Stinger.			S	R
NAILED_GROUP_LIM	Nailed group number for AL-DMT physical interface. Each interface is assigned a unique default number, so you do not need to modify this parameter. If you assign a new value, it must be a number from 1 to 1024 that is unique within the system.			S	O

A_STINGER_7-11_ENABLE_DS3-ATM-TRUNK

Enables the DS3 ATM trunk configuration. It is implemented by the state table program **ST_LUC_STINGER_7-11_ENABLE_DS3-ATM-TRUNK_T.**

Table 17: A_STINGER_7-11_ENABLE_DS3-ATM-TRUNK

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
DS3_ATM_NAME	Name of the DS3 ATM trunk interface.			S	O
SHELF_NUM	Shelf number of trunk in Stinger.			S	R
SLOT_NUM	Slot number of trunk in Stinger.			S	R
PORT_NUM	Port number of trunk in Stinger.			S	R
SPARE_MODE	Sparing mode for the trunk in Stinger (manual/inactive/ automatic).			S	O
NAILED_GROUP_ATM	Nailed group number interface used by the trunk Side. Each interface is assigned a unique default number, so you do not need to modify this parameter. If you assign a new value, it must be a number from 1 to 1024 that is unique within the system.			S	O

A_STINGER_7-11_ENABLE_OC3-ATM-TRUNK

Enables the OC3 ATM trunk configuration. It is implemented by the state table program **ST_LUC_STINGER_7-11_ENABLE_OC3-ATM-TRUNK_T.**

Table 18: A_STINGER_7-11_ENABLE_OC3-ATM-TRUNK

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
OC3_ATM_NAME	Name of the OC3 ATM trunk interface.			S	O

Table 18: A_STINGER_7-11_ENABLE_OC3-ATM-TRUNK

Parameter Name	Description	Range	Default Value	Type	Class
SHELF_NUM	Shelf number of trunk in Stinger.			S	R
SLOT_NUM	Slot number of trunk in Stinger.			S	R
PORT_NUM	Port number of trunk in Stinger.			S	R
SPARE_MODE	The sparing mode for the trunk in Stinger (manual/inactive/ automatic).			S	O
NAILED_GROU P_ATM	Nailed group number interface used by the trunk side. Each interface is assigned a unique default number, so you do not need to modify this parameter. If you assign a new value, it must be a number from 1 to 1024 that is unique within the system.			S	O

A_STINGER_7-11_ENABLE_SDSL

Enables the SDSL configuration. It is implemented by the state table program **ST_LUC_STINGER_7-11_ENABLE_SDSL_T.**

Table 19: A_STINGER_7-11_ENABLE_SDSL

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SDSL_NAME	Name of the interface.			S	O
SHELF_NUM	Shelf number of LIM in Stinger.			S	R
SLOT_NUM	Slot number of LIM in Stinger.			S	R
PORT_NUM	Port number of LIM in Stinger.			S	R

Table 19: A_STINGER_7-11_ENABLE_SDSL

Parameter Name	Description	Range	Default Value	Type	Class
NAILED_GROUP_LIM	Nailed group number for SDSL physical interface. Each interface is assigned a unique default number, so you do not need to modify this parameter. If you assign a new value, it must be a number from 1 to 1024 that is unique within the system.			S	O

A_STINGER_7-11_LIB

Library ASDL for Lucent Stinger. It is implemented by the state table program **ST_LUC_STINGER_7-11_LIB_T.**

A_STINGER_7-11_QRY_ADSL-STATUS

Query the status of a specific ADSL interface. It is implemented by the state table program **ST_LUC_STINGER_7-11_QRY_ADSL-STATUS_T.**

Table 20: A_STINGER_7-11_QRY_ADSL-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SHELF_NUM	Shelf number of LIM in Stinger.			S	R
PORT_NUM	Port number of LIM in Stinger.			S	R
SLOT_NUM	Slot number of LIM in Stinger.			S	R

A_STINGER_7-11_QRY_DS3-STATUS

Queries the status of the DS3 ATM trunk. It is implemented by the state table program **ST_LUC_STINGER_7-11_QRY_DS3-STATUS_T.**

Table 21: A_STINGER_7-11_QRY_DS3-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SHELF_NUM	Shelf number of trunk in Stinger.			S	R
PORT_NUM	Port number of trunk in Stinger.			S	R
SLOT_NUM	Slot number of trunk in Stinger.			S	R

A_STINGER_7-11_QRY_OC3-STATUS

Queries the status of the OC3 ATM trunk. It is implemented by the state table program **ST_LUC_STINGER_7-11_QRY_OC3-STATUS_T.**

Table 22: A_STINGER_7-11_QRY_OC3-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SHELF_NUM	Shelf number of trunk in Stinger.			S	R
PORT_NUM	Port number of trunk in Stinger.			S	R
SLOT_NUM	Slot number of trunk in Stinger.			S	R

