Oracle® Communications ASAP Cartridge 1.0 for Plexus 9000 Cartridge

Plexus 9000 7.0 Cartridge Guide

First Edition

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Plexus 9000 7.0 Cartridge Guide, First Edition

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Cartridge Overview

This guide provides a detailed description of the Plexus9000 cartridge. It contains overview and technical information to assist with extending and integrating the cartridge into a customer environment.

The scope of this guide includes Oracle Communications ASAP (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 ASAP documentation.

The Plexus9000 cartridge provides the ASAP service configuration and network element (NE) interface to activate subscriber services on Lucent PLEXUS host NEs.

Hardware and Software Requirements

The following sections contain the high-level software and hardware environment requirements for provisioning subscriber services on authentication center:

- NE Interface
- ASAP Version

NE Interface

The following database tables in Service Activation Request Manager (SARM) are configured to support the NE configuration:

- tbl_host_clli
- tbl_clli_route
- tbl_comm_param
- tbl_resource_pool
- tbl_ne_config

ASAP Version

This cartridge was developed and tested using ASAP version 4.7.1.

For more information on the operating environment of this ASAP version, refer to the ASAP version 4.7.1 *Release Notes*.

Connecting to the NE

The cartridge uses Telnet/SSH protocol.

Services, Features, and Options

This cartridge supports the following services:

Table 1–1   Supported Services

Service	Description
C_LU-PLEXUS_7-0_OPR_LPBK-T1	Operate Loopback DS1 Facility
C_LU-PLEXUS_7-0_RLS_LPBK-T1	Release Loopback DS1 Facility
C_LU-PLEXUS_7-0_ADD_LSET	Add Link Set
C_LU-PLEXUS_7-0_DEL_LSET	Delete Link Set
C_LU-PLEXUS_7-0_QRY_LSET	Query Link Set
C_LU-PLEXUS_7-0_QRY_LSET-STATUS	Query Link Set Status
C_LU-PLEXUS_7-0_ADD_MGC-PC	Add Media Gateway Controller Point Code
C_LU-PLEXUS_7-0_DEL_MGC-PC	Delete Media Gateway Controller Point Code
C_LU-PLEXUS_7-0_QRY_MGC-PC	Query Media Gateway Controller Point Code
C_LU-PLEXUS_7-0_QRY_MGC-PROTN	Query MGC-PROTN
C_LU-PLEXUS_7-0_ADD_ROUTE-SS7	Add SS7 Route
C_LU-PLEXUS_7-0_DEL_ROUTE-SS7	Delete SS7 Route
C_LU-PLEXUS_7-0_QRY_ROUTE-SS7	Query SS7 Route
C_LU-PLEXUS_7-0_QRY_ROUTESS7-STATUS	Query RouteSS7 Status
C_LU-PLEXUS_7-0_ADD_SG-ISUPPROXY	Add Signaling Gateway ISUP Proxy
C_LU-PLEXUS_7-0_DEL_SG-ISUPPROXY	Delete Signaling Gateway ISUP Proxy
C_LU-PLEXUS_7-0_QRY_SG-ISUPPROXY	Query Signaling Gateway ISUP Proxy
C_LU-PLEXUS_7-0_ADD_SG-PC	Add Singnaling Gateway Point Code
C_LU-PLEXUS_7-0_DEL_SG-PC	Delete Singnaling Gateway Point Code
C_LU-PLEXUS_7-0_QRY_SG-PC	Query Singnaling Gateway Point Code
C_LU-PLEXUS_7-0_ADD_SG-SLK	Add Signaling Gateway Signaling Link
C_LU-PLEXUS_7-0_DEL_SG-SLK	Delete Signaling Gateway Signaling Link
C_LU-PLEXUS_7-0_QRY_SG-SLK	Query Signaling Gateway Signaling Link
C_LU-PLEXUS_7-0_QRY_SGSLK-STATUS	Query Signaling Gateway Signaling Link Status
C_LU-PLEXUS_7-0_ADD_SLK	Add Signaling Link
C_LU-PLEXUS_7-0_DEL_SLK	Delete Signaling Link
C_LU-PLEXUS_7-0_QRY_SLK	Query Signaling Link
C_LU-PLEXUS_7-0_QRY_SLK-STATUS	Query Signaling Link Status
C_LU-PLEXUS_7-0_ADD_SS7-TRK	Add SS7 Trunk
C_LU-PLEXUS_7-0_DEL_SS7-TRK	Delete SS7 Trunk
C_LU-PLEXUS_7-0_MOD_SS7-TRK	Modify SS7 Trunk
C_LU-PLEXUS_7-0_QRY_SS7-TRK	Query SS7 trunk group.
C_LU-PLEXUS_7-0_ADD_T1	Add DS1 Facility
C_LU-PLEXUS_7-0_DEL_T1	Delete DS1 Facility.

Table 1–1   (Cont.) Supported Services

Service	Description
C_LU-PLEXUS_7-0_MOD_T1	Modify DS1 Facility
C_LU-PLEXUS_7-0_QRY_T1	Query DS1 Facility
C_LU-PLEXUS_7-0_ADD_TRKGRP	Add Trunk Group
C_LU-PLEXUS_7-0_DEL_TRKGRP	Delete Trunk Group
C_LU-PLEXUS_7-0_MOD_TRKGRP	Modify Trunk Group
C_LU-PLEXUS_7-0_QRY_TRKGRP	Query Trunk Group

Communication Parameters

The following is the list of parameters for the sample NE configuration XML used by Service Activation Configuration Tool (SACT).

Table 1–2   Communication Parameters

Parameter Label	Parameter Value	Description
HOST_IPADDR	localhost	Network IP address for the host NE.
PORT	2399	Telnet service port.
OPEN_TIMEOUT	5	For Java only. Connection establishment timeout (in seconds).
READ_TIMEOUT	1	For Java only. Timeout for the telnet read functions (in seconds).
PLEXUS_USER	neamneam	Plexus user name.
PLEXUS_PASS	mslvmslv	Plexus password.
PLEXUS_PROMPT	;	Provisioning prompt displayed by Plexus.
CTAG	0	CTAG
SSH_SUPPORT	NO	For Java only. The flag whether SSH is on or not.
SSH_VERSION	SSH2	For Java only. The SSH version.
SSH_PORT	22	For Java only. The SSH port number.
SSH_AUTH_METHOD	PASSWORD	For Java only. The authentication method PASSWORD or PUBLIC_KEY.
SSH_PREF_PUBLIC_KEY	PUBLIC_KEY_SSHRSA	For Java only. The preferred public key PUBLIC_KEY_SSHRSA or PUBLIC_KEY_ SSHDSS.
SSH_PREF_CIPHER_CS	CIPHER_BLOWFISH_ CBC	For Java only. The preferred CS cipher CIPHER_BLOWFISH_CBC, CIPHER_ TRIPLEDES_CBC, TWOFISH128_CBC, TWOFISH192_CBC, TWOFISH256_CBC, TWOFISH_CBC, CAST128_CBC, AES128_CBC, AES192_CBC, AES256_CBC
SSH_PREF_CIPHER_SC	CIPHER_BLOWFISH_ CBC	For Java only. The preferred SC cipher CIPHER_BLOWFISH_CBC, CIPHER_ TRIPLEDES_CBC, TWOFISH128_CBC, TWOFISH192_CBC, TWOFISH256_CBC, TWOFISH_CBC, CAST128_CBC, AES128_CBC, AES192_CBC, AES256_CBC

Table 1–2   (Cont.) Communication Parameters

Parameter Label	Parameter Value	Description
SSH_PREF_MAC_CS	HMAC_MD5	For Java only. The preferred CS message authentication HMAC_MD5 or HMAC_SHA1.
SSH_PREF_MAC_SC	HMAC_MD5	For Java only. The preferred SC message authentication HMAC_MD5 or HMAC_SHA1.
SSH_PREF_COMP_CS	COMPRESSION_ NONE	For Java only. The preferred CS compression COMPRESSION_NONE or COMPRESSION_ ZLIB
SSH_PREF_COMP_SC	COMPRESSION_ NONE	For Java only. The preferred SC compression COMPRESSION_NONE or COMPRESSION_ ZLIB.
SSH_TUNNEL_IPADDR	192.20.210.36	IP address used in tunnel creation. If empty no tunnel created.

2

Atomic Service Description Layer (ASDL) Commands

ASDL commands represent a set of atomic actions that ASAP can perform on a network element (NE). ASAP can combine ASDLs to create meaningful services (CSDLs) within a cartridge.

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

Table 2–1   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, specifies the parameter label transmitted on the ASDL command. Scalar parameters are conventional name-value pair parameters. ■ C - Compound, specifies the base name of the compound parameter transmitted on the ASDL command. A compound parameter contains structures or arrays of information that are represented by a particular structure name or compound parameter name. Each compound parameter can contain a large number of elements. If you use compound parameters, you only require a single entry in the ASAP translation tables to call the compound parameter and all its associated parameter elements. ■ I - Indexed, identifies a parameter that contains a sequential numerical index value to tell the SARM that it should execute the same operation (for example, an ASDL command) for all occurrences of that index. Consequently, if there are several options on a particular CSDL command (OPT1, OPT2, OPT3, etc.), you can specify the OPT parameter as an indexed parameter. When you specify the OPT parameter as an indexed parameter, the SARM generates several occurrences of that same ASDL command and each command has a different value for the option being transmitted to the NEP. For more information on parameter types, refer to the *ASAP Developer's Guide*.

