Oracle® Communications ASAP Cartridge 1.0

Motorola DAC 6000 Cartridge Guide

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1

Cartridge Overview

This guide provides a detailed description of the Motorola DAC 6000 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 Motorola DAC 6000 cartridge provides the ASAP service configuration and network element (NE) interface to activate subscriber services on N_ MOTOROLA-DAC6000_1-0_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 7.0.

For more information on the operating environment of this ASAP version, refer to the ASAP version 7.0 Release Record.

Connecting to the NE

The cartridge uses SOAP protocol.

Services, Features, and Options

This cartridge supports the following services:

Table 1–1 Supported Services

Service	Description
C_MOTOROLA-DAC6000_1-0_ADD_DIGITAL_PROGRAM	Add a Digital Program
C_MOTOROLA-DAC6000_1-0_DELETE_DIGITAL_PROGRAM	This command deletes a digital program or program alias from the DAC. The Program_ Handle field identifies the record in the DAC to delete.
C_MOTOROLA-DAC6000_1-0_MODIFY_DIGITAL_PROGRAM	This command modifies a digital program in the DAC. The DAC updates all field records contained in this command given the BSI_ Code, Service_Handle and Program_Handle.
C_MOTOROLA-DAC6000_1-0_MODIFY_PPV_ AUTHORIZATION	This command adds and deletes multiple Pay-Per-View (PPV) program authorizations for one or more set-tops. The command length varies according to the number of authorizations and de-authorizations sent.
C_MOTOROLA-DAC6000_1-0_ADD_SETTOP	Add Settop
C_MOTOROLA-DAC6000_1-0_DELETE_SETTOP	This command deletes a set-top from the DAC and de-activates the set-top by sending a disconnect, regardless of on or off plant status.
C_MOTOROLA-DAC6000_1-0_INIT_SETTOP	This command initializes and activates an on-plant set-top with optional service, package, or object authorizations.
C_MOTOROLA-DAC6000_1-0_QRY_SETTOP	The Business System sends this command to the DAC to poll purchases; query features; query service, package and program authorizations of a single set-top
C_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_FEAT	This command modifies set-top feature settings.
C_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_SERVICE	Use this command to add or delete service, package, or object authorizations for a set-top.
C_MOTOROLA-DAC6000_1-0_QRY_SINGLE_TERMINAL_ IPPV_PURCHASES	This command is sent from the Business System to the DAC to upload collected purchases from the DAC to the Business System for a specific set-top.
C_MOTOROLA-DAC6000_1-0_SEND_SYNCHRONIZATION	This command used for Business System to send synchronization command to reset sequenceNumber.
C_MOTOROLA-DAC6000_1-0_ADD_ TERMINAL-REQUEST-SETTOP	Add a new Settop using Terminal request.
C_MOTOROLA-DAC6000_1-0_DELETE_ TERMINAL-REQUEST-SETTOP	Delete digital settop using terminal request.

Table 1–1 (Cont.) Supported Services

Service	Description
C_MOTOROLA-DAC6000_1-0_MOD_ TERMINAL-REQUEST-SETTOP	Modify an existing Settop using Terminal request.
C_MOTOROLA-DAC6000_1-0_MODIFY_ TERMINAL-REQUEST-SETTOP-FEATURES	Modify Settop features using Terminal Request.
C_MOTOROLA-DAC6000_1-0_CHANGE_ TERMINAL-REQUEST-SETTOP-STATE	Change the state of Settop using terminal request.

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
IDLE_TIMER_ASDL	A_PING_DAC	The idle ASDL after a period of inactivity on the connection.
IDLE_TIMER_INT	60	The idle timer(value between 60-300). If this parameter is not defined or is set to zero, the IDLE_TIMER_ASDL is not triggered regardless of how long a connection remains idle.
PORT	6011	Port of the remote socket listener.
OPEN_TIMEOUT	5	The wait timeout period, in seconds, that ASAP waits to open the device. The wait timeout parameter is only applicable to the serial interface.
WRITE_TIMEOUT	5	The wait timeout period, in seconds, that ASAP waits to write to the device.
READ_TIMEOUT	1	The wait timeout period, in seconds, that ASAP waits to read from the device. Currently, this is only applicable to the socket interface.
HOST_NAME	VPADAMAT-idc.idc.oracle.com	Machine name for the host NE.
HOST_IPADDR	141.144.192.9	Network IP address for the host NE.
RESPONSE_WAIT_DELAY	30	Wait for the response from NE.
RESPONSELOG	true	To indicate whether to Log MML Request and Response to tbl srq log.

Related Documentation

This cartridge is developed according to the following NE provisioning specifications:

- <Document_Name_1>
- <Document_Name_2>

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 Reference*.

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 Administration Guide.*

ASDL Commands

This cartridge provides the following ASDL commands:

- A_MOTOROLA-DAC6000_1-0_ADD_DIGITAL_PROGRAM
- A_MOTOROLA-DAC6000_1-0_ADD_SETTOP
- A_MOTOROLA-DAC6000_1-0_ADD_TERMINAL-REQUEST-SETTOP
- A_MOTOROLA-DAC6000_1-0_CHANGE_ TERMINAL-REQUEST-SETTOP-STATE
- A_MOTOROLA-DAC6000_1-0_DELETE_DIGITAL_PROGRAM
- A_MOTOROLA-DAC6000_1-0_DELETE_SETTOP
- A_MOTOROLA-DAC6000_1-0_DELETE_TERMINAL-REQUEST-SETTOP
- A_MOTOROLA-DAC6000_1-0_INIT_SETTOP
- A_MOTOROLA-DAC6000_1-0_MODIFY_DIGITAL_PROGRAM
- A_MOTOROLA-DAC6000_1-0_MODIFY_PPV_AUTHORIZATION
- A_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_FEAT
- A_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_SERVICE
- A_MOTOROLA-DAC6000_1-0_MODIFY_ TERMINAL-REQUEST-SETTOP-FEATURES
- A_MOTOROLA-DAC6000_1-0_MOD_TERMINAL-REQUEST-SETTOP
- A_MOTOROLA-DAC6000_1-0_QRY_SETTOP
- A_MOTOROLA-DAC6000_1-0_QRY_SINGLE_TERMINAL_IPPV_PURCHASES
- A_MOTOROLA-DAC6000_1-0_SEND_SYNCHRONIZATION
- A_PING_DAC

A_MOTOROLA-DAC6000_1-0_ADD_DIGITAL_PROGRAM

This command adds new set-tops with optional authorizations to the DAC using the DACs default set-top feature values defined for the equipment type and the equipment sub-type. It is implemented by the Java method

com.mslv.activation.cartridge.oss.motorola.dac6000.prov.DigitalProgrammingProvisioning.addDigitalProgram.

Table 2–2 A_MOTOROLA-DAC6000_1-0_ADD_DIGITAL_PROGRAM

Parameter Name	Description	Range	Default Value	Type	Class
SERVICE_HANDLE	This field identifies services.	N/A	N/A	S	R
PROGRAM_HANDLE	The Program Handle.	N/A	N/A	S	R
PROGRAM_NAME	This field identifies the name of the program.	N/A	N/A	S	R
ALTERNATE_ PROGRAM_NAME	This field identifies the alternate program name	N/A	N/A	S	R
EPOCH_START_TIME	This field defines the scheduled end of the program epoch.	N/A	N/A	S	R
EPOCH_END_TIME		N/A	N/A	S	R
EPOCH_DURATION	This field defines the length of time in seconds the program is active in the system.	N/A	N/A	S	R
INTERSTITIAL_ PERIOD	This field defines the period of time between the start of the program epoch and the actual start of the program. The units are in seconds	N/A	N/A	S	R
PREVIEW_TIME	This field defines the number of seconds between the scheduled start of the program epoch and the actual pay portion of the program (free preview time).	N/A	N/A	S	R
MPAA_ADVISORY	This field identifies the program parental rating level.	N/A	N/A	S	R
VIOLENT_CONTENT_ ADVISORY	This field identifies the program violence content on a graduated scale.	N/A	N/A	S	R
SEXUAL_CONTENT_ ADVISORY	This field identified the program sexual content on a graduated scale.	N/A	N/A	S	R
LANGUAGE_ CONTENT_ ADVISORY	This field identifies the program language content on a graduated scale.	N/A	N/A	S	R
RATING_REGION	This field defines the program-rating region.	N/A	N/A	S	R
IMPULSE_ PURCHASABLE	This field defines the number of seconds from the start of the program epoch that IPPV purchases are allowed.	N/A	N/A	S	R
PACKAGE_COUNT	This field contains the number of packages of which this program is a member.	N/A	N/A	S	R
PROGRAM_NAME_ DISPLAY_TIME	This field can be from 10 through 255 and identifies the time, in tenths of one second, the program name banner is displayed on the set-top.	N/A	N/A	S	R
PURCHASE_COST	This field identifies the internal Units value of the event.	N/A	N/A	S	R

Table 2–2 (Cont.) A_MOTOROLA-DAC6000_1-0_ADD_DIGITAL_PROGRAM

Parameter Name	Description	Range	Default Value	Type	Class
PURCHASE_PRICE	This field identifies the subscriber program price in the active currency.	N/A	N/A	S	R
ANYTIME_FREE_ PREV_DURATION	This 16-bit numeric field contains the duration in seconds of free preview time available after tuning the set-top to a channel.	N/A	N/A	S	R
DIGITAL_PROGRAM_ FEATURE	The Digital Programming Features	N/A	N/A	C	R
MCLI		N/A	N/A	S	R

MML commands

MML Syntax :

```
N/A
```

Output Parameters

N/A

A_MOTOROLA-DAC6000_1-0_ADD_SETTOP

This command adds new set-tops with optional authorizations to the DAC using the DAC?s default set-top feature values defined for the equipment type and the equipment sub-type. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.SettopProvisioning.addSettop.**

Table 2–3 A_MOTOROLA-DAC6000_1-0_ADD_SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
HEADEND_NUMBER	Integer value	N/A	0	S	O
EQUIP_TYPE	This field identifies the type of set-top.	N/A	N/A	S	R
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	N/A	S	R
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
UNIT_ADDRESS	The unit addresses printed on the back panels of set-tops include dashes between numbers for readability.	N/A	N/A	S	R
INIT_FLAG	Use of this field depends on the DAC tunable state.	N/A	N/A	S	R
SERVICE_HANDLE	This field identifies services. the parameter should be SERVICE_ HANDLE.1 SERVICE_HANDLE.2 ... SERVICE_HANDLE.n	N/A	N/A	C	R
MCLI		N/A	N/A	S	R

MML commands

MML Syntax :

Example:

Note:

Output Parameters

CSDL Return parameters

INFO Return parameters

A_MOTOROLA-DAC6000_1-0_ADD_TERMINAL-REQUEST-SETTOP

Add new Settop using terminal request. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.TerminalProvisioning.addNewSettop.**