A_STINGER_7-11_QRY_PVC-STATUS

Queries the ATM PVC status of the cross-connection. It is implemented by the state table program **ST_LUC_STINGER_7-11_QRY_PVC-STATUS_T.**

Table 23: A_STINGER_7-11_QRY_PVC-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R

Table 23: A_STINGER_7-11_QRY_PVC-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
CIRCUIT_NAME	Name of the PVC, which is the value of the station parameter in a local profile or the user-name attribute in a RADIUS profile.			S	R

A_STINGER_7-11_QRY_SDSL-STATUS

Queries the status of a specific SDSL interface. It is implemented by the state table program **ST_LUC_STINGER_7-11_QRY_SDSL-STATUS_T.**

Table 24: A_STINGER_7-11_QRY_SDSL-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SHELF_NUM	Shelf number of LIM in Stinger.			S	R
PORT_NUM	Port number of LIM in Stinger.			S	R
SLOT_NUM	Slot number of LIM in Stinger.			S	R

A_STINGER_7-11_QRY_VCC-STATUS

Queries the ATM VCC status of the cross-connection. It is implemented by the state table program **ST_LUC_STINGER_7-11_QRY_VCC-STATUS_T.**

Table 25: A_STINGER_7-11_QRY_VCC-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SHELF_NUM	Shelf number of LIM/trunk in Stinger.			S	R
PORT_NUM	Port number of LIM/trunk in Stinger.			S	R

Table 25: A_STINGER_7-11_QRY_VCC-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
SLOT_NUM	Slot number of LIM/trunk in Stinger.			S	R
VPI	VPI used in the cross-connection.			S	R
VCI	VCI used in the cross-connection.			S	R

A_STINGER_7-11_SET_VPI-VCI-ATM

Configures the VCI and VPI range for ATM. It is implemented by the state table program **ST_LUC_STINGER_7-11_SET_VPI-VCI-ATM_T.**

Table 26: A_STINGER_7-11_SET_VPI-VCI-ATM

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SHELF_NUM	Shelf number of trunk in Stinger.			S	R
PORT_NUM	Port number of trunk in Stinger.			S	R
SLOT_NUM	Slot number of trunk in Stinger.			S	R

Table 26: A_STINGER_7-11_SET_VPI-VCI-ATM

Parameter Name	Description	Range	Default Value	Type	Class
VPI_VCI_RANGE	Valid range of VCI numbers to be used with VPI zero for virtual channel connections (VCCs). The default is 8K, which distributes the system maximum of 32K VCCs across four trunk ports. If you specify additional VPIs for VC switching (see the VC-Switching-VPI setting), the number of VCCs supported on a port increases proportionally for each of the reserved VPIs. You must set this parameter together with the VC-Switching-VPI parameter to distribute the 32K VCCs across active trunk ports. Following are valid values: ◆ vpi-0-255-vci-32-255 ◆ vpi-0-255-vci-32-511 ◆ vpi-0-255-vci-32-1023 ◆ vpi-0-255-vci-32-2047 ◆ vpi-0-255-vci-32-4095 ◆ vpi-0-255-vci-32-8191 ◆ vpi-0-255-vci-32-16383		8K	S	O
VCI	Array of up to 7 VPIs to use for VC switching. The default is zero, which is always used for VC switching.		Zero	S	O
VPI	Array of up to 7 VPIs to use for VC switching. The default is zero, which is always used for VC switching. With the default zero settings, the range of VCIs specified in the VPI-VCI-Range setting determines the total number of VCCs the port will handle. If you specify another VPI number to use for VC switching, the number of VCCs the port will allow is doubled. You must set this parameter together with the VPI-VCI-Range setting to distribute the maximum 32K VCCs across active trunk ports.			S	O
ATM_TYPE	ATM trunk configuration is for DS3, or OC3 type ATM.			S	R

A_STINGER_7-11_SET_VPI-VCI-LIM

Configures VCI and VPI range for LIM. It is implemented by the state table program **ST_LUC_STINGER_7-11_SET_VPI-VCI-LIM_T.**

Table 27: A_STINGER_7-11_SET_VPI-VCI-LIM

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Host NE identifier.			S	R
SLOT_NUM	Slot number of the LIM on the Stinger.			S	R
VPI_VCI_RANGE	Valid range of VPI and VCI numbers for each LIM slot in the system, where N is the slot number. All ports on a LIM use the same VPI/VCI range. Following are valid values: ◆ vpi-0-3-vci-32-511 ◆ vpi-0-7-vci-32-255 ◆ vpi-0-15-vci-32-127 ◆ vpi-0-31-vci-32-63			S	O

4

Service Definition

The Lucent Stinger 7.11 cartridge contains a set of CSDLs that map to one or more ASDL commands. You can also create additional CSDLs that map to existing and newly-created ASDLs. An upstream system can assemble any of these CSDL commands onto a work order for provisioning.

This chapter presents detailed information on the CSDL parameters that are provided in this cartridge. The following table lists and describes the type of parameter information that is included.