Table 2–1   (Cont.) ASDL Parameter Information

Item	Description
Class	Indicates one of the following parameter classifications: ■ R - Required scalar parameter ■ O - Optional scalar parameter ■ C - Required compound parameter ■ N - Optional compound parameter ■ M - Mandatory indexed parameter ■ I - Optional indexed parameter ■ S - Parameter count

For a detailed description of the Required and Optional parameter classifications, refer to the *ASAP System Administrator's Guide.*

ASDL Commands

This cartridge provides the following ASDL commands:

- A_LU-PLEXUS_7-0_ADD_LSET
- A_LU-PLEXUS_7-0_ADD_LSET-RB
- A_LU-PLEXUS_7-0_ADD_MGC-PC
- A_LU-PLEXUS_7-0_ADD_MGC-PC-RB
- A_LU-PLEXUS_7-0_ADD_ROUTE-SS7
- A_LU-PLEXUS_7-0_ADD_ROUTE-SS7-RB
- A_LU-PLEXUS_7-0_ADD_SG-ISUPPROXY
- A_LU-PLEXUS_7-0_ADD_SG-ISUPPROXY-RB
- A_LU-PLEXUS_7-0_ADD_SG-PC
- A_LU-PLEXUS_7-0_ADD_SG-PC-RB
- A_LU-PLEXUS_7-0_ADD_SG-SLK
- A_LU-PLEXUS_7-0_ADD_SG-SLK-RB
- A_LU-PLEXUS_7-0_ADD_SLK
- A_LU-PLEXUS_7-0_ADD_SLK-RB
- A_LU-PLEXUS_7-0_ADD_SS7-TRK
- A_LU-PLEXUS_7-0_ADD_SS7-TRK-RB
- A_LU-PLEXUS_7-0_ADD_T1
- A_LU-PLEXUS_7-0_ADD_T1-RB
- A_LU-PLEXUS_7-0_ADD_TRKGRP
- A_LU-PLEXUS_7-0_ADD_TRKGRP-RB
- A_LU-PLEXUS_7-0_DEL_LSET
- A_LU-PLEXUS_7-0_DEL_MGC-PC
- A_LU-PLEXUS_7-0_DEL_ROUTE-SS7

- A_LU-PLEXUS_7-0_DEL_SG-ISUPPROXY
- A_LU-PLEXUS_7-0_DEL_SG-PC
- A_LU-PLEXUS_7-0_DEL_SG-SLK
- A_LU-PLEXUS_7-0_DEL_SLK
- A_LU-PLEXUS_7-0_DEL_SS7-TRK
- A_LU-PLEXUS_7-0_DEL_T1
- A_LU-PLEXUS_7-0_DEL_TRKGRP
- A_LU-PLEXUS_7-0_MOD_SS7-TRK
- A_LU-PLEXUS_7-0_MOD_SS7-TRK-RB
- A_LU-PLEXUS_7-0_MOD_T1
- A_LU-PLEXUS_7-0_MOD_T1-RB
- A_LU-PLEXUS_7-0_MOD_TRKGRP
- A_LU-PLEXUS_7-0_MOD_TRKGRP-RB
- A_LU-PLEXUS_7-0_OPR_LPBK-T1
- A_LU-PLEXUS_7-0_QRY_LSET
- A_LU-PLEXUS_7-0_QRY_LSET-STATUS
- A_LU-PLEXUS_7-0_QRY_MGC-PC
- A_LU-PLEXUS_7-0_QRY_MGC-PROTN
- A_LU-PLEXUS_7-0_QRY_ROUTE-SS7
- A_LU-PLEXUS_7-0_QRY_ROUTESS7-STATUS
- A_LU-PLEXUS_7-0_QRY_SG-ISUPPROXY
- A_LU-PLEXUS_7-0_QRY_SG-PC
- A_LU-PLEXUS_7-0_QRY_SG-SLK
- A_LU-PLEXUS_7-0_QRY_SGSLK-STATUS
- A_LU-PLEXUS_7-0_QRY_SLK
- A_LU-PLEXUS_7-0_QRY_SLK-STATUS
- A_LU-PLEXUS_7-0_QRY_SS7-TRK
- A_LU-PLEXUS_7-0_QRY_T1
- A_LU-PLEXUS_7-0_QRY_TRKGRP
- A_LU-PLEXUS_7-0_RLS_LPBK-T1

A_LU-PLEXUS_7-0_ADD_LSET

Add Link Set. It is implemented by the Java method
**com.mslv.activation.cartridge.lu.plexus.x7_
0.lset.add.generated.AddLsetProxy.execute.**

Table 2–2   A_LU-PLEXUS_7-0_ADD_LSET

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
LSET_ID	Identifies the AID as an SS7 link set.	N/A	N/A	S	R
OPC	Identifies the own point code associated with the link set.	N/A	N/A	S	O
ADJ_DPC	Identifies the adjacent DPC to which the link set connects.	N/A	N/A	S	O
ACT_LNK_REQD	Identifies the maximum number of links that can be active at any given time.	N/A	N/A	S	O

MML commands

MML Syntax :

```
This command lets the user add an SS7 link set.  ENT-LSET will not work correctly
unless the following commands have already been issued in the listed order:
ENT-PRFL-SGPC, ENT-SG-PCOWN, ENT-SG-PC.

MML Command:
ENT-LSET:[TID]:<lsetId>:[CTAG]::OPC=<opc>,ADJDPC=<adjDpc>,[ACTLNKREQD=<actLnkReqd>
];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_LSET_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_LSET_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_LSET-RB

Add Link Set Rollback. It is implemented by the Java method **com.mslv.activation.cartridge.lu.plexus.x7_0.lset_ rb.add.generated.AddLsetRbProxy.execute.**

Table 2–3   A_LU-PLEXUS_7-0_ADD_LSET-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
LSET_ID	Identifies the AID as an SS7 link set.	N/A	N/A	S	R

Table 2–3   (Cont.) A_LU-PLEXUS_7-0_ADD_LSET-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_OPC	Identifies the own point code associated with the link set.	N/A	N/A	S	O
OLD_ADJ_DPC	Identifies the adjacent DPC to which the link set connects.	N/A	N/A	S	O
OLD_ACT_LNK_REQD	Identifies the maximum number of links that can be active at any given time.	N/A	N/A	S	O

MML commands

MML Syntax :

```
This command lets the user add an SS7 link set.  ENT-LSET will not work correctly
unless the following commands have already been issued in the listed order:
ENT-PRFL-SGPC, ENT-SG-PCOWN, ENT-SG-PC.

MML Command:
ENT-LSET:[TID]:<lsetId>:[CTAG]::OPC=<opc>,ADJDPC=<adjDpc>,[ACTLNKREQD=<actLnkReqd>
];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_LSET-RB_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_LSET-RB_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_MGC-PC

Add Media Gateway Controller Point Code. It is implemented by the Java method **com.mslv.activation.cartridge.lu.plexus.x7_0.mgc_ pc.add.generated.AddMgcPcProxy.execute.**

Table 2–4   A_LU-PLEXUS_7-0_ADD_MGC-PC

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
MGC_PC_ID	Identifies the AID as the association of an own point code for the Lucent Network Controller with the destination point code for a remote media gateway controller, thus establishing a trunk between the two MGCs.	N/A	N/A	S	R
ISUP_VARIANT	Identifies the protocol variant for the OPC-DPC pair. This variant determines the set of messages requiring action, the actions to take on receipt of these messages and/or timeouts, the timers used and their values.	N/A	N/A	S	R
PC_START_MODE	Identifies the action the switch takes on startup for all circuit groups towards the DPC to ensure a known state for the circuits.	N/A	N/A	S	O
ISUP_TPAUSE	Identifies the value (in seconds) for the Pause Validation timer. Typical values are 15 to 20 seconds. A value of zero means the timer never expires and no action will be taken on a Point Code pause.	N/A	N/A	S	O
T4	Identifies the Timer T4 value (in seconds) for international variants.	N/A	N/A	S	O
PC_PAUSE_ACTN	Identifies the action the switch takes when MTP level 3 sends a pause status primitive to indicate that the DPC is unavailable.	N/A	N/A	S	O
ISUP_CONG_CTRL	Identifies whether to enable ISUP congestion control.	N/A	N/A	S	O
T29	Identifies the Timer T29 value (in seconds) for the ISUP layer.	N/A	N/A	S	O
T30	Identifies the Timer T30 value (in seconds) for the ISUP layer.	N/A	N/A	S	O
CONG_LVL1	Identifies the percentage of originated calls to reject at the first level of call throttling by the ISUP layer.	N/A	N/A	S	O
CONG_LVL2	Identifies the percentage of originated calls to reject at the second level of call throttling by the ISUP layer.	N/A	N/A	S	O
CONG_LVL3	Identifies the percentage of originated calls to reject at the third level of call throttling by the ISUP layer.	N/A	N/A	S	O

MML commands

MML Syntax :

This command lets the user establish a trunk between the NC and a remote media gateway controller by defining both point codes and the attributes applied to the

```
trunk.  ENT-MGC-PC is dependent on ENT-MGC-PCOWN; that is, ENT-MGC-PC will not
work unless ENT-MGC-PCOWN has already been issued.

MMl command:
ENT-MGC-PC:[TID]:<mgcPcId>:[CTAG]::ISUPVARIANT=<isupVariant>,[PCSTARTMODE=<pcStart
Mode>],[ISUPTPAUSE=<isupTPause>],[T4=<t4>],[PCPAUSEACTN=<pcpauseactn>],
[ISUPCONGCTRL=<isupcongctrl>],[T29=<t29>],[T30=<t30>],[CONGLVL1=<conglvl1>],[CONGL
VL2=<conglvl2>],[CONGLVL3=<conglvl3>];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_MGC-PC_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_MGC-PC_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_MGC-PC-RB

Add Media Gateway Controller Point Code Rollback. It is implemented by the Java method **com.mslv.activation.cartridge.lu.plexus.x7_0.mgc_pc_ rb.add.generated.AddMgcPcRbProxy.execute.**

Table 2–5   A_LU-PLEXUS_7-0_ADD_MGC-PC-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
MGC_PC_ID	Identifies the AID as the association of an own point code for the Lucent Network Controller with the destination point code for a remote media gateway controller, thus establishing a trunk between the two MGCs.	N/A	N/A	S	R
OLD_ISUP_VARIANT	Identifies the protocol variant for the OPC-DPC pair. This variant determines the set of messages requiring action, the actions to take on receipt of these messages and/or timeouts, the timers used and their values.	N/A	N/A	S	O
OLD_PC_START_ MODE	Identifies the action the switch takes on startup for all circuit groups towards the DPC to ensure a known state for the circuits.	N/A	N/A	S	O
OLD_ISUP_TPAUSE	Identifies the value (in seconds) for the Pause Validation timer. Typical values are 15 to 20 seconds. A value of zero means the timer never expires and no action will be taken on a Point Code pause.	N/A	N/A	S	O
OLD_T4	Identifies the Timer T4 value (in seconds) for international variants.	N/A	N/A	S	O

Table 2–5   (Cont.) A_LU-PLEXUS_7-0_ADD_MGC-PC-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_PC_PAUSE_ ACTN	Identifies the action the switch takes when MTP level 3 sends a pause status primitive to indicate that the DPC is unavailable.	N/A	N/A	S	O
OLD_ISUP_CONG_ CTRL	Identifies whether to enable ISUP congestion control.	N/A	N/A	S	O
OLD_T29	Identifies the Timer T29 value (in seconds) for the ISUP layer.	N/A	N/A	S	O
OLD_T30	Identifies the Timer T30 value (in seconds) for the ISUP layer.	N/A	N/A	S	O
OLD-CONG_LVL1	Identifies the percentage of originated calls to reject at the first level of call throttling by the ISUP layer.	N/A	N/A	S	O
OLD_CONG_LVL2	Identifies the percentage of originated calls to reject at the second level of call throttling by the ISUP layer.	N/A	N/A	S	O
OLD_CONG_LVL3	Identifies the percentage of originated calls to reject at the third level of call throttling by the ISUP layer.	N/A	N/A	S	O

MML commands

MML Syntax :

This command lets the user establish a trunk between the NC and a remote media gateway controller by defining both point codes and the attributes applied to the trunk. ENT-MGC-PC is dependent on ENT-MGC-PCOWN; that is, ENT-MGC-PC will not work unless ENT-MGC-PCOWN has already been issued.