Table 2–4 A_MOTOROLA-DAC6000_1-0_ADD_TERMINAL-REQUEST-SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R
BSI_CODE	The BSI_Code prevents unauthorized Business Systems from changing set-top information.	N/A	N/A	S	R
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
UNIT_ADDRESS	The unit addresses printed on the back panels of set-tops include dashes between numbers for readability.	N/A	N/A	S	R
EQUIP_TYPE	This field identifies the type of set-top.	N/A	N/A	S	R
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	N/A	S	O
HEADEND_HANDLE	This field identifies the headend.	N/A	N/A	S	O
UPSTREAM_PLANT_HANDLE	This field identifies upstream plants (return paths) for settops.	N/A	N/A	S	O
DOWNSTREAM_PLANT_HANDLE	This field identifies the downstream plant number for the settop.	N/A	N/A	S	O
VCM_HANDLE	This field identifies settop Virtual Channel Maps.	N/A	N/A	S	O
ON_PLANT_FLAG	This Flag in the State Component identifies the on-plant status of set-tops in the DAC.	N/A	N/A	S	O
OPERATION_CODE	This field identifies the operation to be performed on the set-top.	N/A	N/A	S	O

Table 2–4 (Cont.) A_MOTOROLA-DAC6000_1-0_ADD_TERMINAL-REQUEST-SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
CREDIT_ALLOWED	This field defines the amount of credit, in GI Units, for the subscriber to maintain.	N/A	N/A	S	O
PURCHASES_ ALLOWED	This field defines the maximum number of subscriber purchases allowed.	N/A	N/A	S	O
TIMEZONE_HANDLE	This field defines an index into the DAC time zone table for set-tops.	N/A	N/A	S	O
EPG_REGION	This field defines the electronic program guide (EPG) region code assigned to the set-top.	N/A	N/A	S	O
REGION_CONFIG_ HANDLE	This field identifies the region to assign set-tops.	N/A	N/A	S	O
TURNON_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned off.	N/A	N/A	S	O
TURNOFF_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned on	N/A	N/A	S	O
OUTPUT_CHANNEL_ NO	This field defines the television channel base frequency setting on the set-top	N/A	N/A	S	O
FEATURE_SETTING	The following subsections identifies the content of the field in the various commands,	N/A	N/A	C	O
CLEAR_ALL_ PACKAGES_FLAG	This field clears all package authorizations from the settop.	N/A	N/A	S	O
CLEAR_ALL_ SERVICES_FLAG	This field clears all services and terminal features like interactive from the settop.	N/A	N/A	S	O
CLEAR_ALL_ PROGRAMS_FLAG	This field clears all Call-Ahead program authorizations from the settop.	N/A	N/A	S	O
NUM_RECORDS	This field contains the number of records being sent in the command.	N/A	N/A	S	O
AUTHORIZE_FLAG	The Authorize_Flag field designates whether to perform settop authorization or de-authorization.	N/A	N/A	C	O
AUTHORIZATION_ TYPE	This field that specifically identifies the record as a package, service or program authorization.	N/A	N/A	C	O
AUTHORIZATION_ HANDLE	This field identifies a package, service or object.	N/A	N/A	C	O
PROGRAM_HANDLE	The Program_Handle is a unique value that identifies a specific PPV event.	N/A	N/A	C	O
CABLECARD_ID	The CableCARD id is assigned by the CableCARD manufacturer	N/A	N/A	S	O

Table 2–4 (Cont.) A_MOTOROLA-DAC6000_1-0_ADD_TERMINAL-REQUEST-SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
HOST_ID	The Host_Id identifies the Host as assigned by DTLA	N/A	N/A	S	O
DATA	This value is displayed on the Host on-screen display. It is a security data value that is used to facilitate the mating of the CableCARD and Host.	N/A	N/A	S	O
OVERRIDE	The override value gives the MSO the ability to override the CableCARD/Host validation status within the DAC CPMS on a settop by settop basis. If not specified, this field is defaulted to 0.	N/A	N/A	S	O

MML commands

MML Syntax :

Example:

Note:

Output Parameters

CSDL Return parameters

INFO Return parameters

A_MOTOROLA-DAC6000_1-0_CHANGE_TERMINAL-REQUEST-SETTOP-STATE

Change Settop state using Terminal request. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.TerminalProvisioning.changeSettopState.**

Table 2–5 A_MOTOROLA-DAC6000_1-0_CHANGE_TERMINAL-REQUEST-SETTOP-STATE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R
BSI_CODE	The BSI_Code prevents unauthorized Business Systems from changing set-top information.	N/A	N/A	S	R

Table 2–5 (Cont.) A_MOTOROLA-DAC6000_1-0_CHANGE_TERMINAL-REQUEST-SETTOP-STATE

Parameter Name	Description	Range	Default Value	Type	Class
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
ON_PLANT_FLAG	This Flag in the State Component identifies the on-plant status of set-tops in the DAC.	N/A	N/A	S	O
OPERATION_CODE	This field identifies the operation to be performed on the set-top.	N/A	N/A	S	O

MML commands

MML Syntax :

Example:

Note:

Output Parameters

CSDL Return parameters

INFO Return parameters

A_MOTOROLA-DAC6000_1-0_DELETE_DIGITAL_PROGRAM

This command deletes a digital program or program alias from the DAC. The Program_Handle field identifies the record in the DAC to delete. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.DigitalProgrammingProvisioning.deleteDigitalProgram.**

Table 2–6 A_MOTOROLA-DAC6000_1-0_DELETE_DIGITAL_PROGRAM

Parameter Name	Description	Range	Default Value	Type	Class
SERVICE_HANDLE	This field identifies services.	N/A	N/A	S	R
PROGRAM_HANDLE		N/A	N/A	S	R
EPOCH_START_TIME	This field defines the scheduled end of the program epoch.	N/A	N/A	S	R
EPOCH_END_TIME		N/A	N/A	S	R
MCLI		N/A	N/A	S	R

MML commands

MML Syntax :

N/A

Output Parameters

N/A

A_MOTOROLA-DAC6000_1-0_DELETE_SETTOP

This command deletes a set-top from the DAC and de-activates the set-top by sending a disconnect, regardless of on or off plant status. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.SettopProvisioning.deleteSettop.**

Table 2–7 A_MOTOROLA-DAC6000_1-0_DELETE_SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
HEADEND_NUMBER	Integer value	N/A	0	S	O
EQUIP_TYPE	This field identifies the type of set-top.	N/A	0	S	O
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	0	S	O
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
MCLI		N/A	N/A	S	R

MML commands

MML Syntax :

Example:

Note:

Output Parameters

CSDL Return parameters

INFO Return parameters

A_MOTOROLA-DAC6000_1-0_DELETE_TERMINAL-REQUEST-SETTOP

Delete digital Settop using terminal request. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.TerminalProvisioning.deleteDigitalSettop.**

Table 2–8 A_MOTOROLA-DAC6000_1-0_DELETE_TERMINAL-REQUEST-SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R
BSI_CODE	The BSI_Code prevents unauthorized Business Systems from changing set-top information.	N/A	N/A	S	R
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R

MML commands

MML Syntax :

Example:

Note:

Output Parameters

CSDL Return parameters

INFO Return parameters

A_MOTOROLA-DAC6000_1-0_INIT_SETTOP

This command initializes and activates an on-plant set-top with optional service, package, or object authorizations. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.SettopProvisioning.initSettop.**

Table 2–9 A_MOTOROLA-DAC6000_1-0_INIT_SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
HEADEND_NUMBER	Integer value	N/A	0	S	O
EQUIP_TYPE	This field identifies the type of set-top.	N/A	0	S	O
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	0	S	O
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
SERVICE_HANDLE	This field identifies services. the parameter should be SERVICE_ HANDLE.1 SERVICE_HANDLE.2 ... SERVICE_HANDLE.n	N/A	N/A	C	R
MCLI		N/A	N/A	S	R

MML commands

MML Syntax :

Example:

Note:

Output Parameters

CSDL Return parameters

INFO Return parameters

A_MOTOROLA-DAC6000_1-0_MODIFY_DIGITAL_PROGRAM

This command modifies a digital program in the DAC. The DAC updates all field records contained in this command given the BSI_Code, Service_Handle and Program_Handle. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.DigitalProgrammingProvisioning.modifyDigitalProgram.**

Table 2–10 A_MOTOROLA-DAC6000_1-0_MODIFY_DIGITAL_PROGRAM

Parameter Name	Description	Range	Default Value	Type	Class
SERVICE_HANDLE	This field identifies services.	N/A	N/A	S	R
PROGRAM_HANDLE		N/A	N/A	S	R
PROGRAM_NAME	This field identifies the name of the program.	N/A	N/A	S	R
ALTERNATE_ PROGRAM_NAME	This field identifies the alternate program name	N/A	N/A	S	R
EPOCH_START_TIME	This field defines the scheduled end of the program epoch.	N/A	N/A	S	R
EPOCH_END_TIME		N/A	N/A	S	R
EPOCH_DURATION	This field defines the length of time in seconds the program is active in the system.	N/A	N/A	S	R
INTERSTITIAL_ PERIOD	This field defines the period of time between the start of the program epoch and the actual start of the program. The units are in seconds	N/A	N/A	S	R
PREVIEW_TIME	This field defines the number of seconds between the scheduled start of the program epoch and the actual pay portion of the program (free preview time).	N/A	N/A	S	R

Table 2–10 (Cont.) A_MOTOROLA-DAC6000_1-0_MODIFY_DIGITAL_PROGRAM

Parameter Name	Description	Range	Default Value	Type	Class
MPAA_ADVISORY	This field identifies the program parental rating level.	N/A	N/A	S	R
VIOLENT_CONTENT_ ADVISORY	This field identifies the program violence content on a graduated scale.	N/A	N/A	S	R
SEXUAL_CONTENT_ ADVISORY	This field identified the program sexual content on a graduated scale.	N/A	N/A	S	R
LANGUAGE_ CONTENT_ ADVISORY	This field identifies the program language content on a graduated scale.	N/A	N/A	S	R
RATING_REGION	This field defines the program-rating region.	N/A	N/A	S	R
IMPULSE_ PURCHASABLE	This field defines the number of seconds from the start of the program epoch that IPPV purchases are allowed.	N/A	N/A	S	R
PACKAGE_COUNT	This field contains the number of packages of which this program is a member.	N/A	N/A	S	R
PROGRAM_NAME_ DISPLAY_TIME	This field can be from 10 through 255 and identifies the time, in tenths of one second, the program name banner is displayed on the set-top.	N/A	N/A	S	R
PURCHASE_COST	This field identifies the internal Units value of the event.	N/A	N/A	S	R
PURCHASE_PRICE	This field identifies the subscriber program price in the active currency.	N/A	N/A	S	R
ANYTIME_FREE_ PREV_DURATION	This 16-bit numeric field contains the duration in seconds of free preview time available after tuning the set-top to a channel.	N/A	N/A	S	R
DIGITAL_PROGRAM_ FEATURE	The Digital Programming Features	N/A	N/A	C	R
MCLI		N/A	N/A	S	R

MML commands

MML Syntax :

```
N/A
```

Output Parameters

N/A

A_MOTOROLA-DAC6000_1-0_MODIFY_PPV_AUTHORIZATION

This command adds and deletes multiple Pay-Per-View (PPV) program authorizations for one or more set-tops. The command length varies according to the number of authorizations and de-authorizations sent. It is implemented by the Java method

com.mslv.activation.cartridge.oss.motorola.dac6000.prov.PPVProvisioning.UpdateAuthorization.