Table 28: CSDL Parameter Information

Item	Description
Parameter name	Identifies the parameter that is configured for the stated service.
Description	Describes the parameter.
Range	Describes or lists the range of values that can be used to satisfy this parameter.
Default value	Configures a default value for the parameter so that it is not mandatory for the upstream system to provide a value.
Type	Indicates one of the following parameter types: ◆ S—Scalar ◆ C—Compound ◆ I—Indexed
Class	Indicates one of the following parameter classifications: ◆ R—Required ◆ O—Optional

For a detailed description of the required and optional parameter classifications, refer to the *ASAP Product Overview.*

Common Service Description Layer (CSDL) commands

Digital Subscriber Line

This cartridge provides the following CSDL commands:

- C_STINGER_7-11_ADD_ADSL-ATM
- C_STINGER_7-11_ADD_SDSL-ATM
- C_STINGER_7-11_ALLOC_LIM-BWDTH
- C_STINGER_7-11_CFG_ADSL-BITRATE
- C_STINGER_7-11_CFG_SDSL-DATA-RATE
- C_STINGER_7-11_CREATE_ATM-QOS
- C_STINGER_7-11_DEL_ADSL-ATM
- C_STINGER_7-11_DEL_SDSL-ATM
- C_STINGER_7-11_DISABLE_DS3-ATM-TRUNK
- C_STINGER_7-11_DISABLE_OC3-ATM-TRUNK
- C_STINGER_7-11_ENABLE_DS3-ATM-TRUNK
- C_STINGER_7-11_ENABLE_OC3-ATM-TRUNK
- C_STINGER_7-11_QRY_ADSL-STATUS
- C_STINGER_7-11_QRY_DS3-STATUS
- C_STINGER_7-11_QRY_OC3-STATUS
- C_STINGER_7-11_QRY_PVC-STATUS
- C_STINGER_7-11_QRY_SDSL-STATUS
- C_STINGER_7-11_QRY_VCC-STATUS
- C_STINGER_7-11_SET_VPI-VCI-ATM
- C_STINGER_7-11_SET_VPI-VCI-LIM

C_STINGER_7-11_ADD_ADSL-ATM

Sets up and configures the ADSL LIM and creates the cross-connection.

Table 29: C_STINGER_7-11_ADD_ADSL-ATM

Parameter Name	Description	Range	Default Value	Type	Class
ADSL_MAX_BITRATE_DOWN	Maximum bit rate for downstream traffic.			S	O

Table 29: C_STINGER_7-11_ADD_ADSL-ATM

Parameter Name	Description	Range	Default Value	Type	Class
ADSL_MAX_BITRATE_UP	Maximum bit rate for upstream traffic.			S	O
ADSL_MIN_BITRATE_DOWN	Minimum bit rate for downstream traffic.			S	O
ADSL_MIN_BITRATE_UP	Minimum bit rate for upstream traffic.			S	O
ADSL_NAME	Name of the interface.			S	O
CONNECTION_NAME	Name of the ATM connection profile.			S	R
NAILED_GROUP_LIM	Nailed group number for AL-DMT physical interface. Each interface is assigned a unique default number, so you do not need to modify this parameter. If you assign a new value, it must be a number from 1 to 1024 that is unique within the system.			S	O
NAILED_GROUP_TM	Nailed group number interface used by the trunk side.			S	R
NE_ID_STINGER	Host NE identifier.			S	R
PORT_NUM	Port number of the LIM in Stinger.			S	R
QOS_DOWNSTREAM_CONTRACT	Traffic contract name used for the downstream traffic on the circuit.			S	O
QOS_UPSTREAM_CONTRACT	Traffic contract name used for the upstream traffic on the circuit.			S	O
SHELF_NUM	Shelf number of the LIM in Stinger.			S	R
SLOT_NUM	Slot number of the LIM in Stinger.			S	R
VCI_LIM	VCI for the subscriber side.			S	O

Table 29: C_STINGER_7-11_ADD_ADSL-ATM

Parameter Name	Description	Range	Default Value	Type	Class
VCI_TM	VCI for the trunk side.			S	O
VPI_LIM	VPI for the subscriber side.			S	O
VPI_TM	VPI for the trunk side.			S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 30: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_ADD_ADSL-ATM	A_STINGER_7-11_ENABLE_ADSL
	A_STINGER_7-11_CFG_ADSL-BITRATE
	A_STINGER_7-11_ADD_X-CONNECT

C_STINGER_7-11_ADD_SDSL-ATM

Sets-up and configures SDSL LIM and creates the cross-connection.