```
MMl command:
ENT-MGC-PC:[TID]:<mgcPcId>:[CTAG]::ISUPVARIANT=<isupVariant>,[PCSTARTMODE=<pcStart
Mode>],[ISUPTPAUSE=<isupTPause>],[T4=<t4>],[PCPAUSEACTN=<pcpauseactn>],
[ISUPCONGCTRL=<isupcongctrl>],[T29=<t29>],[T30=<t30>],[CONGLVL1=<conglvl1>],[CONGL
VL2=<conglvl2>],[CONGLVL3=<conglvl3>];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_MGC-PC-RB_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_MGC-PC-RB_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_ROUTE-SS7

Add SS7 Route. It is implemented by the Java method
**com.mslv.activation.cartridge.lu.plexus.x7_0.route_
ss7.add.generated.AddRouteSs7Proxy.execute.**

Table 2–6   A_LU-PLEXUS_7-0_ADD_ROUTE-SS7

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
ROUTE_SS7	Identifies the AID as an SS7 route. The pattern is a combination of the destination point code and the link set connecting to it.	N/A	N/A	S	R
LSET_PRIORITY	Identifies the priority for the link set, with lower numbers indicating higher priority.	N/A	N/A	S	O

MML commands

MML Syntax :

```
This command lets the user establish an SS7 route.  Use ENT-ROUTE-SS7 to establish
the point code, the link set identity, and the link set priority.  You can
establish no more than four routes for each point code.  ENT-ROUTE-SS7 will not
work correctly unless the following commands have already been issued in
the listed order:  ENT-PRFL-SGPC, ENT-SG-PCOWN, ENT-SG-PC, and ENT-LSET.

MML Command:
ENT-ROUTE-SS7:[TID]:<routeSs7>:[CTAG]::[LSETPRIORITY=<lsetPriority>];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_ROUTE-SS7_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_ROUTE-SS7_RETURN_INFO = Response Code + Response
Message

A_LU-PLEXUS_7-0_ADD_ROUTE-SS7-RB

Add SS7 Route Rollback. It is implemented by the Java method
**com.mslv.activation.cartridge.lu.plexus.x7_0.route_ss7_
rb.add.generated.AddRouteSs7RbProxy.execute.**

Table 2–7   A_LU-PLEXUS_7-0_ADD_ROUTE-SS7-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
ROUTE_SS7	Identifies the AID as an SS7 route. The pattern is a combination of the destination point code and the link set connecting to it.	N/A	N/A	S	R
OLD_LSET_PRIORITY	Identifies the priority for the link set, with lower numbers indicating higher priority.	N/A	N/A	S	O

MML commands

MML Syntax :

This command lets the user establish an SS7 route. Use ENT-ROUTE-SS7 to establish the point code, the link set identity, and the link set priority. You can establish no more than four routes for each point code. ENT-ROUTE-SS7 will not work correctly unless the following commands have already been issued in the listed order: ENT-PRFL-SGPC, ENT-SG-PCOWN, ENT-SG-PC, and ENT-LSET.

```
MML Command:
ENT-ROUTE-SS7:[TID]:<routeSs7>:[CTAG]::[LSETPRIORITY=<lsetPriority>];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_ROUTE-SS7-RB_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_ROUTE-SS7-RB_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_SG-ISUPPROXY

Add Signaling Gateway ISUP Proxy. It is implemented by the Java method **com.mslv.activation.cartridge.lu.plexus.x7_0.sg_ isupproxy.add.generated.AddSgIsupProxyProxy.execute.**

Table 2–8   A_LU-PLEXUS_7-0_ADD_SG-ISUPPROXY

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
PC_PAIR	Identifies the AID as the association between an SG and a remote or adjacent switch.	N/A	N/A	S	R
ISUP_VARIANT	Identifies the variant for MTP2 and MTP3.	N/A	N/A	S	R

MML commands

MML Syntax :

```
This command lets the user establish the ISUP variant to use for communications
between an SG and a remote or adjacent switch.  ENT-SG-
ISUPPROXY will not work unless ENT-SG-PCOWN and ENT-SG-PC have already been
issued.
```

```
MML Command:
ENT-SG-ISUPPROXY:[TID]:<pcPair>:[CTAG]::ISUPVARIANT=<isupVariant>;
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_SG-ISUPPROXY_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_SG-ISUPPROXY_RETURN_INFO = Response Code +
Response Message

A_LU-PLEXUS_7-0_ADD_SG-ISUPPROXY-RB

Add Signaling Gateway ISUP Proxy. It is implemented by the Java method
**com.mslv.activation.cartridge.lu.plexus.x7_0.sg_isupproxy_
rb.add.generated.AddSgIsupproxyRbProxy.execute.**

Table 2–9   A_LU-PLEXUS_7-0_ADD_SG-ISUPPROXY-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R
PC_PAIR	Identifies the AID as the association between an SG and a remote or adjacent switch.	N/A	N/A	S	R
OLD_ISUP_VARIANT	Identifies the variant for MTP2 and MTP3.	N/A	N/A	S	R

MML commands

MML Syntax :

```
This command lets the user establish the ISUP variant to use for communications
between an SG and a remote or adjacent switch.  ENT-SG-
ISUPPROXY will not work unless ENT-SG-PCOWN and ENT-SG-PC have already been
issued.
```

```
MML Command:
ENT-SG-ISUPPROXY:[TID]:<pcPair>:[CTAG]::ISUPVARIANT=<isupVariant>;
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_SG-ISUPPROXY-RB_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_SG-ISUPPROXY-RB_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_SG-PC

Add Singnaling Gateway Point Code. It is implemented by the Java method **com.mslv.activation.cartridge.lu.plexus.x7_0.sg_ pc.add.generated.AddSgPcProxy.execute.**

Table 2–10   A_LU-PLEXUS_7-0_ADD_SG-PC

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
PC_ID	Identifies the AID as an adjacent or remote point code for a signaling gateway.	N/A	N/A	S	R
PC_DIR	Identifies the type of point code. The value of pcDir cannot be ADJ when the value of pcId is DEF_ANSI or DEF_ITU.	N/A	N/A	S	R
PC_PRFL_ID	Identifies the point code profile.	N/A	N/A	S	R
MTP_VARIANT	Identifies the variant for MTP2 and MTP3	N/A	N/A	S	R
PC_SSF	Identifies the sub-service field to be used.	N/A	N/A	S	O
MTP3_RST_REQ	Identifies whether restart is required for the adjacent node.	N/A	N/A	S	O
MULTI_CONG_LVL	Identifies whether to enable multiple congestion level thresholds.	N/A	N/A	S	O
DM_PRIORITY	Identifies whether to discard message priorities.	N/A	N/A	S	O

MML commands

MML Syntax :

```
This command lets the user establish an adjacent or remote point code for a
signaling gateway.  ENT-SG-PC will not work unless ENT-SG-PCOWN and ENT-PRFL-PC
have already been issued.
```

```
MML Command:
ENT-SG-PC:[TID]:<pcId>:[CTAG]::PCDIR=<pcDir>,PCPRFLID=<pcPrflId>,MTPVARIANT=<mtpVa
riant>,[PCSSF=<pcSsf>],[MTP3RSTREQ=<mtp3RstReq>],[MULTICONGLVL=<multiCongLvl>],[DM
PRIORITY=<dmPriority>];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_SG-PC_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_SG-PC_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_SG-PC-RB

Add Singnaling Gateway Point Code Rollback. It is implemented by the Java method **com.mslv.activation.cartridge.lu.plexus.x7_0.sg_pc_ rb.add.generated.AddSgPcRbProxy.execute.**

Table 2–11   A_LU-PLEXUS_7-0_ADD_SG-PC-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R
PC_ID	Identifies the AID as an adjacent or remote point code for a signaling gateway.	N/A	N/A	S	R
OLD_PC_DIR	Identifies the type of point code. The value of pcDir cannot be ADJ when the value of pcId is DEF_ANSI or DEF_ITU.	N/A	N/A	S	O
OLD_PC_PRFL_ID	Identifies the point code profile.	N/A	N/A	S	R
OLD_MTP_VARIANT	Identifies the variant for MTP2 and MTP3	N/A	N/A	S	R
OLD_PC_SSF	Identifies the sub-service field to be used.	N/A	N/A	S	O
OLD_MTP3_RST_REQ	Identifies whether restart is required for the adjacent node.	N/A	N/A	S	O
OLD_MULTI_CONG_ LVL	Identifies whether to enable multiple congestion level thresholds.	N/A	N/A	S	O
OLD_DM_PRIORITY	Identifies whether to discard message priorities.	N/A	N/A	S	O

MML commands

MML Syntax :

```
This command lets the user establish an adjacent or remote point code for a
signaling gateway.  ENT-SG-PC will not work unless ENT-SG-PCOWN and ENT-PRFL-PC
have already been issued.
```

```
MML Command:
ENT-SG-PC:[TID]:<pcId>:[CTAG]::PCDIR=<pcDir>,PCPRFLID=<pcPrflId>,MTPVARIANT=<mtpVa
riant>,[PCSSF=<pcSsf>],[MTP3RSTREQ=<mtp3RstReq>],[MULTICONGLVL=<multiCongLvl>],[DM
PRIORITY=<dmPriority>];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_SG-PC-RB_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_SG-PC-RB_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_SG-SLK