Table 2–11 A_MOTOROLA-DAC6000_1-0_MODIFY_PPV_AUTHORIZATION

Parameter Name	Description	Range	Default Value	Type	Class
ENTRY	Authorization/De-authorization entry, this is compound parameter	N/A	N/A	C	R
MCLI		N/A	N/A	S	R

MML commands

MML Syntax :

```
N/A
```

Output Parameters

N/A

A_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_FEAT

This command modifies set-top feature settings. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.SettopProvisioning.changeSettopFeatures.**

Table 2–12 A_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_FEAT

Parameter Name	Description	Range	Default Value	Type	Class
HEADEND_NUMBER	Integer value	N/A	0	S	O
EQUIP_TYPE	This field identifies the type of set-top.	N/A	0	S	O
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	0	S	O
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
CREDIT_ALLOWED	This field defines the amount of credit, in GI Units, for the subscriber to maintain.	N/A	N/A	S	R
PURCHASES_ ALLOWED	This field defines the maximum number of subscriber purchases allowed.	N/A	N/A	S	R
RESERVED	This field is not used by the DAC but must be specified within the range above.	N/A	N/A	S	R
TIMEZONE_HANDLE	This field defines an index into the DAC time zone table for set-tops.	N/A	N/A	S	R
COUNTRY_CODE	This represents the country in which the set-top resides.	N/A	N/A	S	R
CURRENCY_REGION	This field defines the currency type to be used for the set-top.	N/A	N/A	S	R
EPG_REGION	This field defines the electronic program guide (EPG) region code assigned to the set-top.	N/A	N/A	S	R

Table 2–12 (Cont.) A_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_FEAT

Parameter Name	Description	Range	Default Value	Type	Class
TURNOFF_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned off.	N/A	N/A	S	R
TURNON_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned on	N/A	N/A	S	R
OUTPUT_CHANNEL_NO	This field defines the television channel base frequency setting on the set-top	N/A	N/A	S	R
SETTOP_FEATURE	The following subsections identifies the content of the field in the various commands,	N/A	N/A	C	R
MCLI		N/A	N/A	S	R

MML commands

MML Syntax :

```
N/A
```

Output Parameters

N/A

A_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_SERVICE

Use this command to add or delete service, package, or object authorizations for a set-top. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.SettopProvisioning.changeSettopServices.**

Table 2–13 A_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
HEADEND_NUMBER	Integer value	N/A	0	S	O
EQUIP_TYPE	This field identifies the type of set-top.	N/A	0	S	O
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	0	S	O
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
SERVICE_HANDLE	This field identifies services. the parameter should be SERVICE_HANDLE.1 SERVICE_HANDLE.2 ... SERVICE_HANDLE.n	N/A	N/A	C	R
MCLI		N/A	N/A	S	R

MML commands

MML Syntax :

N/A

Output Parameters

N/A

A_MOTOROLA-DAC6000_1-0_MODIFY_TERMINAL-REQUEST-SETTOP-FEATURES

Modify Settop features using Terminal request. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.TerminalProvisioning.ModifySettopFeatures.**

Table 2–14 A_MOTOROLA-DAC6000_1-0_MODIFY_TERMINAL-REQUEST-SETTOP-FEATURES

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R
BSI_CODE	The BSI_Code prevents unauthorized Business Systems from changing set-top information.	N/A	N/A	S	R
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
CREDIT_ALLOWED	This field defines the amount of credit, in GI Units, for the subscriber to maintain.	N/A	N/A	S	O
PURCHASES_ ALLOWED	This field defines the maximum number of subscriber purchases allowed.	N/A	N/A	S	O
TIMEZONE_HANDLE	This field defines an index into the DAC time zone table for set-tops.	N/A	N/A	S	O
EPG_REGION	This field defines the electronic program guide (EPG) region code assigned to the set-top.	N/A	N/A	S	O
REGION_CONFIG_ HANDLE	This field identifies the region to assign set-tops.	N/A	N/A	S	O
TURNON_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned off.	N/A	N/A	S	O
TURNOFF_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned on	N/A	N/A	S	O
OUTPUT_CHANNEL_ NO	This field defines the television channel base frequency setting on the set-top	N/A	N/A	S	O
FEATURE_SETTING	The following subsections identifies the content of the field in the various commands,	N/A	N/A	C	O

MML commands

MML Syntax :

Example:

Note:

Output Parameters

CSDL Return parameters

INFO Return parameters

A_MOTOROLA-DAC6000_1-0_MOD_TERMINAL-REQUEST-SETTOP

Modify an existing Settop using terminal request. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.TerminalProvisioning.modifySettop.**

Table 2–15 A_MOTOROLA-DAC6000_1-0_MOD_TERMINAL-REQUEST-SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R
BSI_CODE	The BSI_Code prevents unauthorized Business Systems from changing set-top information.	N/A	N/A	S	R
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
EQUIP_TYPE	This field identifies the type of set-top.	N/A	N/A	S	O
HEADEND_HANDLE	This field identifies the headend.	N/A	N/A	S	O
UPSTREAM_PLANT_ HANDLE	This field identifies upstream plants (return paths) for settops.	N/A	N/A	S	O
DOWNSTREAM_ PLANT_HANDLE	This field identifies the downstream plant number for the settop.	N/A	N/A	S	O
VCM_HANDLE	This field identifies settop Virtual Channel Maps.	N/A	N/A	S	O
ON_PLANT_FLAG	This Flag in the State Component identifies the on-plant status of set-tops in the DAC.	N/A	N/A	S	O
OPERATION_CODE	This field identifies the operation to be performed on the set-top.	N/A	N/A	S	O
CREDIT_ALLOWED	This field defines the amount of credit, in GI Units, for the subscriber to maintain.	N/A	N/A	S	O
PURCHASES_ ALLOWED	This field defines the maximum number of subscriber purchases allowed.	N/A	N/A	S	O
TIMEZONE_HANDLE	This field defines an index into the DAC time zone table for set-tops.	N/A	N/A	S	O
EPG_REGION	This field defines the electronic program guide (EPG) region code assigned to the set-top.	N/A	N/A	S	O
REGION_CONFIG_ HANDLE	This field identifies the region to assign set-tops.	N/A	N/A	S	O

Table 2–15 (Cont.) A_MOTOROLA-DAC6000_1-0_MOD_TERMINAL-REQUEST-SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
TURNON_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned off.	N/A	N/A	S	O
TURNOFF_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned on	N/A	N/A	S	O
OUTPUT_CHANNEL_NO	This field defines the television channel base frequency setting on the set-top	N/A	N/A	S	O
FEATURE_SETTING	The following subsections identifies the content of the field in the various commands,	N/A	N/A	C	O
CLEAR_ALL_PACKAGES_FLAG	This field clears all package authorizations from the settop.	N/A	N/A	S	O
CLEAR_ALL_SERVICES_FLAG	This field clears all services and terminal features like interactive from the settop.	N/A	N/A	S	O
CLEAR_ALL_PROGRAMS_FLAG	This field clears all Call-Ahead program authorizations from the settop.	N/A	N/A	S	O
NUM_RECORDS	This field contains the number of records being sent in the command.	N/A	N/A	S	O
AUTHORIZE_FLAG	The Authorize_Flag field designates whether to perform settop authorization or de-authorization.	N/A	N/A	C	O
AUTHORIZATION_TYPE	This field that specifically identifies the record as a package, service or program authorization.	N/A	N/A	C	O
AUTHORIZATION_HANDLE	This field identifies a package, service or object.	N/A	N/A	C	O
PROGRAM_HANDLE	The Program_Handle is a unique value that identifies a specific PPV event.	N/A	N/A	C	O
CABLECARD_ID	The CableCARD id is assigned by the CableCARD manufacturer	N/A	N/A	S	O
HOST_ID	The Host_Id identifies the Host as assigned by DTLA	N/A	N/A	S	O
DATA	This value is displayed on the Host on-screen display. It is a security data value that is used to facilitate the mating of the CableCARD and Host.	N/A	N/A	S	O
OVERRIDE	The override value gives the MSO the ability to override the CableCARD/Host validation status within the DAC CPMS on a settop by settop basis. If not specified, this field is defaulted to 0.	N/A	N/A	S	O

MML commands

MML Syntax :

Example:

Note:

Output Parameters

CSDL Return parameters

INFO Return parameters

A_MOTOROLA-DAC6000_1-0_QRY_SETTOP

The Business System sends this command to the DAC to poll purchases; query features; query service, package and program authorizations of a single set-top. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.SettopProvisioning.querySettop.**

Table 2–16 A_MOTOROLA-DAC6000_1-0_QRY_SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
HEADEND_NUMBER	Integer value	N/A	0	S	O
EQUIP_TYPE	This field identifies the type of set-top.	N/A	0	S	O
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	0	S	O
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
ACTION_CODE	The Action_Code field contained in this command identifies the type of function to perform and the type of data to return to the Business System.	N/A	N/A	S	R
MCLI	HOSTCLLI	N/A	N/A	S	R

MML commands

MML Syntax :

Example:

Note:

Output Parameters

CSDL Return parameters

INFO Return parameters

A_MOTOROLA-DAC6000_1-0_QRY_SINGLE_TERMINAL_IPPV_PURCHASES

This command is sent from the Business System to the DAC to upload collected purchases from the DAC to the Business System for a specific set-top. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.PPVProvisioning.UploadSingleTerminalIPPV.**

Table 2–17 A_MOTOROLA-DAC6000_1-0_QRY_SINGLE_TERMINAL_IPPV_PURCHASES

Parameter Name	Description	Range	Default Value	Type	Class
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
MCLI		N/A	N/A	S	R

MML commands

MML Syntax :

```
N/A
```

Output Parameters

N/A

A_MOTOROLA-DAC6000_1-0_SEND_SYNCHRONIZATION

This command used for Business System to send synchronization command to reset sequenceNumber. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.ProvisioningBase.ping.**

Table 2–18 A_MOTOROLA-DAC6000_1-0_SEND_SYNCHRONIZATION

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R

MML commands

MML Syntax :

Example:

Note:

Output Parameters

CSDL Return parameters

INFO Return parameters

A_PING_DAC

This command used for Business System to Ping DAC if no activity for a certain time, this configured in comm param. It is implemented by the Java method **com.mslv.activation.cartridge.oss.motorola.dac6000.prov.ProvisioningBase.ping.**

Table 2–19 A_PING_DAC

Parameter Name	Description	Range	Default Value	Type	Class

MML commands

MML Syntax :

Example:

Note:

Output Parameters

CSDL Return parameters

INFO Return parameters

User Exit Types

User exit types allow cartridge developers and systems administrators to map ASDL exit codes to one of the predefined base exit types. Base exit types determine the product behavior. Cartridges map return codes and status values from a network element to a user defined exit type.