Table 31: C_STINGER_7-11_ADD_SDSL-ATM

Parameter Name	Description	Range	Default Value	Type	Class
CONNECTION_NAME	Name of the ATM connection profile.			S	R
NAILED_GROUP_LIM	Nailed group number for SDSL physical interface. Each interface is assigned a unique default number, so you do not need to modify this parameter. If you assign a new value, it must be a number from 1 to 1024 that is unique within the system.			S	O

Table 31: C_STINGER_7-11_ADD_SDSL-ATM

Parameter Name	Description	Range	Default Value	Type	Class
NAILED_GROUP_TM	Nailed group number interface used by the trunk side.			S	R
NE_ID_STINGER	Host NE identifier.			S	R
PORT_NUM	Port number of the LIM in Stinger.			S	R
QOS_DOWNSTREAM_CONTRACT	Traffic contract name used for the downstream traffic on the circuit.			S	O
QOS_UPSTREAM_CONTRACT	Traffic contract name used for the upstream traffic on the circuit.			S	O
SDSL_DATA_RATE_MODE	Per-session SDSL data-rate mode. Must be set to single baud, which causes the LIM to train to a single data rate, even if the modem can train at a higher or lower data rate.			S	O
SDSL_MAX_RATE	Maximum data rate for the line, expressed in bits per second. The loop can be set to support up to 2.32 Mbps.			S	O
SDSL_NAME	Name of the interface.			S	O
SHELF_NUM	Shelf number of the LIM in Stinger.			S	R
SLOT_NUM	Slot number of the LIM in Stinger.			S	R
VCI_LIM	VCI for the subscriber side.			S	O
VCI_TM	VCI for the trunk side.			S	O
VPI_LIM	VPI for the subscriber side.			S	O
VPI_TM	VPI for the trunk side.			S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 32: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_ADD_SDSL-ATM	A_STINGER_7-11_ENABLE_SDSL
	A_STINGER_7-11_CFG_SDSL-DATA-RATE
	A_STINGER_7-11_ADD_X-CONNECT

C_STINGER_7-11_ALLOC_LIM-BWDTH

Distributes the total bandwidth between LIMs.

Table 33: C_STINGER_7-11_ALLOC_LIM-BWDTH

Parameter Name	Description	Range	Default Value	Type	Class
GUARANTEED _BWDTH	Guaranteed upstream bandwidth for the slot, expressed in Kbps.		◆ 44 Mbps for each LIM, which distributes the sum of 622 Mbps across the 14 LIM slots	S	O
LIM_NUM	LIM number on the Stinger.			S	R
MAX_BWDTH	Maximum upstream bandwidth for the slot, expressed in Kbps. Valid values are from 0 to 155520 (155.52 Mbps, which is OC3 speed).		◆ 70 Mbps for each LIM ◆ 1 Mbps for each CM	S	O
NE_ID_STING ER	Host NE identifier.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 34: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_ALLOC_LIM-BWDTH	A_STINGER_7-11_ALLOC_LIM-BWDTH

C_STINGER_7-11_CFG_ADSL-BITRATE

Configures the maximum and minimum ADSL bitrate for upstream and downstream.

Table 35: C_STINGER_7-11_CFG_ADSL-BITRATE

Parameter Name	Description	Range	Default Value	Type	Class
ADSL_MAX_BITRATE_DOWN	Maximum bit rate for downstream traffic.			S	O
ADSL_MAX_BITRATE_UP	Maximum bit rate for upstream traffic.			S	O
ADSL_MIN_BITRATE_DOWN	Minimum bit rate for downstream traffic.			S	O
ADSL_MIN_BITRATE_UP	Minimum bit rate for upstream traffic.			S	O
NE_ID_STINGER	Host NE identifier.			S	R
PORT_NUM	Port number of the LIM in Stinger.			S	R
SHELF_NUM	Shelf number of the LIM in Stinger.			S	R
SLOT_NUM	Slot number of the LIM in Stinger.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 36: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_CFG_ADSL-BITRATE	A_STINGER_7-11_CFG_ADSL-BITRATE

C_STINGER_7-11_CFG_SDSL-DATA-RATE

Configures the maximum data rate and its mode for SDSL.

Table 37: C_STINGER_7-11_CFG_SDSL-DATA-RATE

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_STINGER	Host NE identifier.			S	R
PORT_NUM	Port number of the LIM in Stinger.			S	R
SDSL_DATA_RATE_MODE	Per-session SDSL data-rate mode. Must be set to single baud, which causes the LIM to train to a single data rate, even if the modem can train at a higher or lower data rate.			S	O
SDSL_MAX_RATE	Maximum data rate for the line, expressed in bits per second. The loop can be set to support up to 2.32 Mbps.			S	O
SHELF_NUM	Shelf number of the LIM in Stinger.			S	R
SLOT_NUM	Slot number of the LIM in Stinger.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 38: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_CFG_SDSL-DATA-RATE	A_STINGER_7-11_CFG_SDSL-DATA-RATE

C_STINGER_7-11_CREATE_ATM-QOS

Creates the QoS parameter that supports different types of ATM traffic.