Add Signaling Gateway Signaling Link. It is implemented by the Java method **com.mslv.activation.cartridge.lu.plexus.x7_0.sg_ slk.add.generated.AddSgSlkProxy.execute.**

Table 2–12   A_LU-PLEXUS_7-0_ADD_SG-SLK

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
SG_SS7LNKID	Identifies the AID as a signaling link. There can be no more than 16 signaling links in a link set.	N/A	N/A	S	R
SG_SIG_TYPE	Identifies the signaling type.	N/A	N/A	S	R
SG_M2UA_ASSOC_ID	Identifies the M2UA association, terminating on an SG or MG, to which to send MTP2 messages.	N/A	N/A	S	R
SG_M2UA_IID	Identifies an arbitrary index, unique for each signaling link, used to correlate traffic received from the M2UA server.	N/A	N/A	S	R
SG_LSET_ID	Identifies the link set.	N/A	N/A	S	R
SG_MTP3PRFL_ID	Identifies the MTP layer 3 profile.	N/A	N/A	S	R
SG_SLC	Identifies the link selection code, which represents a single link in a specific link set.	N/A	N/A	S	R
SG_LNK_PRIORITY	Identifies the link priority level for the link within its link set, with lower numbers indicating higher priority.	N/A	N/A	S	O
SG_CONG_LVL1	Identifies the onset threshold for congestion level 1 in MTP3.	N/A	N/A	S	O
SG_CONG_LVL2	Identifies the onset threshold for congestion level 2 in MTP3.	N/A	N/A	S	O
SG_CONG_LVL3	Identifies the onset threshold for congestion level 3 in MTP3.	N/A	N/A	S	O

Table 2–12   (Cont.) A_LU-PLEXUS_7-0_ADD_SG-SLK

Parameter Name	Description	Range	Default Value	Type	Class
SG_RESET_MTP3T31	Identifies whether congestion timer T31 is reset when the congestion level increases.	N/A	N/A	S	O
SG_ENABLEMTP3T31	Identifies whether congestion timer T31 is enabled for congestion level 1.	N/A	N/A	S	O
SG_M2PA_ASSOC_ID	Identifies, when the value of sigType is M2PASIG, the M2PA association, previously established with ENT-M2PA-ASSOC, to which to send MTP3 messages over M2PA/SCTP.	N/A	N/A	S	R

MML commands

MML Syntax :

This command lets the user create a narrowband signaling link using T1s or E1s on a TDM IOM, or to create a broadband signaling link

```
MML Command:
ENT-SG-SLK:[TID]:<ss7LnkId>:[CTAG]::SIGTYPE=<sigType>,M2UAASSOCID=<m2uaAssocId>,M2
UAIID=<m2uaIID>,LSETID=<lsetId>,MTP3PRFLID=<mtp3PrflId>,SLC=<slc>,M2PAASSOCID=<m2p
aAssocId>,[LNKPRIORITY=<lnkPriority>],[CONGLVL1=<congLvl1>],[CONGLVL2=<congLvl2>],
[CONGLVL3=<congLvl3>],[ENABLEMTP3T31=<enableMtp3T31>],[RESETMTP3T31=<resetMtp3T31>
];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_SG-SLK_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_SG-SLK_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_SG-SLK-RB

Add Signaling Gateway Signaling Link Rollback. It is implemented by the Java method **com.mslv.activation.cartridge.lu.plexus.x7_0.sg_slk_ rb.add.generated.AddSgSlkRbProxy.execute.**

Table 2–13   A_LU-PLEXUS_7-0_ADD_SG-SLK-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R
SG_SS7LNKID	Identifies the AID as a signaling link. There can be no more than 16 signaling links in a link set.	N/A	N/A	S	R
OLD_SG_SIG_TYPE	Identifies the signaling type.	N/A	N/A	S	R
OLD_SG_M2UA_ ASSOC_ID	Identifies the M2UA association, terminating on an SG or MG, to which to send MTP2 messages.	N/A	N/A	S	R
OLD_SG_M2UA_IID	Identifies an arbitrary index, unique for each signaling link, used to correlate traffic received from the M2UA server.	N/A	N/A	S	R
OLD_SG_LSET_ID	Identifies the link set.	N/A	N/A	S	R
OLD_SG_MTP3PRFL_ ID	Identifies the MTP layer 3 profile.	N/A	N/A	S	R
OLD_SG_SLC	Identifies the link selection code, which represents a single link in a specific link set.	N/A	N/A	S	R
OLD_SG_LNK_ PRIORITY	Identifies the link priority level for the link within its link set, with lower numbers indicating higher priority.	N/A	N/A	S	O
OLD_SG_CONG_LVL1	Identifies the onset threshold for congestion level 1 in MTP3.	N/A	N/A	S	O
OLD_SG_CONG_LVL2	Identifies the onset threshold for congestion level 2 in MTP3.	N/A	N/A	S	O
OLD_SG_CONG_LVL3	Identifies the onset threshold for congestion level 3 in MTP3.	N/A	N/A	S	O
OLD_SG_RESET_ MTP3T31	Identifies whether congestion timer T31 is reset when the congestion level increases.	N/A	N/A	S	O
OLD_SG_ ENABLEMTP3T31	Identifies whether congestion timer T31 is enabled for congestion level 1.	N/A	N/A	S	O
OLD_SG_M2PA_ ASSOC_ID	Identifies, when the value of sigType is M2PASIG, the M2PA association, previously established with ENT-M2PA-ASSOC, to which to send MTP3 messages over M2PA/SCTP.	N/A	N/A	S	O

MML commands

MML Syntax :

```
This command lets the user create a narrowband signaling link using T1s or E1s on
a TDM IOM, or to create a broadband signaling link

MML Command:
ENT-SG-SLK:[TID]:<ss7LnkId>:[CTAG]::SIGTYPE=<sigType>,M2UAASSOCID=<m2uaAssocId>,M2
UAIID=<m2uaIID>,LSETID=<lsetId>,MTP3PRFLID=<mtp3PrflId>,SLC=<slc>,M2PAASSOCID=<m2p
aAssocId>,[LNKPRIORITY=<lnkPriority>],[CONGLVL1=<congLvl1>],[CONGLVL2=<congLvl2>],
[CONGLVL3=<congLvl3>],[ENABLEMTP3T31=<enableMtp3T31>],[RESETMTP3T31=<resetMtp3T31>
```

```
];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_SG-SLK-RB_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_SG-SLK-RB_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_SLK

Add Signaling Link. It is implemented by the Java method **com.mslv.activation.cartridge.lu.plexus.x7_ 0.slk.add.generated.AddSlkProxy.execute.**

Table 2–14   A_LU-PLEXUS_7-0_ADD_SLK

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
SS7LNK_ID	Identifies the AID as a signaling link.	N/A	N/A	S	R
SIG_TYPE	Identifies the type of signaling link.	N/A	N/A	S	R
M2UA_ASSOC_ID	Identifies the M2UA association, terminating on an SG or MG, to which to send MTP2 messages.	N/A	N/A	S	R
M2UA_IID	Identifies an arbitrary index, unique for each signaling link, used to correlate traffic received from the M2UA server.	N/A	N/A	S	R
TERM_ID	Identifies the termination for the signaling link.	N/A	N/A	S	R
L2PRFL_ID	Identifies the MTP layer 2 profile.	N/A	N/A	S	R
LNK_SPEED	Identifies the link speed when the value of sigType is NARROWBAND.	N/A	N/A	S	O
M2PAASSOCID	Identifies the IPSG M2PA association, previously established with ENT-M2PA-ASSOC, to which to send the MTP3 messaging to peer MTP3 over M2PA/SCTP.	N/A	N/A	S	R

Table 2–14 (Cont.) A_LU-PLEXUS_7-0_ADD_SLK

Parameter Name	Description	Range	Default Value	Type	Class
SECM2UAASSOCID	Identifies the backup M2UA association, previously established with ENT-M2UA-SGASSOC, terminating on an SG or MG, to which to send MTP2 messages.	N/A	N/A	S	O
LSSULEN	Identifies the length in bytes of the Link Status Signal Unit.	N/A	N/A	S	O
MTP2DRVRPRTCL	Identifies the MTP2 driver protocol standard used for MTPL2 driver microcode (Japan differs from other countries) and the M2UA server when the value of remoteSgType in M2UA-SGASSOC is DSG.	N/A	N/A	S	O

MML commands

MML Syntax :

```
This command lets the user create a signaling link on a Lucent Network Gateway
(NG) with signaling gateway functionality.
```

```
MML Command:
ENT-SLK:[TID]:<ss7LnkId>:[CTAG]::SIGTYPE=<sigType>,M2UAASSOCID=<m2uaAssocId>,M2PAA
SSOCID=<m2paAssocId>,M2UAIID=<m2uaIId>,TERMID=<termId>,L2PRFLID=<l2PrflId>,[SECM2U
AASSOCID=<secM2uaAssocId>],[LNKSPEED=<lnkSpeed>],[LSSULEN=<lssuLen>],[MTP2DRVRPRTC
L=<mtp2DrvrPrtcl>];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_SLK_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_SLK_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_SLK-RB

Add Signaling Link. It is implemented by the Java method **com.mslv.activation.cartridge.lu.plexus.x7_0.slk_ rb.add.generated.AddSlkRbProxy.execute.**

Table 2–15   A_LU-PLEXUS_7-0_ADD_SLK-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R
SS7LNK_ID	Identifies the AID as a signaling link.	N/A	N/A	S	R
OLD_SIG_TYPE	Identifies the type of signaling link.	N/A	N/A	S	O

Table 2–15   (Cont.) A_LU-PLEXUS_7-0_ADD_SLK-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_M2UA_ASSOC_ID	Identifies the M2UA association, terminating on an SG or MG, to which to send MTP2 messages.	N/A	N/A	S	O
OLD_M2UA_IID	Identifies an arbitrary index, unique for each signaling link, used to correlate traffic received from the M2UA server.	N/A	N/A	S	O
OLD_TERM_ID	Identifies the termination for the signaling link.	N/A	N/A	S	O
OLD_L2PRFL_ID	Identifies the MTP layer 2 profile.	N/A	N/A	S	O
OLD_LNK_SPEED	Identifies the link speed when the value of sigType is NARROWBAND.	N/A	N/A	S	O
OLD_M2PAASSOCID	Identifies the primary M2UA association, previously established with ENT-M2UA-SGASSOC, terminating on an SG or MG, to which to send MTP2 messages.	N/A	N/A	S	R
OLD_SECM2UAASSOCID	Identifies the backup M2UA association, previously established with ENT-M2UA-SGASSOC, terminating on an SG or MG, to which to send MTP2 messages.	N/A	N/A	S	O
OLD_LSSULEN	Identifies the length in bytes of the Link Status Signal Unit.	N/A	N/A	S	O
OLD_MTP2DRVRPRTCL	Identifies the MTP2 driver protocol standard used for MTPL2 driver microcode (Japan differs from other countries) and the M2UA server when the value of remoteSgType in M2UA-SGASSOC is DSG.	N/A	N/A	S	O

MML commands

MML Syntax :

his command lets the user create a signaling link on a Lucent Network Gateway (NG) with signaling gateway functionality.