Regular expressions (regex) are used to perform pattern searches on responses from network elements. The pattern is stored in "tbl_user_err" in the SARM database. The user exit type contains a regex pattern that is applied at runtime.

Regular expressions enable users to associate a series of responses to a specific base type. For example, a regular expression "6." can identify a pattern where any response with the character "6" followed by any number of characters will translate to base type of FAIL.

Regular expressions can also allow very specific searches within a response from a network element. Regular expressions are typically compiled before being executed. Compilation produces a binary version of the expression and ensures that the syntax of the regular expression is correct. This compilation occurs using SACT\SADT when

user exit types are deployed into ASAP. If the syntax is deemed to be incorrect during compilation, SADT displays an error message and the deployment of the user exit type will fail.

For more information on pattern matching, refer to the *ASAP Developer Reference* and the *ASAP Administration Guide*.

Understanding User Exit Type XML Files

```
…
<userDefinedExitType>
<neDescriptor>
<softwareLoad>DYNAMIC_SL</softwareLoad>
<technology>DYNAMIC_VENDOR-DYNAMIC_TECH</technology>
</neDescriptor>
<searchPattern>SUCCESS.</searchPattern>...1
<userType>U_SUCCEED</userType>...2
<baseType>SUCCEED<</baseType>...3
<description>The ASDL provisioning was successful</description>
</userDefinedExitType>
<userDefinedExitType>
<searchPattern>90.</searchPattern>
<userType>U_FAIL</userType>
<baseType>FAIL</baseType>
<description>The ASDL failed - fail the current order and stop
processing.</description>
</userDefinedExitType>
<userDefinedExitType>
<searchPattern>101-110[201-215]</searchPattern>...4
<userType>U_SOFT_FAIL</userType>
<baseType>SOFT_FAIL</baseType>
<description>The ASDL has encountered a soft failure. Processing will
continue.</description>
</userDefinedExitType>
<userDefinedExitType>
<searchPattern>801-850</searchPattern>...5
<userType>U_MINOR_ERROR</userType>
<baseType>SOFT_FAIL</baseType>
<description>The ASDL has encountered a soft failure. Processing will
continue.</description>
</userDefinedExitType>
<userDefinedExitType>
<searchPattern>251-275&&[^261-265]</searchPattern>...6
<userType>U_DELAYED_FAIL</userType>
<baseType>DELAYED_FAIL</baseType>
<description>The ASDL has failed during provisioning.</description>
</userDefinedExitType>
<userDefinedExitType>
<neDescriptor>
<softwareLoad>BCS36</softwareLoad>
<technology>NORTEL_DMS</technology>
<neVendor>Nortel</neVendor>
</neDescriptor>
<searchPattern>*.</searchPattern>
<userType>U_MAINTAIN</userType>
<baseType>MAINTENANCE</baseType>
<description>The ASDL will Wait until the NE comes out of Maintenance
Mode</description>
</userDefinedExitType>
```

The numbered elements highlighted in bold in the previous code sample are explained as follows:

1. Pattern searches accommodate situations in which responses from the device contain small variants that represent the same meaning. The user type contains an associated search pattern that is applied at runtime. Using regular expressions, you can default a series of responses. For example a regular expression "90." can specify a pattern where any response with the character "90" followed by any character will translate to base type of FAIL. If the regular expression is defined as "90*", then any response with the character "90" followed by any number of characters will translate to base type of FAIL.
2. The user type that the search pattern maps to.
3. The base type that maps to the user type.
4. 101 to 110 and 201 to 215 will translate to a base type of SOFT_FAIL
5. 801-850 will translate to a base type of SOFT_FAIL. Note that the user type differs from the previous range.
6. 251 to 275 but not 261 to 265 will translate to a base type of DELAYED_FAILURE.

The previous code sample shows some typical search pattern examples. Some additional examples follow:

- ^.*\b(one | two | three)\b.*$ = matches a complete line of text that contains any of the words "one", "two" or "three"
- ^(?=.*?\bone\b)(?=.*?\btwo\b)(?=.*?\bthree\b).*$ matches a complete line of text that contains all of the words "one", "two" and "three"
- "[^"\r\n]*" matches a single-line string that does not allow the quote character to appear inside the string.
- \b\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3}\b matches any IP address.

For more information on search patterns, refer to http://java.sun.com/j2se/1.4.2/docs/api/java/util/regex/Pattern.html.

For more information on user exit types, refer to the *ASAP Developer Reference*.

User Defined ASDL Exit Types

The following table lists the user defined ASDL exit types.

Table 2–20 User Defined ASDL Exit Types

Search Pattern	User Type	Base Type	Description
1	SUCCEED	SUCCEED	No error.
220	PROTOCOL_IO_ERR	FAIL	Protocol I/O error.
226	PACKET_CHECKSUM_ERR	FAIL	Packet checksum error.
231	PACKET_SIZE_ERR	FAIL	Packet size error.
232	PACKET_TIMEOUT_ERR	FAIL	Packet timeout error.
1001	VALIDATION_FAILED	FAIL	Validation failed.
1002	INVALID_BSI_CODE	FAIL	Invalid BSI Code. BSI Code not assigned to this WireLink port.

Table 2–20 (Cont.) User Defined ASDL Exit Types

Search Pattern	User Type	Base Type	Description
1004	INVALID_SERIAL_NUM	FAIL	Invalid Serial Number. This field is formatted incorrectly.
1005	NO_SERIAL_NUMBER	FAIL	Serial Number does not exist.
1006	SERIAL_NUM_EXISTS	FAIL	Serial Number already exists.
1007	INVALID_UNIT_ADDRESS	FAIL	Invalid Unit Address.
1008	UNIT_ADDRESS_EXISTS	FAIL	Unit Address already exists.
1009	INVALID_EQUIP_TYPE	FAIL	Invalid Equipment type.
1010	INVALID_EQUIP_SUBTYP	FAIL	Invalid Equipment subtype.
1020	NO_SRV_FOR_BSI	FAIL	Service Handle does not exist for this Business System.
1021	NO_PROGRAM_FOR_BSI	FAIL	Program Handle does not exist for this Business System.
1022	PROG_EXISTS_FOR_BSI	FAIL	Program Handle already exists for this Business System.
1023	EPOCH_TOO_LONG	FAIL	Epoch duration is longer than the maximum allowed.
1024	INTERSTITAL_TOO_LONG	FAIL	Interstitial period is longer than the epoch duration.
1025	PREVIEW_TOO_LONG	FAIL	Preview time is longer than the epoch duration.
1026	IMPULSE_TOO_LONG	FAIL	Impulse purchasable is longer than the epoch duration.
1027	PROGRAM_TIME_OVERLAP	FAIL	Program time overlaps an existing program.
1028	INVALID_ACTION_CODE	FAIL	Invalid action code.
1029	INVALID_SRV_HANDLE	FAIL	Service Handle is invalid.
1030	TOO_MANY_SERVICES	FAIL	Total Number of Services is out of range.
1031	PROG_OUT_OF_RANGE	FAIL	Program Handle is out of range.
1032	INVALID_MPAA	FAIL	MPAA Advisory is not valid.
1033	INV_VIOLENT_CONTENT	FAIL	Violent Content Advisory is not valid.
1034	INV_SEXUAL_CONTENT	FAIL	Sexual Content Advisory is not valid.
1035	INV_LANGUAGE_CONTENT	FAIL	Language Content Advisory is not valid.
1036	INV_EPOCH_START_TIME	FAIL	Epoch Start Time is invalid. Formatted incorrectly.
1037	INV_EPOCH_END_TIME	FAIL	Epoch End Time is before Epoch Start Time.
1038	EPOCH_TIME_IN_PAST	FAIL	Epoch Start Time is in the past.

Table 2–20 (Cont.) User Defined ASDL Exit Types

Search Pattern	User Type	Base Type	Description
1039	DUPLICATE_PROGRAM	FAIL	Duplicate program.
1040	INV_RATING_REGION	FAIL	Rating Region is invalid
1041	INV_NUM_OF_ENTRIES	FAIL	Invalid number of entries.
1046	ILLEGAL_OPERATION	FAIL	Illegal operation. Cannot delete last program handle.
1047	INV_COUNTRY_CODE	FAIL	Invalid country code, currency region, and EPG region combination.
1049	TERM_NOT_ON_PLANT	FAIL	Terminal Not On Plant.
1050	NO_BSG_HANDLE	FAIL	BSG Handle Not Found
1051	NO_EPOCH_START_TIME	FAIL	Epoch Start Time Not Found
1053	NO_SETTOP_FEAT_FOUND	FAIL	Settop Features Not Found.
1063	BSI_SERIAL_MISMATCH	FAIL	BSI Code and Set-top Serial Number Mismatch Error.
1066	INV_SERVICE_TYPE	FAIL	Invalid Service Type for Service Handle.
1067	INV_SERVICE_HANDLE	FAIL	Invalid Service Handle. Cannot add digital program for analog service.
2001	TERMINAL_ADD_FAILED	RETRY_DIS	Terminal add failed. Terminal was not added to database.
2003	TERMINAL_DEL_FAILED	RETRY_DIS	Terminal delete failed. Terminal was not deleted.
2004	TERMINAL_AUTH_FAILED	RETRY_DIS	Terminal authorization failed.
2006	PROGRAM_ADD_FAILED	RETRY_DIS	Program add failed. Program was not added.
2007	PROG_CHANGE_FAILED	RETRY_DIS	Program change failed. Program was not changed.
2008	PROG_DELETE_FAILED	RETRY_DIS	Program delete failed. Program was not deleted.
2011	TERM_POLL_OFF_PLANT	RETRY_DIS	Poll of terminal failed - Settop Off Plant.
2012	TERM_POLL_NO_RESPON	RETRY_DIS	Poll of Terminal Failed - Settop Not Responding.
2013	PURCHASE_UPLOAD_FAIL	RETRY_DIS	Purchase upload failed.
2014	TERM_AUTH_OFF_PLANT	RETRY_DIS	Terminal Authorization Refresh Failed - Settop Off Plant.
2015	TERM_AUTH_NO_RESPON	RETRY_DIS	Terminal Authorization Refresh Failed - Settop Not Responding.
2016	SETTOP_INIT_FAILED	RETRY_DIS	Initialization of Settop Failed.
2017	TERM_INIT_FAILED	RETRY_DIS	Terminal Initialization Failed - Settop Not Responding.