Table 39: C_STINGER_7-11_CREATE_ATM-QOS

Parameter Name	Description	Range	Default Value	Type	Class
CELL_DELAY	Cell delay variation in microseconds. This setting is related to the jitter tolerance of the application. For example, the ideal delay variation would be zero for an application such as voice.		20 milliseconds is a reasonable jitter threshold for most applications with a low tolerance for delay (CBR and real-time VBR traffic, for example). A higher value could be used for non real-time VBR and other applications that are not delay sensitive	S	O
CONTRACT_NAME	A unique name for the contract (a text string of up to 16 characters). The name is used to apply the specified traffic settings to any number of connections.			S	R

Table 39: C_STINGER_7-11_CREATE_ATM-QOS

Parameter Name	Description	Range	Default Value	Type	Class
MAX_BURST_SIZE	Maximum burst size (MBS) is the maximum number of cells that can be transmitted at PCR before the Stinger unit determines that the connection is exceeding the traffic contract and begins discarding or tagging cells. This value is expressed relative to the PCR (as a cell rate, not Kbps). It applies only to VBR traffic.			S	O
NE_ID_STINGER	Host NE identifier.			S	R
PEAK_RATE_KBPS	Peak bit rate per second in Kbps. For CBR traffic, this setting specifies the static bit rate. For ABR, it is the maximum explicit rate. For VBR, it is the upper boundary of the variable bit rate.			S	O
QOS_CLASS	ATM service category. Supported values are CBR (Constant Bit Rate), Real-Time-VBR (Real-Time Variable Bit Rate), Non-Real-Time-VBR (Non-Real-Time Variable Bit Rate), ABR (Available Bit Rate), and UBR (Unspecified Bit Rate).			S	R
SUSTAINABLE_RATE_KBPS	Sustainable cell rate (SCR) is the average cell transmission rate allowed over a given period of time on a given circuit. The value is read-only. It is calculated from the Sustainable-Rate-Kbits-Per-Sec setting and used in the internal ATM configuration.			S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 40: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_CREATE_ATM-QOS	A_STINGER_7-11_CREATE_ATM-QOS

C_STINGER_7-11_DEL_ADSL-ATM

Deletes the ADSL LIM and the cross-connection.

Table 41: C_STINGER_7-11_DEL_ADSL-ATM

Parameter Name	Description	Range	Default Value	Type	Class
CONNECTION_ NAME	Name for the connection profile.			S	R
NE_ID_STINGE R	Host NE identifier.			S	R
PORT_NUM	Port number of the LIM in Stinger.			S	R
SHELF_NUM	Shelf number of the LIM in Stinger.			S	R
SLOT_NUM	Slot number of the LIM in Stinger.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 42: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_DEL_ADSL-ATM	A_STINGER_7-11_DISABLE_ADSL
	A_STINGER_7-11_DEL_X-CONNECT

C_STINGER_7-11_DEL_SDSL-ATM

Deletes the SDSL LIM and the cross-connection.

Table 43: C_STINGER_7-11_DEL_SDSL-ATM

Parameter Name	Description	Range	Default Value	Type	Class
CONNECTION_ NAME	Name for the connection profile.			S	R
NE_ID_STINGE R	Host NE identifier.			S	R
PORT_NUM	Port number of the LIM in Stinger.			S	R
SHELF_NUM	Shelf number of the LIM in Stinger.			S	R
SLOT_NUM	Slot number of the LIM in Stinger.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 44: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_DEL_SDSL-ATM	A_STINGER_7-11_DISABLE_SDSL
	A_STINGER_7-11_DEL_X-CONNECT

C_STINGER_7-11_DISABLE_DS3-ATM-TRUNK

Disables the DS3 ATM trunk on the Stinger.

Table 45: C_STINGER_7-11_DISABLE_DS3-ATM-TRUNK

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_STINGE R	Host NE identifier.			S	R
PORT_NUM	Port number of the trunk in Stinger.			S	R

Table 45: C_STINGER_7-11_DISABLE_DS3-ATM-TRUNK

Parameter Name	Description	Range	Default Value	Type	Class
SHELF_NUM	Shelf number of the trunk in Stinger.			S	R
SLOT_NUM	Slot number of the trunk in Stinger.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 46: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_DISABLE_DS3-ATM-TRUNK	A_STINGER_7-11_DISABLE_DS3-ATM-TRUNK

C_STINGER_7-11_DISABLE_OC3-ATM-TRUNK

Disables the OC3 ATM trunk on the Stinger.

Table 47: C_STINGER_7-11_DISABLE_OC3-ATM-TRUNK

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_STINGER	Host NE identifier.			S	R
PORT_NUM	Port number of the trunk in Stinger.			S	R
SHELF_NUM	Shelf number of the trunk in Stinger.			S	R
SLOT_NUM	Slot number of the trunk in Stinger.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 48: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_DISABLE_OC3-ATM-TRUNK	A_STINGER_7-11_DISABLE_OC3-ATM-TRUNK

C_STINGER_7-11_ENABLE_DS3-ATM-TRUNK

Sets up and configures the DS3 ATM trunk on the Stinger.