```
MML Command:
ENT-SLK:[TID]:<ss7LnkId>:[CTAG]::SIGTYPE=<sigType>,M2UAASSOCID=<m2uaAssocId>,M2PAA
SSOCID=<m2paAssocId>,M2UAIID=<m2uaIId>,TERMID=<termId>,L2PRFLID=<l2PrflId>,[SECM2U
AASSOCID=<secM2uaAssocId>],[LNKSPEED=<lnkSpeed>],[LSSULEN=<lssuLen>],[MTP2DRVRPRTC
L=<mtp2DrvrPrtcl>];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_SLK-RB_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_SLK-RB_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_SS7-TRK

Add SS7 Trunk. It is implemented by the Java method
**com.mslv.activation.cartridge.lu.plexus.x7_0.ss7_
trk.add.generated.AddSs7TrkProxy.execute.**

Table 2–16   A_LU-PLEXUS_7-0_ADD_SS7-TRK

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
SS7TRK_AID	Identifies the AID as a unique trunk (ISUP tcic) or range of trunks associated with a trunk group number.	N/A	N/A	S	R
MG_NAME	Identifies the local media gateway associated with a media gateway controller.	N/A	N/A	S	R
TERM_ID	Identifies the TDM termination on the local media gateway in MEGACO format.	N/A	N/A	S	R
TRK_NAME	Identifies the name of the trunk. Trunk names must be unique across all trunks, regardless of signaling type.	N/A	N/A	S	O
PRE_CUT	Identifies whether the trunk has not yet been turned up for service (pre-cut), or is available (cut regardless of whether trunk is in- service or out-of-service).	N/A	N/A	S	O
PST	Identifies the primary state of the trunk(s).	N/A	N/A	S	O

MML commands

MML Syntax :

```
This command lets the user establish a trunk (ISUP tcic) or range of trunks in a
trunk group, associate it with a termination on a local media gateway, and,
optionally, name it, establish its availability, and assign it a primary state.
```

```
MML Command:
ENT-SS7-TRK:[TID]:<ss7TrkAid>:[CTAG]::MGNAME=<mgName>,TERMID=<termId>,[NAME=<trkNa
me>],[PRECUT=<preCut>]:[<pst>];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_SS7-TRK_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_SS7-TRK_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_SS7-TRK-RB

Add SS7 Trunk Rollback. It is implemented by the Java method **com.mslv.activation.cartridge.lu.plexus.x7_0.ss7_trk_ rb.add.generated.AddSs7TrkRbProxy.execute.**

Table 2–17   A_LU-PLEXUS_7-0_ADD_SS7-TRK-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R
SS7TRK_AID	Identifies the AID as a unique trunk (ISUP tcic) or range of trunks associated with a trunk group number.	N/A	N/A	S	R
OLD_MG_NAME	Identifies the local media gateway associated with a media gateway controller.	N/A	N/A	S	R
OLD_TERM_ID	Identifies the TDM termination on the local media gateway in MEGACO format.	N/A	N/A	S	O
OLD_TRK_NAME	Identifies the name of the trunk.	N/A	N/A	S	O
OLD_PRE_CUT	Identifies whether the trunk has not yet been turned up for service (pre-cut), or is available (cut regardless of whether trunk is in- service or out-of-service).	N/A	N/A	S	O
OLD_PST	Identifies the primary state of the trunk(s).	N/A	N/A	S	O

MML commands

MML Syntax :

```
This command lets the user establish a trunk (ISUP tcic) or range of trunks in a
trunk group, associate it with a termination on a local media gateway, and,
optionally, name it, establish its availability, and assign it a primary state.
```

```
MML Command:
ENT-SS7-TRK:[TID]:<ss7TrkAid>:[CTAG]::MGNAME=<mgName>,TERMID=<termId>,[NAME=<trkNa
me>],[PRECUT=<preCut>]:[<pst>];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_SS7-TRK-RB_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_SS7-TRK-RB_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_T1

Add DS1 Facility. It is implemented by the Java method
com.mslv.activation.cartridge.lu.plexus.x7_0.t1.add.generated.AddT1Proxy.execute.

Table 2–18   A_LU-PLEXUS_7-0_ADD_T1

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
DS_ID	Identifies the AID as an I/O module or a T1 port on an I/O module in the switch.	N/A	N/A	S	R
EQLZ	Identifies the attenuation distortion equalization setting to compensate for the length of a 22-gauge cable in feet.	N/A	N/A	S	O
FMT	Identifies the DS1 digital signal framing format; a null value defaults to SF or not applicable.	N/A	N/A	S	O
LINE_CDE	Identifies the signal inserted for zero code suppression on a DS1.	N/A	N/A	S	O
OMODE	Identifies what will be transmitted from the DS1 output port when out of service.	N/A	N/A	S	O
TMG_REF	Identifies whether the TMG-A or TMG-B is to be used as the primary or secondary timing source for the system.	N/A	N/A	S	O
IF_TYPE	Identifies whether the subject T1 port affects the network or user side.	N/A	N/A	S	O
PST	Identifies the primary state of the port.	N/A	N/A	S	O
SST	Identifies the secondary state of the port.	N/A	N/A	S	O

MML commands

MML Syntax :

```
This command lets the user establish the parameters associated with a DS1 port on
an I/O module in the switch.  These parameters include equalization/build-out,
framing, line code, service mode, timing reference, primary state, and secondary
state.
```

```
MML Command:
ENT-T1:[TID]:<ds_
id>:[CTAG]::[EQLZ=<eqlz>],[FMT=<fmt>],[LINECDE=<linecde>],[OMODE=<omode>],[TMGREF=
<tmgref>],[IFTYPE=<iftype>]:[<pst>],[<sst>];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_T1_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_T1_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_T1-RB

Add DS1 Facility Rollback. It is implemented by the Java method
**com.mslv.activation.cartridge.lu.plexus.x7_0.t1_
rb.add.generated.AddT1RbProxy.execute.**

Table 2–19   A_LU-PLEXUS_7-0_ADD_T1-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R
DS_ID	Identifies the AID as an I/O module or a T1 port on an I/O module in the switch.	N/A	N/A	S	R
OLD_EQLZ	Identifies the attenuation distortion equalization setting to compensate for the length of a 22-gauge cable in feet.	N/A	N/A	S	O
OLD_FMT	Identifies the DS1 digital signal framing format; a null value defaults to SF or not applicable.	N/A	N/A	S	O
OLD_LINE_CDE	Identifies the signal inserted for zero code suppression on a DS1.	N/A	N/A	S	O
OLD_OMODE	Identifies what will be transmitted from the DS1 output port when out of service.	N/A	N/A	S	O
OLD_TMG_REF	Identifies whether the TMG-A or TMG-B is to be used as the primary or secondary timing source for the system.	N/A	N/A	S	O
OLD_IF_TYPE	Identifies whether the subject T1 port affects the network or user side.	N/A	N/A	S	O
OLD_PST	Identifies the primary state of the port.	N/A	N/A	S	O
OLD_SST	Identifies the secondary state of the port.	N/A	N/A	S	O

MML commands

MML Syntax :

```
This command lets the user establish the parameters associated with a DS1 port on
an I/O module in the switch.  These parameters include equalization/build-out,
framing, line code, service mode, timing reference, primary state, and secondary
state.
```