Table 2–20 (Cont.) User Defined ASDL Exit Types

Search Pattern	User Type	Base Type	Description
2020	TERM_REFRESH_FAILED	RETRY_DIS	Terminal Refresh Operation failed.
2026	PPV_AUTH_UPDATE_FAIL	RETRY_DIS	PPV Authorization Update Failed.
2028	INTERACTIVE_REF_FAIL	RETRY_DIS	Interactive Refresh Operation Failed.
2029	MARK_EVENT_FAIL	RETRY_DIS	Mark Event Purchase Failed.
2030	ST_FEAT_CHANGE_FAIL	RETRY_DIS	Change Settop Features Operation Failed.
3001	NO_DESTINATION_TASK	RETRY_DIS	Destination task is not available.
3002	MEM_ALLOCATION_ERR	RETRY_DIS	Memory Allocation Error.
3003	DATABASE_ACCESS_ERR	RETRY_DIS	Database Access Error.
3005	ON_PLANT_NO_FOUND	RETRY_DIS	On Plant Not Found.
3006	PURCHASE_COLLECT_ERR	RETRY_DIS	Error Collecting Purchases.
3009	NO_INTERACTIVE_PATH	RETRY_DIS	Interactive Return Path Not Found.
3010	GET_DB_PROCED_FAILED	RETRY_DIS	Get All Services DB Stored Procedure Failed.
3011	INV_MESSAGE_TYPE	RETRY_DIS	Invalid Message Type.
3013	INV_PROG_DATE_FORMAT	RETRY_DIS	Invalid Program Date Format Error.
3014	CHECK_DUP_DB_PROCED	RETRY_DIS	Check Duplicate Programs DB Stored Procedure Error.
3017	GET_SRV_DB_PROCED	RETRY_DIS	Get Service Handles DB Stored Procedure Error.
3018	IPPV_COLLECT_PURCHAS	RETRY_DIS	Error Collecting IPPV Purchases.
3019	SETTOP_COLLECT_PURCH	RETRY_DIS	Error Collecting Settop Purchases.
3021	GET_SRV_TIERS_DB_ERR	RETRY_DIS	Get Service Tiers DB Stored Procedure Error.
3022	GET_PROG_TIER_DB_ERR	RETRY_DIS	Get Program Tiers DB Stored Procedure Error.
4002	DEL_SETTOP_TIMEOUT	RETRY_DIS	Delete Settop Timeout Error.
4004	CHG_ST_FEAT_TIMEOUT	RETRY_DIS	Change Settop Features Timeout Error.
4005	ST_TERM_REF_TIMEOUT	RETRY_DIS	Settop Terminal Refresh Timeout Error.
4008	SETTOP_AUTH_TIMEOUT	RETRY_DIS	Settop Authorization Timeout Error.
4010	IV_CUST_REF_TIMEOUT	RETRY_DIS	Interactive Custom Refresh Timeout Error.
4011	SETTOP_ADD_TIMEOUT	RETRY_DIS	Settop Add Timeout Error.

Table 2–20 (Cont.) User Defined ASDL Exit Types

Search Pattern	User Type	Base Type	Description
4012	SETTOP_INIT_TIMEOUT	RETRY_DIS	Settop Initialization Timeout Error.
4013	PROG_ADD_TIMEOUT	RETRY_DIS	Program Add Timeout Error.
4014	PROG_CHG_TIMEOUT	RETRY_DIS	Program Change Timeout Error.
4015	PROG_DEL_TIMEOUT	RETRY_DIS	Program Delete Timeout Error.
4017	SING_ST_POLL_TIMEOUT	RETRY_DIS	Single Settop Poll Timeout Error.
0	LOOPBACK_SUCCEED	SUCCEED	The command was success in loopback mode.
4018	TERMI_STATE_TIMEOUT	RETRY_DIS	Terminal state operation timeout Error.
4019	TERMI_PLANT_TIMEOUT	RETRY_DIS	Terminal off plant operation timeout error.
4100	IPPV_AUTHORI_TIMEOUT	RETRY_DIS	Change IPPV Authorization timeout error.
4101	TERMI_MODIFY_TIMEOUT	RETRY_DIS	Terminal Modify Timeout error.
1011	HEADEND_NOT_EXIST	FAIL	Headend handle does not exist
1012	UPSTRM_PLANT_NOT_EXT	FAIL	Upstream Plant Handle does not exist
1013	DOWNSTRM_PLANT_NOT_E	FAIL	Downstream Plant Handle does not exist.
1014	VCM_HANDLE_NOT_EXIST	FAIL	VCM Handle does not exist.
1015	INVALID_OPCODE_STATE	FAIL	Invalid Operation Code in the State Component.
1016	ILLEGAL_OPCODE_STATE	FAIL	Illegal Operation Code in the State Component Settop off plant.
1017	RC_HANDLE_NOT_EXIST	FAIL	Region Config Handle in the Feature Component does not exist.
1018	INVALID_AUTHORI_TYPE	FAIL	Invalid authorization type, in the authorization component.
1019	PKAGE_HANDLE_NOT_EXT	FAIL	Package Handle does not exist for this Business System.
1042	INVALID_AUTHORI_FLAG	FAIL	Invalid authorization flag.
1043	BITMASK_OUT_OF_RANGE	FAIL	Bit Mask value is out of range.
1044	ILLEGAL_COM_RECEIVED	FAIL	Illegal Component was received
1045	DUPLICATE_COM_RECEIV	FAIL	Duplicate Component was received.
1048	INVALID_VCM_NAME	FAIL	Invalid VCM Name.

Table 2–20 (Cont.) User Defined ASDL Exit Types

Search Pattern	User Type	Base Type	Description
1052	NOT_APM_FOR_UPLOAD	FAIL	Not All Purchases Marked For Upload.
1054	DUPLICATE_TYPE_COMPO	FAIL	Duplicate Type Component Error.
1055	DUPLICATE_PLANT_COMP	FAIL	Duplicate Plant Component Error.
1056	DUPLICATE_STATE_COMP	FAIL	Duplicate State Component Error.
1057	DUPLICATE_FEAT_COMPO	FAIL	Duplicate Feature Component Error.
1058	DUPLICATE_AUTH_COMPO	FAIL	Duplicate Authorization Component Error.
1059	UNKNOWN_COMPON_ ERROR	FAIL	Unknown Component Error.
1060	AUTH_RECORD_LAST_ERR	FAIL	Authorization Records Not Last Error.
1061	DUPLICATE_BSO_ERROR	FAIL	Duplicate Business System Owner (BSO) Error.
1062	MISSING_TYPE_IN_760	FAIL	Missing Type Component in 760 Command.
1064	MAX_SRV_EXCEEDS_ERRO	FAIL	Maximum Services Exceeds Limits Error.
1065	DUPLICATE_CABLE_CARD	FAIL	Duplicate CableCARD/Host Component Error.
1068	MCSC_OPERATION_FAIL	FAIL	MCSC Operation Failed Error.
1069	ILLEGAL_COMBINATION	FAIL	Illegal Settop Plant Type Combination Error.
1070	GET_SUBTYPE_ERROR	FAIL	Get Validation Message SubType Error.
1071	DSP_USP_CONN_ERROR	FAIL	DSP USP Connection Validation Error.
1072	CANNOT_VALIDATE_CC	FAIL	Cannot validate non-CableCARD terminal.
2002	TERMI_DATA_NOT_CH_DB	RETRY	Terminal change failed. Terminal data was not changed in database.
2005	STATE_COMP_FAILED	RETRY	Terminal state operation, defined by the operation code of the state component, failed
2009	SETTOP_OFF_PLANT_FAI	RETRY	Query of terminal data failed Settop Off Plant. (not supported).
2010	SETTOP_NOT_SUPPORTED	RETRY	Query of Terminal Data Failed Settop Not Responding. (not supported).
2018	TERMINAL_PIN_FAILED	RETRY	Terminal Clear PIN Operation failed.

Table 2–20 (Cont.) User Defined ASDL Exit Types

Search Pattern	User Type	Base Type	Description
2019	TERMINAL_ACT_OP_FAIL	RETRY	Terminal Activation Operation failed.
2021	TERMINAL_CMC_FAILED	RETRY	Terminal Channel Map Change failed.
2022	TERMINAL_INIT_FAILED	RETRY	Terminal Cold Initialization failed. (not supported).
2023	TERMINAL_RESET_FAIL	RETRY	Terminal Warm Reset failed. (not supported).
2024	TERMINAL_DE_ACT_FAIL	RETRY	Terminal De-activation Operation failed. (not supported).
2025	TERMINAL_RESET_FAIL	RETRY	Terminal Factory Reset failed. (not supported).
2027	CUST_REFRESH_FAILED	RETRY	Custom Refresh Failed - Settop On Plant.
2031	TERMINAL_PLANT_FAIL	RETRY	Terminal Off Plant Operation Failed.
2100	IPPV_AUTHORI_FAILED	RETRY	Change IPPV Authorization Failed.
2101	MCSC_OPERATIO_FAILED	RETRY	MCSC Operation failed.
3004	IPPV_TIER_NOT_FOUND	RETRY	IPPV Tiem not found.
3005	ON_PLANT_NOT_FOUND	RETRY	On Plant not found.
3007	UNDEFINED_STATE_COMP	RETRY	Undefined State Component error of 760 Command.
3012	BAD_REQUEST_TYPE_760	RETRY	Bad request type in identifier component of 760 command.
3015	GET_PH_DB_SP_ERROR	RETRY	Get PROGRAM HANDLES DB Stored procedure error.
3016	GET_PACKH_DB_SP_ERRO	RETRY	Get PACKAGE HANDLES DB stored procedure error.
3020	GET_PACK_TIER_DBERRO	RETRY	Get PACKAGE TIERS DB stored procedure error.
3023	BAD_AUTH_FLAG_ERROR	RETRY	Bad Authorization Flag Error.
3024	ILLEGAL_STATE_OP_ERR	RETRY	Illegal State operation error.
3100	GET_AUTH_DB_ERROR	RETRY	GET TERMINAL ATTRIBUTES DB STORED PROCEDURE ERROR
3101	GET_TERMI_TYPE_ERROR	RETRY	GET TERMINAL TYPE INFORMATION DB STORED PROCEDURE ERROR
3102	GET_RETURN_PATH_ERR	RETRY	GET RETURN PATH TYPE FAILED ERROR.
3103	PATH_NOT_FOUND_ERROR	RETRY	RETURN PATH TYPE NOT FOUND ERROR (NOT SUPPORTED).