Table 49: C_STINGER_7-11_ENABLE_DS3-ATM-TRUNK

Parameter Name	Description	Range	Default Value	Type	Class
DS3_ATM_NAME	Name of the DS3 ATM trunk interface.			S	O
NAILED_GROUP_ATM	Nailed group number interface used by the trunk side. Each interface is assigned a unique default number, so you do not need to modify this parameter. If you assign a new value, it must be a number from 1 to 1024 that is unique within the system.			S	O
NE_ID_STINGER	Host NE identifier.			S	R
PORT_NUM	Port number of the trunk in Stinger.			S	R
SHELF_NUM	Shelf number of the trunk in Stinger.			S	R
SLOT_NUM	Slot number of the trunk in Stinger.			S	R
SPARE_MODE	Sparing mode for the trunk in Stinger (manual/inactive/automatic).			S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 50: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_ENABLE_DS3-ATM-TRUNK	A_STINGER_7-11_ENABLE_DS3-ATM-TRUNK

C_STINGER_7-11_ENABLE_OC3-ATM-TRUNK

Sets up and configures the OC3 ATM trunk on the Stinger.

Table 51: C_STINGER_7-11_ENABLE_OC3-ATM-TRUNK

Parameter Name	Description	Range	Default Value	Type	Class
NAILED_GROUP_ATM	Nailed group number interface used by the trunk side. Each interface is assigned a unique default number, so you do not need to modify this parameter. If you assign a new value, it must be a number from 1 to 1024 that is unique within the system.			S	O
NE_ID_STINGER	Host NE identifier.			S	R
OC3_ATM_NAME	Name of the OC3 ATM trunk interface.			S	O
PORT_NUM	Port number of the trunk in Stinger.			S	R
SHELF_NUM	Shelf number of the trunk in Stinger.			S	R
SLOT_NUM	Slot number of the trunk in Stinger.			S	R
SPARE_MODE	Sparing mode for the trunk in Stinger (manual/inactive/automatic).			S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 52: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_ENABLE_OC3-ATM-TRUNK	A_STINGER_7-11_ENABLE_OC3-ATM-TRUNK

C_STINGER_7-11_QRY_ADSL-STATUS

Queries the status of a specific ADSL interface.

Table 53: C_STINGER_7-11_QRY_ADSL-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_STINGER	Host NE identifier.			S	R
PORT_NUM	Port number of the LIM in Stinger.			S	R
SHELF_NUM	Shelf number of the LIM in Stinger.			S	R
SLOT_NUM	Slot number of the LIM in Stinger.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 54: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_QRY_ADSL-STATUS	A_STINGER_7-11_QRY_ADSL-STATUS

C_STINGER_7-11_QRY_DS3-STATUS

Queries the status of the DS3 ATM trunk.

Table 55: C_STINGER_7-11_QRY_DS3-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_STINGER	Host NE identifier.			S	R
PORT_NUM	Port number of the trunk in Stinger.			S	R
SHELF_NUM	Shelf number of the trunk in Stinger.			S	R
SLOT_NUM	Slot number of the trunk in Stinger.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 56: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_QRY_DS3-STATUS	A_STINGER_7-11_QRY_DS3-STATUS

C_STINGER_7-11_QRY_OC3-STATUS

Queries the status of the OC3 ATM trunk.

Table 57: C_STINGER_7-11_QRY_OC3-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_STINGER	Host NE identifier.			S	R
PORT_NUM	Port number of the trunk in Stinger.			S	R
SHELF_NUM	Shelf number of the trunk in Stinger.			S	R
SLOT_NUM	Slot number of trunk in Stinger.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 58: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_QRY_OC3-STATUS	A_STINGER_7-11_QRY_OC3-STATUS

C_STINGER_7-11_QRY_PVC-STATUS

Queries the ATM PVC status of the cross-connection.

Table 59: C_STINGER_7-11_QRY_PVC-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
CIRCUIT_NAME	Name of the PVC, which is the value of the station parameter in a local profile or the user-name attribute in a RADIUS profile.			S	R
NE_ID_STINGER	Host NE identifier.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 60: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_QRY_PVC-STATUS	A_STINGER_7-11_QRY_PVC-STATUS

C_STINGER_7-11_QRY_SDSL-STATUS

Queries the status of a specific SDSL interface.

Table 61: C_STINGER_7-11_QRY_SDSL-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_STINGER	Host NE identifier.			S	R
PORT_NUM	Port number of the LIM in Stinger.			S	R
SHELF_NUM	Shelf number of the LIM in Stinger.			S	R
SLOT_NUM	Slot number of the LIM in Stinger.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 62: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_QRY_SDSL-STATUS	A_STINGER_7-11_QRY_SDSL-STATUS

C_STINGER_7-11_QRY_VCC-STATUS

Queries the ATM VCC status of the cross-connection.