```
MML Command:
ENT-T1:[TID]:<ds_
id>:[CTAG]::[EQLZ=<eqlz>],[FMT=<fmt>],[LINECDE=<linecde>],[OMODE=<omode>],[TMGREF=
<tmgref>],[IFTYPE=<iftype>]:[<pst>],[<sst>];
```

Output Parameters

The following parameter will retuned as CSDL parameter:

A_LU-PLEXUS_6-3_ADD_T1-RB_UDET = user defiend exit type

The following parameter will retuned as INFO parameter:

A_LU-PLEXUS_6-3_ADD_T1-RB_RETURN_INFO = Response Code + Response Message

A_LU-PLEXUS_7-0_ADD_TRKGRP

Add Trunk Group. It is implemented by the Java method **com.mslv.activation.cartridge.lu.plexus.x7_ 0.trkgrp.add.generated.AddTrkGrpProxy.execute.**

Table 2–20   A_LU-PLEXUS_7-0_ADD_TRKGRP

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
TGN	Identifies the AID as a trunk group.	N/A	N/A	S	R
SIG_TYPE	Identifies the signaling type for the trunk group.	N/A	N/A	S	R
TRK_GRP_CLASS	Identifies the trunk group class for the remote switch on which the trunk group terminates.	N/A	N/A	S	O
OWN_CLASS	Identifies the trunk group class for the local switch	N/A	N/A	S	O
TRK_GRP_NAME	Identifies the name of the trunk group.	N/A	N/A	S	O
OPC_DPC	Identifies the association of the own point code for the switch with the destination point code for a remote or adjacent switch, thus establishing the endpoints for the trunk.	N/A	N/A	S	O
HUNTING	Identifies the method by which CICs are allocated.	N/A	N/A	S	O
HUNT_PRIORITY	Identifies whether hunting searches even, odd, or both numbered channels	N/A	N/A	S	O
DIRECTION	Identifies whether the switch originates outgoing calls and/or accepts incoming calls on a trunk group.	N/A	N/A	S	O
INIT_STATE	Identifies the initial state of the trunk group.	N/A	N/A	S	O
COT_FREQ	Identifies the frequency at which continuity tests are performed on outgoing calls	N/A	N/A	S	O
ECHO_CNTRL	Identifies the amount, in milliseconds, of echo cancellation for outgoing calls	N/A	N/A	S	O

Table 2–20   (Cont.) A_LU-PLEXUS_7-0_ADD_TRKGRP

Parameter Name	Description	Range	Default Value	Type	Class
LONG_DELAY	Identifies whether echo cancellation processing is required because of a long delay	N/A	N/A	S	O
FAR_END_CLLI	Identifies the Common Language Location Identification code at the far end.	N/A	N/A	S	O
SEC_OWN_LRN	Identifies a secondary local routing number associated with outgoing calls for the trunk group.	N/A	N/A	S	O
TG_PRFL	Identifies the profile for the trunk group (Not editable for CAS).	N/A	N/A	S	O
BILL_PRFL	Identifies the billing profile for the trunk group.	N/A	N/A	S	O
VALIDATE_GAP	Identifies whether to enable Generic Address Parameter validation against the subscribers for the trunk group.	N/A	N/A	S	O
CLASS_OF_SRV	Identifies how to route incoming messages on the trunk group.	N/A	N/A	S	O
LATA_ID	Identifies the LATA used by the tollfree service for incoming calls. LATA IDs are restricted to either three or five digits.	N/A	N/A	S	O
SBLN	Identifies the Special Billing Number, to which incoming calls without a specific number are to be billed.	N/A	N/A	S	O
TG_SERVICE	Identifies a service to apply to the trunk group.	N/A	N/A	S	O
MAX_IP_CALLS	Identifies the maximum number of active calls allowed on the trunk group when the value of sigType is SIP or SIPT.	N/A	N/A	S	O
SDP_PRFL	Identifies the SDP (Session Description Protocol) profile for the trunk group when the value of sigType is SIP or SIPT.	N/A	N/A	S	O
ISUP_CONFUSION_MSG	Identifies whether to send an ISUP confusion message when ISUP receives an unrecognized message.	N/A	N/A	S	O
ATP	Identifies whether to send the Access Transport Parameter	N/A	N/A	S	O
AUDIO_IND	Identifies, for ISUP and SIP-T trunk groups.	N/A	N/A	S	O
AIN_TRIG_LIST	Identifies a list of AIN triggers.	N/A	N/A	S	O
CNAM	Identifies whether CNAM service is enabled for outgoing SIP or SIPT trunk groups.	N/A	N/A	S	O
TRANS_PLAN	Identifies the translation plan, previously defined with ENT-TRANS-PLAN or ENT-TRANS-SCHED.	N/A	N/A	S	O
ROUTE_COST	Identifies the cost of the trunk group.	N/A	N/A	S	O

Table 2–20   (Cont.) A_LU-PLEXUS_7-0_ADD_TRKGRP

Parameter Name	Description	Range	Default Value	Type	Class
DGT_SCRN	Identifies the outgoing trunk group screening table name.	N/A	N/A	S	O
ACTN_TERM_ ATTMPT	Identifies the action to take after the trunk group has been chosen as an outgoing interface for the call.	N/A	N/A	S	O
BEARER_CAP	Identifies the bearer capabilities for the trunk group, with ampersands (	N/A	N/A	S	O

3

Service Definition

The Plexus9000 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 about the CSDL parameters in this cartridge. The following table lists and describes the type of parameter information that is included.

Table 3–1   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, specifies the parameter label transmitted on the ASDL command. Scalar parameters are conventional name-value pair parameters.
	■ C - Compound, specifies the base name of the compound parameter transmitted on the ASDL command. A compound parameter contains structures or arrays of information that are represented by a particular structure name or compound parameter name. Each compound parameter can contain a large number of elements. If you use compound parameters, you only require a single entry in the ASAP translation tables to call the compound parameter and all its associated parameter elements.
	■ I - Indexed, identifies a parameter that contains a sequential numerical index value to tell the SARM that it should execute the same operation (for example, an ASDL command) for all occurrences of that index. Consequently, if there are several options on a particular CSDL command (OPT1, OPT2, OPT3, etc.), you can specify the OPT parameter as an indexed parameter. When you specify the OPT parameter as an indexed parameter, the SARM generates several occurrences of that same ASDL command and each command has a different value for the option being transmitted to the NEP.
	For more information on parameter types, refer to the *ASAP Developer's Guide*.

Table 3–1   (Cont.) ASDL Parameter Information

Item	Description
Class	Indicates one of the following parameter classifications: ■ R - Required scalar parameter ■ O - Optional scalar parameter ■ C - Required compound parameter ■ N - Optional compound parameter ■ M - Mandatory indexed parameter ■ I - Optional indexed parameter ■ S - Parameter count

For a detailed description of the Required and Optional parameter classifications, refer to the *ASAP System Administrator's Guide*.

CSDL Commands

This cartridge provides the following CSDL commands:

- C_LU-PLEXUS_7-0_ADD_LSET
- C_LU-PLEXUS_7-0_ADD_MGC-PC
- C_LU-PLEXUS_7-0_ADD_ROUTE-SS7
- C_LU-PLEXUS_7-0_ADD_SG-ISUPPROXY
- C_LU-PLEXUS_7-0_ADD_SG-PC
- C_LU-PLEXUS_7-0_ADD_SG-SLK
- C_LU-PLEXUS_7-0_ADD_SLK
- C_LU-PLEXUS_7-0_ADD_SS7-TRK
- C_LU-PLEXUS_7-0_ADD_T1
- C_LU-PLEXUS_7-0_ADD_TRKGRP
- C_LU-PLEXUS_7-0_DEL_LSET
- C_LU-PLEXUS_7-0_DEL_MGC-PC
- C_LU-PLEXUS_7-0_DEL_ROUTE-SS7
- C_LU-PLEXUS_7-0_DEL_SG-ISUPPROXY
- C_LU-PLEXUS_7-0_DEL_SG-PC
- C_LU-PLEXUS_7-0_DEL_SG-SLK
- C_LU-PLEXUS_7-0_DEL_SLK
- C_LU-PLEXUS_7-0_DEL_SS7-TRK
- C_LU-PLEXUS_7-0_DEL_T1
- C_LU-PLEXUS_7-0_DEL_TRKGRP
- C_LU-PLEXUS_7-0_MOD_SS7-TRK
- C_LU-PLEXUS_7-0_MOD_T1
- C_LU-PLEXUS_7-0_MOD_TRKGRP

- C_LU-PLEXUS_7-0_OPR_LPBK-T1
- C_LU-PLEXUS_7-0_QRY_LSET
- C_LU-PLEXUS_7-0_QRY_LSET-STATUS
- C_LU-PLEXUS_7-0_QRY_MGC-PC
- C_LU-PLEXUS_7-0_QRY_MGC-PROTN
- C_LU-PLEXUS_7-0_QRY_ROUTE-SS7
- C_LU-PLEXUS_7-0_QRY_ROUTESS7-STATUS
- C_LU-PLEXUS_7-0_QRY_SG-ISUPPROXY
- C_LU-PLEXUS_7-0_QRY_SG-PC
- C_LU-PLEXUS_7-0_QRY_SG-SLK
- C_LU-PLEXUS_7-0_QRY_SGSLK-STATUS
- C_LU-PLEXUS_7-0_QRY_SLK
- C_LU-PLEXUS_7-0_QRY_SLK-STATUS
- C_LU-PLEXUS_7-0_QRY_SS7-TRK
- C_LU-PLEXUS_7-0_QRY_T1
- C_LU-PLEXUS_7-0_QRY_TRKGRP
- C_LU-PLEXUS_7-0_RLS_LPBK-T1

C_LU-PLEXUS_7-0_ADD_LSET

Add Link Set.

Table 3–2   C_LU-PLEXUS_7-0_ADD_LSET

Parameter Name	Description	Range	Default Value	Type	Class
ACT_LNK_REQD	Identifies the maximum number of links that can be active at any given time.	N/A	N/A	S	O
ADJ_DPC	Identifies the adjacent DPC to which the link set connects.	N/A	N/A	S	O
LSET_ID	Identifies the AID as an SS7 link set.	N/A	N/A	S	R
NE_ID_LU-PLEXUS	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
OPC	Identifies the own point code associated with the link set.	N/A	N/A	S	O

Mapping to ASDLs

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

Table 3–3   CSDL to ASDL Mapping

CSDL	ASDL
C_LU-PLEXUS_7-0_ADD_LSET	A_LU-PLEXUS_7-0_ADD_LSET

C_LU-PLEXUS_7-0_ADD_MGC-PC

Add Media Gateway Controller Point Code.

Table 3–4   C_LU-PLEXUS_7-0_ADD_MGC-PC

Parameter Name	Description	Range	Default Value	Type	Class
CONG_LVL1	Identifies the percentage of originated calls to reject at the first level of call throttling by the ISUP layer.	N/A	N/A	S	O
CONG_LVL2	Identifies the percentage of originated calls to reject at the second level of call throttling by the ISUP layer.	N/A	N/A	S	O
CONG_LVL3	Identifies the percentage of originated calls to reject at the third level of call throttling by the ISUP layer.	N/A	N/A	S	O
ISUP_CONG_CTRL	Identifies whether to enable ISUP congestion control.	N/A	N/A	S	O
ISUP_TPAUSE	Identifies the value (in seconds) for the Pause Validation timer. Typical values are 15 to 20 seconds. A value of zero means the timer never expires and no action will be taken on a Point Code pause.	N/A	N/A	S	O
ISUP_VARIANT	Identifies the protocol variant for the OPC-DPC pair. This variant determines the set of messages requiring action, the actions to take on receipt of these messages and/or timeouts, the timers used and their values.	N/A	N/A	S	R
MGC_PC_ID	Identifies the AID as the association of an own point code for the Lucent Network Controller with the destination point code for a remote media gateway controller, thus establishing a trunk between the two MGCs.	N/A	N/A	S	R
NE_ID_LU-PLEXUS	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
PC_PAUSE_ACTN	Identifies the action the switch takes when MTP level 3 sends a pause status primitive to indicate that the DPC is unavailable.	N/A	N/A	S	O
PC_START_MODE	Identifies the action the switch takes on startup for all circuit groups towards the DPC to ensure a known state for the circuits.	N/A	N/A	S	O
T29	Identifies the Timer T29 value (in seconds) for the ISUP layer.	N/A	N/A	S	O
T30	Identifies the Timer T30 value (in seconds) for the ISUP layer.	N/A	N/A	S	O
T4	Identifies the Timer T4 value (in seconds) for international variants.	N/A	N/A	S	O

Mapping to ASDLs

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

Table 3–5   CSDL to ASDL Mapping