Table 2–20 (Cont.) User Defined ASDL Exit Types

Search Pattern	User Type	Base Type	Description
3104	GET_PLANT_INFO_ERROR	RETRY	GET PLANT INFORMATION DB STORED PROCEDURE ERROR.
3105	GET_PLANT_INFO_FAIL	RETRY	GET PLANT INFORMATION FAILED ERROR
3106	GET_HEADED_INFO_ERR	RETRY	GET HEADEND INFORMATION DB STORED PROCEDURE ERROR.
3107	GET_TERMI_STATE_ERR	RETRY	GET TERMINAL STATE INFORMATION DB STORED PROCEDURE ERROR.
3108	GET_TERM_STATUS_ERR	RETRY	GET TERMINAL STATUS DB STORED PROCEDURE ERROR
3109	GET_TERMINA_DB_ERROR	RETRY	GET TERMINAL ON PLANT DB STORED PROCEDURE ERROR.
3110	GET_TERMINAL_BSI_FAI	RETRY	GET TERMINAL BSI CODE FAILED ERROR.
3111	TERMINAL_BSICODE_ERR	RETRY	TERMINAL BSI CODE NOT FOUND ERROR.
3112	SETTOP_AUTHOZ_FAILED	RETRY	SETTOP AUTHORIZATION FAILED ERROR.
3113	GET_TIRM_HANDLE_ERR	RETRY	GET TIER FOR HANDLE DB STORED PROCEDURE ERROR.
4001	CLEARPIN_TIMEOUT_ERR	RETRY	CLEAR PIN TIMEOUT ERROR OF 760 COMMAND.
4002	DEL_SETTOP_TIMEOUT_E	RETRY	DELETE SETTOP TIMEOUT ERROR.
4003	SETTOP_ACT_TIMEOUT_E	RETRY	SETTOP ACTIVATION TIMEOUT ERROR.
4006	CHANGE_VCM_TIMEOUT_E	RETRY	CHANGE VCM NAME TIMEOUT ERROR.
4007	PPV_AUTH_TIMEOUT_ERR	RETRY	PPV AUTHORIZATION TIMEOUT ERROR.
4009	AUTH_REFRESH_ERROR	RETRY	AUTHORIZATION REFRESH TIMEOUT ERROR.
4016	MARK_EVENT_TIMEOUT_E	RETRY	MARK EVENT PURCHASE TIMEOUT ERROR.

UserExitType.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<serviceModel xmlns="http://www.metasolv.com/ServiceActivation/2003/ServiceModel">
     <userDefinedExitType>
          <neDescriptor>
               <softwareLoad>1.0<//softwareLoad>
               <technology>DAC6000<//technology>
               <neVendor>MOTOROLA<//neVendor>
```