Table 63: C_STINGER_7-11_QRY_VCC-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_STINGER	Host NE identifier.			S	R
PORT_NUM	Port number of the LIM/trunk in Stinger.			S	R
SHELF_NUM	Shelf number of the LIM/trunk in Stinger.			S	R

Table 63: C_STINGER_7-11_QRY_VCC-STATUS

Parameter Name	Description	Range	Default Value	Type	Class
SLOT_NUM	Slot number of the LIM/trunk in Stinger.			S	R
VCI	VCI used in the cross-connection.			S	R
VPI	VPI used in the cross-connection.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 64: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_QRY_VCC-STATUS	A_STINGER_7-11_QRY_VCC-STATUS

C_STINGER_7-11_SET_VPI-VCI-ATM

Configures the VCI and VPI range for the ATM.

Table 65: C_STINGER_7-11_SET_VPI-VCI-ATM

Parameter Name	Description	Range	Default Value	Type	Class
ATM_TYPE	ATM trunk configuration is for the DS3, or OC3 type ATM.			S	R
NE_ID_STINGER	Host NE identifier.			S	R
PORT_NUM	Port number of the trunk in Stinger.			S	R
SHELF_NUM	Shelf number of the trunk in Stinger.			S	R
SLOT_NUM	Slot number of the trunk in Stinger.			S	R

Table 65: C_STINGER_7-11_SET_VPI-VCI-ATM

Parameter Name	Description	Range	Default Value	Type	Class
VCI	Array of up to 7 VPIs to use for VC switching.		Zero, which is always used for VC switching	S	O
VPI	Array of up to 7 VPIs to use for VC switching. The default is zero, which is always used for VC switching. With the default zero settings, the range of VCIs specified in the VPI-VCI-Range setting determines the total number of VCCs the port will handle. If you specify another VPI number to use for VC switching, the number of VCCs the port will allow is doubled. You must set this parameter together with the VPI-VCI-Range setting to distribute the maximum 32K VCCs across active trunk ports.		Zero	S	O

Table 65: C_STINGER_7-11_SET_VPI-VCI-ATM

Parameter Name	Description	Range	Default Value	Type	Class
VPI_VCI_RANGE	Valid range of VCI numbers to be used with VPI zero for virtual channel connections (VCCs). The default is 8K, which distributes the system maximum of 32K VCCs across four trunk ports. If you specify additional VPIs for VC switching (see the VC-Switching-VPI setting), the number of VCCs supported on a port increases proportionally for each of the reserved VPIs. You must set this parameter together with the VC-Switching-VPI parameter to distribute the 32K VCCs across active trunk ports. Following are valid values: ◆ vpi-0-255-vci-32-255 ◆ vpi-0-255-vci-32-511 ◆ vpi-0-255-vci-32-1023 ◆ vpi-0-255-vci-32-2047 ◆ vpi-0-255-vci-32-4095 ◆ vpi-0-255-vci-32-8191 ◆ vpi-0-255-vci-32-16383		8K	S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 66: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_SET_VPI-VCI-ATM	A_STINGER_7-11_SET_VPI-VCI-ATM

C_STINGER_7-11_SET_VPI-VCI-LIM

Configures the VCI and VPI range for the LIM.

Table 67: C_STINGER_7-11_SET_VPI-VCI-LIM

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_STINGER	Host NE identifier.			S	R
SLOT_NUM	Slot number of the LIM on the Stinger.			S	R
VPI_VCI_RANGE	Valid range of VPI and VCI numbers for each LIM slot in the system, where N is the slot number. All ports on a LIM use the same VPI/VCI range. Following are valid values: ◆ vpi-0-3-vci-32-511 ◆ vpi-0-7-vci-32-255 ◆ vpi-0-15-vci-32-127 ◆ vpi-0-31-vci-32-63			S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 68: CSDL to ASDL Mapping

CSDL	ASDL
C_STINGER_7-11_SET_VPI-VCI-LIM	A_STINGER_7-11_SET_VPI-VCI-LIM

5

Configuring ASAP to Support Additional NE Instances

You can configure ASAP to support the Stinger NE by populating database tables with NE-specific information.

Perform the following steps in ASAP to complete this configuration:

1. Add the Stinger Host NE to ASAP.

2. Create the mapping between the Remote NE and Host NE.

3. Define the primary pool of the connection for the Host NE.

4. Add the set of devices to the primary pool that will be used to establish one or more connections to the Stinger NE.

5. Set up the communication parameters for the Stinger NE.

Adding the Stinger Host NE to ASAP

The tbl_host_clli database table contains information that is specific to each NE in ASAP. Add the following information for the Stinger NE to tbl_host_clli:

◆ Host NE name—STINGER

◆ NE technology—Stinger-DSLAM

◆ Software load—7.11

Creating mappings

To enable ASAP to route work orders to the appropriate NE, add a unique entry for each Stinger NE to tbl_clli_route, and then specify the Remote-to-Host NE mapping for each NE.

The following table illustrates an entry in tbl_clli_route for a Stinger NE.