CSDL	ASDL
C_LU-PLEXUS_7-0_ADD_MGC-PC	A_LU-PLEXUS_7-0_ADD_MGC-PC

C_LU-PLEXUS_7-0_ADD_ROUTE-SS7

Add SS7 Route.

Table 3–6   C_LU-PLEXUS_7-0_ADD_ROUTE-SS7

Parameter Name	Description	Range	Default Value	Type	Class
LSET_PRIORITY	Identifies the priority for the link set, with lower numbers indicating higher priority.	N/A	N/A	S	O
NE_ID_LU-PLEXUS	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
ROUTE_SS7	Identifies the AID as an SS7 route. The pattern is a combination of the destination point code and the link set connecting to it.	N/A	N/A	S	R

Mapping to ASDLs

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

Table 3–7   CSDL to ASDL Mapping

CSDL	ASDL
C_LU-PLEXUS_7-0_ADD_ROUTE-SS7	A_LU-PLEXUS_7-0_ADD_ROUTE-SS7

C_LU-PLEXUS_7-0_ADD_SG-ISUPPROXY

Add Signaling Gateway ISUP Proxy.

Table 3–8   C_LU-PLEXUS_7-0_ADD_SG-ISUPPROXY

Parameter Name	Description	Range	Default Value	Type	Class
ISUP_VARIANT	Identifies the variant for MTP2 and MTP3.	N/A	N/A	S	R
NE_ID_LU-PLEXUS	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
PC_PAIR	Identifies the AID as the association between an SG and a remote or adjacent switch.	N/A	N/A	S	R

Mapping to ASDLs

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

Table 3–9   CSDL to ASDL Mapping

CSDL	ASDL
C_LU-PLEXUS_7-0_ADD_SG-ISUPPROXY	A_LU-PLEXUS_7-0_ADD_SG-ISUPPROXY

C_LU-PLEXUS_7-0_ADD_SG-PC

Add Singnaling Gateway Point Code.

Table 3–10   C_LU-PLEXUS_7-0_ADD_SG-PC

Parameter Name	Description	Range	Default Value	Type	Class
DM_PRIORITY	Identifies whether to discard message priorities.	N/A	N/A	S	O
MTP3_RST_REQ	Identifies whether restart is required for the adjacent node.	N/A	N/A	S	O
MTP_VARIANT	Identifies the variant for MTP2 and MTP3	N/A	N/A	S	R
MULTI_CONG_LVL	Identifies whether to enable multiple congestion level thresholds.	N/A	N/A	S	O
NE_ID_LU-PLEXUS	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
PC_DIR	Identifies the type of point code. The value of pcDir cannot be ADJ when the value of pcId is DEF_ANSI or DEF_ITU.	N/A	N/A	S	R
PC_ID	Identifies the AID as an adjacent or remote point code for a signaling gateway.	N/A	N/A	S	R
PC_PRFL_ID	Identifies the point code profile.	N/A	N/A	S	R
PC_SSF	Identifies the sub-service field to be used.	N/A	N/A	S	O

Mapping to ASDLs

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

Table 3–11   CSDL to ASDL Mapping

CSDL	ASDL
C_LU-PLEXUS_7-0_ADD_SG-PC	A_LU-PLEXUS_7-0_ADD_SG-PC

C_LU-PLEXUS_7-0_ADD_SG-SLK

Add Signaling Gateway Signaling Link.

Table 3–12   C_LU-PLEXUS_7-0_ADD_SG-SLK

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_LU-PLEXUS	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
SG_CONG_LVL1	Identifies the onset threshold for congestion level 1 in MTP3.	N/A	N/A	S	O
SG_CONG_LVL2	Identifies the onset threshold for congestion level 2 in MTP3.	N/A	N/A	S	O
SG_CONG_LVL3	Identifies the onset threshold for congestion level 3 in MTP3.	N/A	N/A	S	O
SG_ENABLEMTP3T31	Identifies whether congestion timer T31 is enabled for congestion level 1.	N/A	N/A	S	O

Table 3–12   (Cont.) C_LU-PLEXUS_7-0_ADD_SG-SLK

Parameter Name	Description	Range	Default Value	Type	Class
SG_LNK_PRIORITY	Identifies the link priority level for the link within its link set, with lower numbers indicating higher priority.	N/A	N/A	S	O
SG_LSET_ID	Identifies the link set.	N/A	N/A	S	R
SG_M2PA_ASSOC_ID	Identifies, when the value of sigType is M2PASIG, the M2PA association, previously established with ENT-M2PA-ASSOC, to which to send MTP3 messages over M2PA/SCTP.	N/A	N/A	S	R
SG_M2UA_ASSOC_ID	Identifies the M2UA association, terminating on an SG or MG, to which to send MTP2 messages.	N/A	N/A	S	R
SG_M2UA_IID	Identifies an arbitrary index, unique for each signaling link, used to correlate traffic received from the M2UA server.	N/A	N/A	S	R
SG_MTP3PRFL_ID	Identifies the MTP layer 3 profile.	N/A	N/A	S	R
SG_RESET_MTP3T31	Identifies whether congestion timer T31 is reset when the congestion level increases.	N/A	N/A	S	O
SG_SIG_TYPE	Identifies the signaling type.	N/A	N/A	S	R
SG_SLC	Identifies the link selection code, which represents a single link in a specific link set.	N/A	N/A	S	R
SG_SS7LNKID	Identifies the AID as a signaling link. There can be no more than 16 signaling links in a link set.	N/A	N/A	S	R

Mapping to ASDLs

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

Table 3–13   CSDL to ASDL Mapping

CSDL	ASDL
C_LU-PLEXUS_7-0_ADD_SG-SLK	A_LU-PLEXUS_7-0_ADD_SG-SLK

C_LU-PLEXUS_7-0_ADD_SLK

Add Signaling Link.

Table 3–14   C_LU-PLEXUS_7-0_ADD_SLK

Parameter Name	Description	Range	Default Value	Type	Class
L2PRFL_ID	Identifies the MTP layer 2 profile.	N/A	N/A	S	R
LNK_SPEED	Identifies the link speed when the value of sigType is NARROWBAND.	N/A	N/A	S	O
LSSULEN	Identifies the length in bytes of the Link Status Signal Unit.	N/A	N/A	S	O

Table 3–14   (Cont.) C_LU-PLEXUS_7-0_ADD_SLK

Parameter Name	Description	Range	Default Value	Type	Class
M2PAASSOCID	Identifies the IPSG M2PA association, previously established with ENT-M2PA-ASSOC, to which to send the MTP3 messaging to peer MTP3 over M2PA/SCTP.	N/A	N/A	S	R
M2UA_ASSOC_ID	Identifies the M2UA association, terminating on an SG or MG, to which to send MTP2 messages.	N/A	N/A	S	R
M2UA_IID	Identifies an arbitrary index, unique for each signaling link, used to correlate traffic received from the M2UA server.	N/A	N/A	S	R
MTP2DRVRPRTCL	Identifies the MTP2 driver protocol standard used for MTPL2 driver microcode (Japan differs from other countries) and the M2UA server when the value of remoteSgType in M2UA-SGASSOC is DSG.	N/A	N/A	S	O
NE_ID_LU-PLEXUS	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
SECM2UAASSOCID	Identifies the backup M2UA association, previously established with ENT-M2UA-SGASSOC, terminating on an SG or MG, to which to send MTP2 messages.	N/A	N/A	S	O
SIG_TYPE	Identifies the type of signaling link.	N/A	N/A	S	R
SS7LNK_ID	Identifies the AID as a signaling link.	N/A	N/A	S	R
TERM_ID	Identifies the termination for the signaling link.	N/A	N/A	S	R

Mapping to ASDLs

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

Table 3–15   CSDL to ASDL Mapping

CSDL	ASDL
C_LU-PLEXUS_7-0_ADD_SLK	A_LU-PLEXUS_7-0_ADD_SLK

C_LU-PLEXUS_7-0_ADD_SS7-TRK

Add SS7 Trunk.

Table 3–16   C_LU-PLEXUS_7-0_ADD_SS7-TRK

Parameter Name	Description	Range	Default Value	Type	Class
MG_NAME	Identifies the local media gateway associated with a media gateway controller.	N/A	N/A	S	R
NE_ID_LU-PLEXUS	Lucent PLEXUS NE identifer.	N/A	N/A	S	R
PRE_CUT	Identifies whether the trunk has not yet been turned up for service (pre-cut), or is available (cut regardless of whether trunk is in- service or out-of-service).	N/A	N/A	S	O
PST	Identifies the primary state of the trunk(s).	N/A	N/A	S	O
SS7TRK_AID	Identifies the AID as a unique trunk (ISUP tcic) or range of trunks associated with a trunk group number.	N/A	N/A	S	R
TERM_ID	Identifies the TDM termination on the local media gateway in MEGACO format.	N/A	N/A	S	R
TRK_NAME	Identifies the name of the trunk. Trunk names must be unique across all trunks, regardless of signaling type.	N/A	N/A	S	O

Mapping to ASDLs

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

Table 3–17   CSDL to ASDL Mapping

CSDL	ASDL
C_LU-PLEXUS_7-0_ADD_SS7-TRK	A_LU-PLEXUS_7-0_ADD_SS7-TRK

C_LU-PLEXUS_7-0_ADD_T1

Add DS1 Facility.

Table 3–18   C_LU-PLEXUS_7-0_ADD_T1

Parameter Name	Description	Range	Default Value	Type	Class
DS_ID	Identifies the AID as an I/O module or a T1 port on an I/O module in the switch.	N/A	N/A	S	R
EQLZ	Identifies the attenuation distortion equalization setting to compensate for the length of a 22-gauge cable in feet.	N/A	N/A	S	O
FMT	Identifies the DS1 digital signal framing format; a null value defaults to SF or not applicable.	N/A	N/A	S	O
IF_TYPE	Identifies whether the subject T1 port affects the network or user side.	N/A	N/A	S	O
LINE_CDE	Identifies the signal inserted for zero code suppression on a DS1.	N/A	N/A	S	O
NE_ID_LU-PLEXUS	Lucent PLEXUS NE identifer.	N/A	N/A	S	R

Table 3–18 (Cont.) C_LU-PLEXUS_7-0_ADD_T1

Parameter Name	Description	Range	Default Value	Type	Class
OMODE	Identifies what will be transmitted from the DS1 output port when out of service.	N/A	N/A	S	O
PST	Identifies the primary state of the port.	N/A	N/A	S	O
SST	Identifies the secondary state of the port.	N/A	N/A	S	O
TMG_REF	Identifies whether the TMG-A or TMG-B is to be used as the primary or secondary timing source for the system.	N/A	N/A	S	O

Mapping to ASDLs

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

Table 3–19   CSDL to ASDL Mapping

CSDL	ASDL
C_LU-PLEXUS_7-0_ADD_T1	A_LU-PLEXUS_7-0_ADD_T1

C_LU-PLEXUS_7-0_ADD_TRKGRP

Add Trunk Group.

Table 3–20   C_LU-PLEXUS_7-0_ADD_TRKGRP

Parameter Name	Description	Range	Default Value	Type	Class
ACC	Identifies, for ISUP variants only, whether to allow Automatic Congestion Control.	N/A	N/A	S	O
ACMTMR	Identifies, for ISUP and SIP-T trunk groups on the ingress side, the time in seconds after transmitting the IAM (or equivalent message for other protocols) until the switch transmits an ACM and generates a ringback tone towards the preceding switch.	N/A	N/A	S	O
ACTN_TERM_ ATTMPT	Identifies the action to take after the trunk group has been chosen as an outgoing interface for the call.	N/A	N/A	S	O
AIN_TRIG_LIST	Identifies a list of AIN triggers.	N/A	N/A	S	O
ATP	Identifies whether to send the Access Transport Parameter	N/A	N/A	S	O
AUDIO_IND	Identifies, for ISUP and SIP-T trunk groups.	N/A	N/A	S	O
BEARER_CAP	Identifies the bearer capabilities for the trunk group, with ampersands (	N/A	N/A	S	O

4

Configuring ASAP to Support Additional NE Instances

You can configure Oracle Communications ASAP (ASAP) to support the Lucent PLEXUS host - NEP configuration using the Service Activation Configuration Tool (SACT). Refer to the *ASAP System Administrator's Guide* for more information.

Extracting Source Files

Before you can access an XML file to modify it, you must extract it from the .sar file. Use the following procedure to extract source files from the sar file.

To extract source files:

1. If necessary, create a repository directory, copy the .sar file to the new directory and un-jar the sar file.

2. After you un-jar the sar file, you can access the XML files.

Loading a New XML File

When you finish modifying an XML file, you must create a new sar file, then restart the cartridge using the new file.

Configuration XML File

Below is an example of the Activation.Configuration.XML file for the Plexus9000 cartridge.