```
     <//neDescriptor>
     <searchPattern>1<//searchPattern>
     <userType>SUCCEED<//userType>
     <baseType>SUCCEED<//baseType>
     <description>No error.<//description>
<//userDefinedExitType>
.....................
<//serviceModel >
```

3

Service Definition

The Motorola DAC 6000 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 Reference*.

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 Administration Guide.*

CSDL Commands

This cartridge provides the following CSDL commands:

- C_MOTOROLA-DAC6000_1-0_ADD_DIGITAL_PROGRAM
- C_MOTOROLA-DAC6000_1-0_ADD_SETTOP
- C_MOTOROLA-DAC6000_1-0_ADD_TERMINAL-REQUEST-SETTOP
- C_MOTOROLA-DAC6000_1-0_CHANGE_ TERMINAL-REQUEST-SETTOP-STATE
- C_MOTOROLA-DAC6000_1-0_DELETE_DIGITAL_PROGRAM
- C_MOTOROLA-DAC6000_1-0_DELETE_SETTOP
- C_MOTOROLA-DAC6000_1-0_DELETE_TERMINAL-REQUEST-SETTOP
- C_MOTOROLA-DAC6000_1-0_INIT_SETTOP
- C_MOTOROLA-DAC6000_1-0_MODIFY_DIGITAL_PROGRAM
- C_MOTOROLA-DAC6000_1-0_MODIFY_PPV_AUTHORIZATION
- C_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_FEAT
- C_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_SERVICE
- C_MOTOROLA-DAC6000_1-0_MODIFY_ TERMINAL-REQUEST-SETTOP-FEATURES
- C_MOTOROLA-DAC6000_1-0_MOD_TERMINAL-REQUEST-SETTOP
- C_MOTOROLA-DAC6000_1-0_QRY_SETTOP
- C_MOTOROLA-DAC6000_1-0_QRY_SINGLE_TERMINAL_IPPV_PURCHASES
- C_MOTOROLA-DAC6000_1-0_SEND_SYNCHRONIZATION

C_MOTOROLA-DAC6000_1-0_ADD_DIGITAL_PROGRAM

Add a Digital Program.

Table 3–2 C_MOTOROLA-DAC6000_1-0_ADD_DIGITAL_PROGRAM

Parameter Name	Description	Range	Default Value	Type	Class
ALTERNATE_ PROGRAM_NAME	This field identifies the alternate program name	N/A	N/A	S	R
ANYTIME_FREE_ PREV_DURATION	This 16-bit numeric field contains the duration in seconds of free preview time available after tuning the set-top to a channel.	N/A	N/A	S	R
DIGITAL_PROGRAM_ FEATURE	The Digital Programming Features	N/A	N/A	C	R
EPOCH_DURATION	This field defines the length of time in seconds the program is active in the system.	N/A	N/A	S	R
EPOCH_END_TIME		N/A	N/A	S	R
EPOCH_START_TIME	This field defines the scheduled end of the program epoch.	N/A	N/A	S	R
IMPULSE_ PURCHASABLE	This field defines the number of seconds from the start of the program epoch that IPPV purchases are allowed.	N/A	N/A	S	R
INTERSTITIAL_ PERIOD	This field defines the period of time between the start of the program epoch and the actual start of the program. The units are in seconds	N/A	N/A	S	R
LANGUAGE_ CONTENT_ ADVISORY	This field identifies the program language content on a graduated scale.	N/A	N/A	S	R
MCLI		N/A	N/A	S	R
MPAA_ADVISORY	This field identifies the program parental rating level.	N/A	N/A	S	R
PACKAGE_COUNT	This field contains the number of packages of which this program is a member.	N/A	N/A	S	R
PREVIEW_TIME	This field defines the number of seconds between the scheduled start of the program epoch and the actual pay portion of the program (free preview time).	N/A	N/A	S	R
PROGRAM_HANDLE	The Program Handle.	N/A	N/A	S	R
PROGRAM_NAME	This field identifies the name of the program.	N/A	N/A	S	R
PROGRAM_NAME_ DISPLAY_TIME	This field can be from 10 through 255 and identifies the time, in tenths of one second, the program name banner is displayed on the set-top.	N/A	N/A	S	R
PURCHASE_COST	This field identifies the internal Units value of the event.	N/A	N/A	S	R
PURCHASE_PRICE	This field identifies the subscriber program price in the active currency.	N/A	N/A	S	R
RATING_REGION	This field defines the program-rating region.	N/A	N/A	S	R

Table 3–2 (Cont.) C_MOTOROLA-DAC6000_1-0_ADD_DIGITAL_PROGRAM

Parameter Name	Description	Range	Default Value	Type	Class
SERVICE_HANDLE	This field identifies services.	N/A	N/A	S	R
SEXUAL_CONTENT_ ADVISORY	This field identified the program sexual content on a graduated scale.	N/A	N/A	S	R
VIOLENT_CONTENT_ ADVISORY	This field identifies the program violence content on a graduated scale.	N/A	N/A	S	R

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_MOTOROLA-DAC6000_1-0_ADD_DIGITAL_ PROGRAM	A_MOTOROLA-DAC6000_1-0_ADD_DIGITAL_ PROGRAM

C_MOTOROLA-DAC6000_1-0_ADD_SETTOP

Add Settop.

Table 3–4 C_MOTOROLA-DAC6000_1-0_ADD_SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	N/A	S	R
EQUIP_TYPE	This field identifies the type of set-top.	N/A	N/A	S	R
HEADEND_NUMBER	Integer value	N/A	0	S	O
INIT_FLAG	Use of this field depends on the DAC tunable state.	N/A	N/A	S	R
MCLI		N/A	N/A	S	R
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
SERVICE_HANDLE	This field identifies services. the parameter should be SERVICE_ HANDLE.1 SERVICE_HANDLE.2 ... SERVICE_HANDLE.n	N/A	N/A	C	R
UNIT_ADDRESS	The unit addresses printed on the back panels of set-tops include dashes between numbers for readability.	N/A	N/A	S	R

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_MOTOROLA-DAC6000_1-0_ADD_SETTOP	A_MOTOROLA-DAC6000_1-0_ADD_SETTOP

C_MOTOROLA-DAC6000_1-0_ADD_TERMINAL-REQUEST-SETTOP

Add a new Settop using Terminal request.

Table 3–6 C_MOTOROLA-DAC6000_1-0_ADD_TERMINAL-REQUEST-SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
AUTHORIZATION_ HANDLE	This field identifies a package, service or object.	N/A	N/A	C	O
AUTHORIZATION_ TYPE	This field that specifically identifies the record as a package, service or program authorization.	N/A	N/A	C	O
AUTHORIZE_FLAG	The Authorize_Flag field designates whether to perform settop authorization or de-authorization.	N/A	N/A	C	O
BSI_CODE	The BSI_Code prevents unauthorized Business Systems from changing set-top information.	N/A	N/A	S	R
CABLECARD_ID	The CableCARD id is assigned by the CableCARD manufacturer	N/A	N/A	S	O
CLEAR_ALL_ PACKAGES_FLAG	This field clears all package authorizations from the settop.	N/A	N/A	S	O
CLEAR_ALL_ PROGRAMS_FLAG	This field clears all Call-Ahead program authorizations from the settop.	N/A	N/A	S	O
CLEAR_ALL_ SERVICES_FLAG	This field clears all services and terminal features like interactive from the settop.	N/A	N/A	S	O
CREDIT_ALLOWED	This field defines the amount of credit, in GI Units, for the subscriber to maintain.	N/A	N/A	S	O
DATA	This value is displayed on the Host on-screen display. It is a security data value that is used to facilitate the mating of the CableCARD and Host.	N/A	N/A	S	O
DOWNSTREAM_ PLANT_HANDLE	This field identifies the downstream plant number for the settop.	N/A	N/A	S	O
EPG_REGION	This field defines the electronic program guide (EPG) region code assigned to the set-top.	N/A	N/A	S	O
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	N/A	S	O
EQUIP_TYPE	This field identifies the type of set-top.	N/A	N/A	S	R
FEATURE_SETTING	The following subsections identifies the content of the field in the various commands,	N/A	N/A	C	O
HEADEND_HANDLE	This field identifies the headend.	N/A	N/A	S	O
HOST_ID	The Host_Id identifies the Host as assigned by DTLA	N/A	N/A	S	O
MCLI		N/A	N/A	S	R
NUM_RECORDS	This field contains the number of records being sent in the command.	N/A	N/A	S	O

Table 3–6 (Cont.) C_MOTOROLA-DAC6000_1-0_ADD_TERMINAL-REQUEST-SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
ON_PLANT_FLAG	This Flag in the State Component identifies the on-plant status of set-tops in the DAC.	N/A	N/A	S	O
OPERATION_CODE	This field identifies the operation to be performed on the set-top.	N/A	N/A	S	O
OUTPUT_CHANNEL_NO	This field defines the television channel base frequency setting on the set-top	N/A	N/A	S	O
OVERRIDE	The override value gives the MSO the ability to override the CableCARD/Host validation status within the DAC CPMS on a settop by settop basis. If not specified, this field is defaulted to 0.	N/A	N/A	S	O
PROGRAM_HANDLE	The Program_Handle is a unique value that identifies a specific PPV event.	N/A	N/A	C	O
PURCHASES_ALLOWED	This field defines the maximum number of subscriber purchases allowed.	N/A	N/A	S	O
REGION_CONFIG_HANDLE	This field identifies the region to assign set-tops.	N/A	N/A	S	O
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
TIMEZONE_HANDLE	This field defines an index into the DAC time zone table for set-tops.	N/A	N/A	S	O
TURNOFF_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned on	N/A	N/A	S	O
TURNON_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned off.	N/A	N/A	S	O
UNIT_ADDRESS	The unit addresses printed on the back panels of set-tops include dashes between numbers for readability.	N/A	N/A	S	R
UPSTREAM_PLANT_HANDLE	This field identifies upstream plants (return paths) for settops.	N/A	N/A	S	O
VCM_HANDLE	This field identifies settop Virtual Channel Maps.	N/A	N/A	S	O

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_MOTOROLA-DAC6000_1-0_ADD_TERMINAL-REQUEST-SETTOP	A_MOTOROLA-DAC6000_1-0_ADD_TERMINAL-REQUEST-SETTOP

C_MOTOROLA-DAC6000_1-0_CHANGE_TERMINAL-REQUEST-SETTOP-STATE

Change the state of Settop using terminal request.

Table 3–8 C_MOTOROLA-DAC6000_1-0_CHANGE_TERMINAL-REQUEST-SETTOP-STATE

Parameter Name	Description	Range	Default Value	Type	Class
BSI_CODE	The BSI_Code prevents unauthorized Business Systems from changing set-top information.	N/A	N/A	S	R
MCLI		N/A	N/A	S	R
ON_PLANT_FLAG	This Flag in the State Component identifies the on-plant status of set-tops in the DAC.	N/A	N/A	S	O
OPERATION_CODE	This field identifies the operation to be performed on the set-top.	N/A	N/A	S	O
SERIAL_NUMBER	This field identifies the set-top.	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_MOTOROLA-DAC6000_1-0_CHANGE_ TERMINAL-REQUEST-SETTOP-STATE	A_MOTOROLA-DAC6000_1-0_CHANGE_ TERMINAL-REQUEST-SETTOP-STATE

C_MOTOROLA-DAC6000_1-0_DELETE_DIGITAL_PROGRAM

This command deletes a digital program or program alias from the DAC. The Program_Handle field identifies the record in the DAC to delete.

Table 3–10 C_MOTOROLA-DAC6000_1-0_DELETE_DIGITAL_PROGRAM

Parameter Name	Description	Range	Default Value	Type	Class
EPOCH_END_TIME		N/A	N/A	S	R
EPOCH_START_TIME	This field defines the scheduled end of the program epoch.	N/A	N/A	S	R
MCLI		N/A	N/A	S	R
PROGRAM_HANDLE		N/A	N/A	S	R
SERVICE_HANDLE	This field identifies services.	N/A	N/A	S	R

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_MOTOROLA-DAC6000_1-0_DELETE_DIGITAL_ PROGRAM	A_MOTOROLA-DAC6000_1-0_DELETE_DIGITAL_ PROGRAM

C_MOTOROLA-DAC6000_1-0_DELETE_SETTOP

This command deletes a set-top from the DAC and de-activates the set-top by sending a disconnect, regardless of on or off plant status.

Table 3–12 C_MOTOROLA-DAC6000_1-0_DELETE_SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	0	S	O
EQUIP_TYPE	This field identifies the type of set-top.	N/A	0	S	O
HEADEND_NUMBER	Integer value	N/A	0	S	O
MCLI		N/A	N/A	S	R
SERIAL_NUMBER	This field identifies the set-top.	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_MOTOROLA-DAC6000_1-0_DELETE_SETTOP	A_MOTOROLA-DAC6000_1-0_DELETE_SETTOP

C_MOTOROLA-DAC6000_1-0_DELETE_TERMINAL-REQUEST-SETTOP

Delete digital settop using terminal request.

Table 3–14 C_MOTOROLA-DAC6000_1-0_DELETE_TERMINAL-REQUEST-SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
BSI_CODE	The BSI_Code prevents unauthorized Business Systems from changing set-top information.	N/A	N/A	S	R
MCLI		N/A	N/A	S	R
SERIAL_NUMBER	This field identifies the set-top.	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_MOTOROLA-DAC6000_1-0_DELETE_ TERMINAL-REQUEST-SETTOP	A_MOTOROLA-DAC6000_1-0_DELETE_ TERMINAL-REQUEST-SETTOP

C_MOTOROLA-DAC6000_1-0_INIT_SETTOP

This command initializes and activates an on-plant set-top with optional service, package, or object authorizations.

Table 3–16 C_MOTOROLA-DAC6000_1-0_INIT_SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	0	S	O
EQUIP_TYPE	This field identifies the type of set-top.	N/A	0	S	O
HEADEND_NUMBER	Integer value	N/A	0	S	O
MCLI		N/A	N/A	S	R
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
SERVICE_HANDLE	This field identifies services. the parameter should be SERVICE_ HANDLE.1 SERVICE_HANDLE.2 ... SERVICE_HANDLE.n	N/A	N/A	C	R

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_MOTOROLA-DAC6000_1-0_INIT_SETTOP	A_MOTOROLA-DAC6000_1-0_INIT_SETTOP

C_MOTOROLA-DAC6000_1-0_MODIFY_DIGITAL_PROGRAM

This command modifies a digital program in the DAC. The DAC updates all field records contained in this command given the BSI_Code, Service_Handle and Program_Handle.

Table 3–18 C_MOTOROLA-DAC6000_1-0_MODIFY_DIGITAL_PROGRAM

Parameter Name	Description	Range	Default Value	Type	Class
ALTERNATE_ PROGRAM_NAME	This field identifies the alternate program name	N/A	N/A	S	R
ANYTIME_FREE_ PREV_DURATION	This 16-bit numeric field contains the duration in seconds of free preview time available after tuning the set-top to a channel.	N/A	N/A	S	R
DIGITAL_PROGRAM_ FEATURE	The Digital Programming Features	N/A	N/A	C	R
EPOCH_DURATION	This field defines the length of time in seconds the program is active in the system.	N/A	N/A	S	R
EPOCH_END_TIME		N/A	N/A	S	R
EPOCH_START_TIME	This field defines the scheduled end of the program epoch.	N/A	N/A	S	R