Table 69: tbl_clli_route

mach_clli (Remote NE)	host_clli (Host NE)
STINGER	STINGER

If an actual Host NE does not exist, map the Remote NE to a virtual Host NE. You can achieve this one-to-one mapping by entering identical values into the mach_clli and host_clli columns.

Defining a primary pool

You can define the primary pool of the connection for the Host NE by specifying the following values in tbl_ne_config:

◆ Maximum number of connections
◆ Drop timeout
◆ Spawn threshold
◆ Kill threshold

You can change these values to meet your specific requirements.

Adding devices

The tbl_resource_pool database table defines the collection of devices that is used by the NEP in ASAP to establish connections to NEs. A collection of devices is associated with a logical pool.

To add devices for a Stinger NE, populate tbl_resource_pool with the following information for each device that you add:

Table 70: tbl_resource_pool

Asap_sys	Pool	Device	Line_type	Vs_key
TEST_SYS	LUC_POOL	luc_dev	T	1

The maximum allowable lengths for the pool and device names are as follows:
◆ **Pool name**—8 characters
◆ **Device name**—40 characters

Setting up communication parameters

The tbl_comm_param database table contains the communication parameters required for the NEP to communicate with various external systems.

The following table lists and describes the communication parameters you must add to tbl_comm_param to configure the NEP to communicate with a Stinger NE. Add these parameters for each device that you configure.

Table 71: Communication Parameters

Communication Parameter	Description
HOST_LOGIN	Login name used to log in to the Host NE.
HOST_PASSWORD	Password used to authenticate the user with the Host NE.
HOST_IP_ADDRESS	IP address of the unix machine on which the Host NE resides.

For more information on ASAP database tables, refer to the *ASAP Data Dictionary*.

Configuration example

During the initial installation of this cartridge, you are prompted to enter specific configuration parameters that allow you to install a single instance of the Stinger NE. If you want to install additional instances of this NE, configure support for these Stinger NEs by manually adding them to ASAP.

The following procedural example illustrates how to configure support for an additional instance of the Stinger NE using the following sample values:

◆ **mach_clli**—STINGER
◆ **pool name**—LUC_POOL
◆ **device name**—luc_dev

To add a Stinger NE to ASAP

1. Log in to the SARM database in ASAP by typing the following command at the Unix prompt:

   ```
   sqlplus
   ```

   Ensure that you use the appropriate user ID and password to connect to the SARM database, when prompted.

2. Declare a variable to hold the return value from your 'exec' statements by typing:

    ```
    variable retval number;
    ```

3. Define a new instance of the NE in tbl_host_clli by providing the following information:

    ◆ Host NE name

    ◆ NE technology

    ◆ NE software load

    To populate tbl_host_clli with this information, type the following command at the Unix prompt:

    ```
    exec :retval := SSP_new_ne_host ('STINGER', 'Stinger-DSLAM', '7.11' );
    ```

4. Add the Remote-to-Host NE mapping to tbl_clli_route to route work orders to the Remote NE by typing:

    ```
    exec :retval := SSP_new_clli_map ('STINGER', 'STINGER', ' ' );
    ```

    > If an actual Host NE does not exist, map the Remote NE to a virtual Host NE. This creates a one-to-one mapping, allowing the Remote and Host NEs to be the same.

5. Do the following:

    ◆ Define the primary pool of the connection for the Host NE.

    ◆ Specify the attributes of the primary pool—maximum number of connections, drop time-out, spawn threshold, and kill threshold.

    ◆ Associate the Host NE with a specific NEP in tbl_ne_config by typing:

    ```
    exec :retval := SSP_new_net_elem ('STINGER', 'NEP_S200', 'LUC_POOL', 5, 2, 5,
    2);
    ```

    > You can change these values to meet your specific requirements.

6. In tbl_resource_pool, add a set of devices to the primary pool of the Host NE by typing:

    ```
    exec :retval := SSP_new_resource ('TEST', 'LUC_POOL', 'luc_dev', 'T');
    ```

    where "T" indicates a Telnet connection.

    > You can add these devices to one of the following environments:
    > ◆ Test—"TEST"
    > ◆ Production—"PROD"

7. In tbl_comm_param, add the user ID that is required to connect to the Stinger NE by typing:

    ```
    exec :retval := SSP_new_comm_param ('T', 'STINGER', 'COMMON_DEVICE_CFG',
    'HOST_LOGIN', 'admin', 'Remote Host Name');
    ```

8. In tbl_comm_param, add the password that is required to connect to the Stinger NE by typing:

```
exec :retval := SSP_new_comm_param ('T', 'STINGER', 'COMMON_DEVICE_CFG',
'HOST_PASSWORD', 'Ascend', 'Remote Host Password');
```

9. In tbl_comm_param, add the Host IP Address that is required to connect to the Stinger NE by typing:

```
exec :retval := SSP_new_comm_param('T', 'STINGER', 'COMMON_DEVICE_CFG',
'HOST_IP_ADDRESS', '192.168.9.205', 'Remote Host IP Address');
```

An instance of the Stinger NE has been added to ASAP.