```
<?xml version="1.0" encoding="UTF-8"?>
<activationConfig
xmlns="http://www.metasolv.com/ServiceActivation/2003/ActivationConfig"
xmlns:cfg="http://www.mslv.com/studio/activation/model/config"
xmlns:route="http://www.mslv.com/studio/activation/model/routing"
xmlns:sm="http://www.metasolv.com/ServiceActivation/2003/ServiceModel"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
     <connectionPool name="LUPLXPL">
         <device name="NE_LU-PLEXUS_7-0_HOST1">
             <environment/>
             <lineType>TELNET_CONNECTION</lineType>
         </device>
         <device name="Connection1">
             <environment/>
             <lineType>TELNET_CONNECTION</lineType>
         </device>
     </connectionPool>
```

```
<element name="T_LU-PLEXUS_7-0_HOST1">
        <vendor>LU</vendor>
        <technology>PLEXUS</technology>
        <softwareLoad>7-0</softwareLoad>
        <nepServerName>$NEP</nepServerName>
        <primaryPool>LUPLXPL</primaryPool>
        <maximumConnections>5</maximumConnections>
        <dropTimeout>1</dropTimeout>
        <spawnThreshold>6</spawnThreshold>
        <killThreshold>3</killThreshold>
        <routingElement name="T_LU-PLEXUS_7-0_HOST1"/>
        <communicationParameter>
                <label>HOST_IPADDR</label>
                <value>
                        <value>localhost</value>
                </value>
                <description>Network IP address for the host NE.</description>
                <lineType>TELNET_CONNECTION</lineType>
        </communicationParameter>
        <communicationParameter>
                <label>PORT</label>
                <value>
                        <value>2399</value>
                </value>
                <description>Telnet service port.</description>
                <lineType>TELNET_CONNECTION</lineType>
        </communicationParameter>
        <communicationParameter>
                <label>OPEN_TIMEOUT</label>
                <value>
                        <value>5</value>
                </value>
                <description>For Java only. Connection establishment timeout (in
seconds).</description>
                <lineType>TELNET_CONNECTION</lineType>
        </communicationParameter>
        <communicationParameter>
                <label>READ_TIMEOUT</label>
                <value>
                        <value>1</value>
                </value>
                <description>For Java only. Timeout for the telnet read functions
(in seconds).</description>
                <lineType>TELNET_CONNECTION</lineType>
        </communicationParameter>
        <communicationParameter>
                <label>PLEXUS_USER</label>
                <value>
                        <value>neamneam</value>
                </value>
                <description>Plexus user name.</description>
                <lineType>TELNET_CONNECTION</lineType>
        </communicationParameter>
        <communicationParameter>
                <label>PLEXUS_PASS</label>
                <value>
                        <value>mslvmslv</value>
                </value>
                <description>Plexus password.</description>
                <lineType>TELNET_CONNECTION</lineType>
```

```
                </communicationParameter>
                <communicationParameter>
                        <label>PLEXUS_PROMPT</label>
                        <value>
                                <value>;</value>
                        </value>
                        <description>Provisioning prompt displayed by Plexus.</description>
                        <lineType>TELNET_CONNECTION</lineType>
                </communicationParameter>
                <communicationParameter>
                        <label>CTAG</label>
                        <value>
                                <value>0</value>
                        </value>
                        <description>CTAG</description>
                        <lineType>TELNET_CONNECTION</lineType>
                </communicationParameter>
                <communicationParameter>
                        <label>SSH_SUPPORT</label>
                        <value>
                                <value>NO</value>
                        </value>
                        <description>For Java only. The flag whether SSH is on or
not.</description>
                        <lineType>TELNET_CONNECTION</lineType>
                </communicationParameter>
                <communicationParameter>
                        <label>SSH_VERSION</label>
                        <value>
                                <value>SSH2</value>
                        </value>
                        <description>For Java only. The SSH version.</description>
                        <lineType>TELNET_CONNECTION</lineType>
                </communicationParameter>
                <communicationParameter>
                        <label>SSH_PORT</label>
                        <value>
                                <value>22</value>
                        </value>
                        <description>For Java only. The SSH port number.</description>
                        <lineType>TELNET_CONNECTION</lineType>
                </communicationParameter>
                <communicationParameter>
                        <label>SSH_AUTH_METHOD</label>
                        <value>
                                <value>PASSWORD</value>
                        </value>
                        <description>For Java only. The authentication method PASSWORD or
PUBLIC_KEY.</description>
                        <lineType>TELNET_CONNECTION</lineType>
                </communicationParameter>
                <communicationParameter>
                        <label>SSH_PREF_PUBLIC_KEY</label>
                        <value>
                                <value>PUBLIC_KEY_SSHRSA</value>
                        </value>
                        <description>For Java only. The preferred public key PUBLIC_KEY_
SSHRSA or PUBLIC_KEY_SSHDSS.</description>
                        <lineType>TELNET_CONNECTION</lineType>
                </communicationParameter>
```

```
                        <communicationParameter>
                                <label>SSH_PREF_CIPHER_CS</label>
                                <value>
                                        <value>CIPHER_BLOWFISH_CBC</value>
                                </value>
                                <description>For Java only. The preferred CS cipher CIPHER_
BLOWFISH_CBC, CIPHER_TRIPLEDES_CBC, TWOFISH128_CBC, TWOFISH192_CBC, TWOFISH256_
CBC, TWOFISH_CBC, CAST128_CBC, AES128_CBC, AES192_CBC, AES256_CBC</description>
                                <lineType>TELNET_CONNECTION</lineType>
                        </communicationParameter>
                        <communicationParameter>
                                <label>SSH_PREF_CIPHER_SC</label>
                                <value>
                                        <value>CIPHER_BLOWFISH_CBC</value>
                                </value>
                                <description>For Java only. The preferred SC cipher CIPHER_
BLOWFISH_CBC, CIPHER_TRIPLEDES_CBC, TWOFISH128_CBC, TWOFISH192_CBC, TWOFISH256_
CBC, TWOFISH_CBC, CAST128_CBC, AES128_CBC, AES192_CBC, AES256_CBC</description>
                                <lineType>TELNET_CONNECTION</lineType>
                        </communicationParameter>
                        <communicationParameter>
                                <label>SSH_PREF_MAC_CS</label>
                                <value>
                                        <value>HMAC_MD5</value>
                                </value>
                                <description>For Java only. The preferred CS message authentication
HMAC_MD5 or HMAC_SHA1.</description>
                                <lineType>TELNET_CONNECTION</lineType>
                        </communicationParameter>
                        <communicationParameter>
                                <label>SSH_PREF_MAC_SC</label>
                                <value>
                                        <value>HMAC_MD5</value>
                                </value>
                                <description>For Java only. The preferred SC message authentication
HMAC_MD5 or HMAC_SHA1.</description>
                                <lineType>TELNET_CONNECTION</lineType>
                        </communicationParameter>
                        <communicationParameter>
                                <label>SSH_PREF_COMP_CS</label>
                                <value>
                                        <value>COMPRESSION_NONE</value>
                                </value>
                                <description>For Java only. The preferred CS compression
COMPRESSION_NONE or COMPRESSION_ZLIB</description>
                                <lineType>TELNET_CONNECTION</lineType>
                        </communicationParameter>
                        <communicationParameter>
                                <label>SSH_PREF_COMP_SC</label>
                                <value>
                                        <value>COMPRESSION_NONE</value>
                                </value>
                                <description>For Java only. The preferred SC compression
COMPRESSION_NONE or COMPRESSION_ZLIB.</description>
                                <lineType>TELNET_CONNECTION</lineType>
                        </communicationParameter>
                        <communicationParameter>
                                <label>SSH_TUNNEL_IPADDR</label>
                                <value>
                                        <value>192.20.210.36</value>
```

```
                    </value>
                    <description>IP address used in tunnel creation. If empty no tunnel
created.</description>
                    <lineType>TELNET_CONNECTION</lineType>
            </communicationParameter>
        </element>
</activationConfig>
```