IMPULSE_ PURCHASABLE	This field defines the number of seconds from the start of the program epoch that IPPV purchases are allowed.	N/A	N/A	S	R

Table 3–18 (Cont.) C_MOTOROLA-DAC6000_1-0_MODIFY_DIGITAL_PROGRAM

Parameter Name	Description	Range	Default Value	Type	Class
INTERSTITIAL_ PERIOD	This field defines the period of time between the start of the program epoch and the actual start of the program. The units are in seconds	N/A	N/A	S	R
LANGUAGE_ CONTENT_ ADVISORY	This field identifies the program language content on a graduated scale.	N/A	N/A	S	R
MCLI		N/A	N/A	S	R
MPAA_ADVISORY	This field identifies the program parental rating level.	N/A	N/A	S	R
PACKAGE_COUNT	This field contains the number of packages of which this program is a member.	N/A	N/A	S	R
PREVIEW_TIME	This field defines the number of seconds between the scheduled start of the program epoch and the actual pay portion of the program (free preview time).	N/A	N/A	S	R
PROGRAM_HANDLE		N/A	N/A	S	R
PROGRAM_NAME	This field identifies the name of the program.	N/A	N/A	S	R
PROGRAM_NAME_ DISPLAY_TIME	This field can be from 10 through 255 and identifies the time, in tenths of one second, the program name banner is displayed on the set-top.	N/A	N/A	S	R
PURCHASE_COST	This field identifies the internal Units value of the event.	N/A	N/A	S	R
PURCHASE_PRICE	This field identifies the subscriber program price in the active currency.	N/A	N/A	S	R
RATING_REGION	This field defines the program-rating region.	N/A	N/A	S	R
SERVICE_HANDLE	This field identifies services.	N/A	N/A	S	R
SEXUAL_CONTENT_ ADVISORY	This field identified the program sexual content on a graduated scale.	N/A	N/A	S	R
VIOLENT_CONTENT_ ADVISORY	This field identifies the program violence content on a graduated scale.	N/A	N/A	S	R

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_MOTOROLA-DAC6000_1-0_MODIFY_DIGITAL_ PROGRAM	A_MOTOROLA-DAC6000_1-0_MODIFY_DIGITAL_ PROGRAM

C_MOTOROLA-DAC6000_1-0_MODIFY_PPV_AUTHORIZATION

This command adds and deletes multiple Pay-Per-View (PPV) program authorizations for one or more set-tops. The command length varies according to the number of authorizations and de-authorizations sent.

Table 3–20 C_MOTOROLA-DAC6000_1-0_MODIFY_PPV_AUTHORIZATION

Parameter Name	Description	Range	Default Value	Type	Class
ENTRY	Authorization/De-authorization entry, this is compound parameter	N/A	N/A	C	R
MCLI		N/A	N/A	S	R

Mapping to ASDLs

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

Table 3–21 CSDL to ASDL Mapping

CSDL	ASDL
C_MOTOROLA-DAC6000_1-0_MODIFY_PPV_ AUTHORIZATION	A_MOTOROLA-DAC6000_1-0_MODIFY_PPV_ AUTHORIZATION

C_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_FEAT

This command modifies set-top feature settings.

Table 3–22 C_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_FEAT

Parameter Name	Description	Range	Default Value	Type	Class
COUNTRY_CODE	This represents the country in which the set-top resides.	N/A	N/A	S	R
CREDIT_ALLOWED	This field defines the amount of credit, in GI Units, for the subscriber to maintain.	N/A	N/A	S	R
CURRENCY_REGION	This field defines the currency type to be used for the set-top.	N/A	N/A	S	R
EPG_REGION	This field defines the electronic program guide (EPG) region code assigned to the set-top.	N/A	N/A	S	R
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	0	S	O
EQUIP_TYPE	This field identifies the type of set-top.	N/A	0	S	O
HEADEND_NUMBER	Integer value	N/A	0	S	O
MCLI		N/A	N/A	S	R
OUTPUT_CHANNEL_ NO	This field defines the television channel base frequency setting on the set-top	N/A	N/A	S	R
PURCHASES_ ALLOWED	This field defines the maximum number of subscriber purchases allowed.	N/A	N/A	S	R
RESERVED	This field is not used by the DAC but must be specified within the range above.	N/A	N/A	S	R

Table 3–22 (Cont.) C_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_FEAT

Parameter Name	Description	Range	Default Value	Type	Class
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
SETTOP_FEATURE	The following subsections identifies the content of the field in the various commands,	N/A	N/A	C	R
TIMEZONE_HANDLE	This field defines an index into the DAC time zone table for set-tops.	N/A	N/A	S	R
TURNOFF_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned off.	N/A	N/A	S	R
TURNON_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned on	N/A	N/A	S	R

Mapping to ASDLs

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

Table 3–23 CSDL to ASDL Mapping

CSDL	ASDL
C_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_FEAT	A_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_FEAT

C_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_SERVICE

Use this command to add or delete service, package, or object authorizations for a set-top.

Table 3–24 C_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	0	S	O
EQUIP_TYPE	This field identifies the type of set-top.	N/A	0	S	O
HEADEND_NUMBER	Integer value	N/A	0	S	O
MCLI		N/A	N/A	S	R
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
SERVICE_HANDLE	This field identifies services. the parameter should be SERVICE_HANDLE.1 SERVICE_HANDLE.2 ... SERVICE_HANDLE.n	N/A	N/A	C	R

Mapping to ASDLs

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

Table 3–25 CSDL to ASDL Mapping

CSDL	ASDL
C_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_SERVICE	A_MOTOROLA-DAC6000_1-0_MODIFY_SETTOP_SERVICE

C_MOTOROLA-DAC6000_1-0_MODIFY_TERMINAL-REQUEST-SETTOP-FEATURES

Modify Settop features using Terminal Request.

Table 3–26 C_MOTOROLA-DAC6000_1-0_MODIFY_TERMINAL-REQUEST-SETTOP-FEATURES

Parameter Name	Description	Range	Default Value	Type	Class
BSI_CODE	The BSI_Code prevents unauthorized Business Systems from changing set-top information.	N/A	N/A	S	R
CREDIT_ALLOWED	This field defines the amount of credit, in GI Units, for the subscriber to maintain.	N/A	N/A	S	O
EPG_REGION	This field defines the electronic program guide (EPG) region code assigned to the set-top.	N/A	N/A	S	O
FEATURE_SETTING	The following subsections identifies the content of the field in the various commands,	N/A	N/A	C	O
MCLI		N/A	N/A	S	R
OUTPUT_CHANNEL_NO	This field defines the television channel base frequency setting on the set-top	N/A	N/A	S	O
PURCHASES_ALLOWED	This field defines the maximum number of subscriber purchases allowed.	N/A	N/A	S	O
REGION_CONFIG_HANDLE	This field identifies the region to assign set-tops.	N/A	N/A	S	O
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
TIMEZONE_HANDLE	This field defines an index into the DAC time zone table for set-tops.	N/A	N/A	S	O
TURNOFF_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned on	N/A	N/A	S	O
TURNON_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned off.	N/A	N/A	S	O

Mapping to ASDLs

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

Table 3–27 CSDL to ASDL Mapping

CSDL	ASDL
C_MOTOROLA-DAC6000_1-0_MODIFY_TERMINAL-REQUEST-SETTOP-FEATURES	A_MOTOROLA-DAC6000_1-0_MODIFY_TERMINAL-REQUEST-SETTOP-FEATURES

C_MOTOROLA-DAC6000_1-0_MOD_TERMINAL-REQUEST-SETTOP

Modify an existing Settop using Terminal request.

Table 3–28 C_MOTOROLA-DAC6000_1-0_MOD_TERMINAL-REQUEST-SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
AUTHORIZATION_ HANDLE	This field identifies a package, service or object.	N/A	N/A	C	O
AUTHORIZATION_ TYPE	This field that specifically identifies the record as a package, service or program authorization.	N/A	N/A	C	O
AUTHORIZE_FLAG	The Authorize_Flag field designates whether to perform settop authorization or de-authorization.	N/A	N/A	C	O
BSI_CODE	The BSI_Code prevents unauthorized Business Systems from changing set-top information.	N/A	N/A	S	R
CABLECARD_ID	The CableCARD id is assigned by the CableCARD manufacturer	N/A	N/A	S	O
CLEAR_ALL_ PACKAGES_FLAG	This field clears all package authorizations from the settop.	N/A	N/A	S	O
CLEAR_ALL_ PROGRAMS_FLAG	This field clears all Call-Ahead program authorizations from the settop.	N/A	N/A	S	O
CLEAR_ALL_ SERVICES_FLAG	This field clears all services and terminal features like interactive from the settop.	N/A	N/A	S	O
CREDIT_ALLOWED	This field defines the amount of credit, in GI Units, for the subscriber to maintain.	N/A	N/A	S	O
DATA	This value is displayed on the Host on-screen display. It is a security data value that is used to facilitate the mating of the CableCARD and Host.	N/A	N/A	S	O
DOWNSTREAM_ PLANT_HANDLE	This field identifies the downstream plant number for the settop.	N/A	N/A	S	O
EPG_REGION	This field defines the electronic program guide (EPG) region code assigned to the set-top.	N/A	N/A	S	O
EQUIP_TYPE	This field identifies the type of set-top.	N/A	N/A	S	O
FEATURE_SETTING	The following subsections identifies the content of the field in the various commands,	N/A	N/A	C	O
HEADEND_HANDLE	This field identifies the headend.	N/A	N/A	S	O
HOST_ID	The Host_Id identifies the Host as assigned by DTLA	N/A	N/A	S	O
MCLI		N/A	N/A	S	R
NUM_RECORDS	This field contains the number of records being sent in the command.	N/A	N/A	S	O
ON_PLANT_FLAG	This Flag in the State Component identifies the on-plant status of set-tops in the DAC.	N/A	N/A	S	O

Table 3–28 (Cont.) C_MOTOROLA-DAC6000_1-0_MOD_TERMINAL-REQUEST-SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
OPERATION_CODE	This field identifies the operation to be performed on the set-top.	N/A	N/A	S	O
OUTPUT_CHANNEL_NO	This field defines the television channel base frequency setting on the set-top	N/A	N/A	S	O
OVERRIDE	The override value gives the MSO the ability to override the CableCARD/Host validation status within the DAC CPMS on a settop by settop basis. If not specified, this field is defaulted to 0.	N/A	N/A	S	O
PROGRAM_HANDLE	The Program_Handle is a unique value that identifies a specific PPV event.	N/A	N/A	C	O
PURCHASES_ALLOWED	This field defines the maximum number of subscriber purchases allowed.	N/A	N/A	S	O
REGION_CONFIG_HANDLE	This field identifies the region to assign set-tops.	N/A	N/A	S	O
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R
TIMEZONE_HANDLE	This field defines an index into the DAC time zone table for set-tops.	N/A	N/A	S	O
TURNOFF_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned on	N/A	N/A	S	O
TURNON_VC	This field identifies the virtual channel that set-tops are tuned to when the set-tops are turned off.	N/A	N/A	S	O
UPSTREAM_PLANT_HANDLE	This field identifies upstream plants (return paths) for settops.	N/A	N/A	S	O
VCM_HANDLE	This field identifies settop Virtual Channel Maps.	N/A	N/A	S	O

Mapping to ASDLs

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

Table 3–29 CSDL to ASDL Mapping

CSDL	ASDL
C_MOTOROLA-DAC6000_1-0_MOD_TERMINAL-REQUEST-SETTOP	A_MOTOROLA-DAC6000_1-0_MOD_TERMINAL-REQUEST-SETTOP

C_MOTOROLA-DAC6000_1-0_QRY_SETTOP

The Business System sends this command to the DAC to poll purchases; query features; query service, package and program authorizations of a single set-top.

Table 3–30 C_MOTOROLA-DAC6000_1-0_QRY_SETTOP

Parameter Name	Description	Range	Default Value	Type	Class
ACTION_CODE	The Action_Code field contained in this command identifies the type of function to perform and the type of data to return to the Business System.	N/A	N/A	S	R
EQUIP_SUB_TYPE	This field provides a secondary identifier of the equipment type.	N/A	0	S	O
EQUIP_TYPE	This field identifies the type of set-top.	N/A	0	S	O
HEADEND_NUMBER	Integer value	N/A	0	S	O
MCLI	HOSTCLLI	N/A	N/A	S	R
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R

Mapping to ASDLs

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

Table 3–31 CSDL to ASDL Mapping

CSDL	ASDL
C_MOTOROLA-DAC6000_1-0_QRY_SETTOP	A_MOTOROLA-DAC6000_1-0_QRY_SETTOP

C_MOTOROLA-DAC6000_1-0_QRY_SINGLE_TERMINAL_IPPV_PURCHASES

This command is sent from the Business System to the DAC to upload collected purchases from the DAC to the Business System for a specific set-top.

Table 3–32 C_MOTOROLA-DAC6000_1-0_QRY_SINGLE_TERMINAL_IPPV_PURCHASES

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R
SERIAL_NUMBER	This field identifies the set-top.	N/A	N/A	S	R

Mapping to ASDLs

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

Table 3–33 CSDL to ASDL Mapping

CSDL	ASDL
C_MOTOROLA-DAC6000_1-0_QRY_SINGLE_ TERMINAL_IPPV_PURCHASES	A_MOTOROLA-DAC6000_1-0_QRY_SINGLE_ TERMINAL_IPPV_PURCHASES

C_MOTOROLA-DAC6000_1-0_SEND_SYNCHRONIZATION

This command used for Business System to send synchronization command to reset sequenceNumber.

Table 3–34 C_MOTOROLA-DAC6000_1-0_SEND_SYNCHRONIZATION

Parameter Name	Description	Range	Default Value	Type	Class
MCLI		N/A	N/A	S	R

Mapping to ASDLs

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

Table 3–35 CSDL to ASDL Mapping

CSDL	ASDL
C_MOTOROLA-DAC6000_1-0_SEND_ SYNCHRONIZATION	A_MOTOROLA-DAC6000_1-0_SEND_ SYNCHRONIZATION

4

Configuring ASAP to Support Additional NE Instances

You can configure Oracle Communications ASAP (ASAP) to support the N_MOTOROLA-DAC6000_1-0_HOST - NEP configuration using the Service Activation Configuration Tool (SACT). Refer to the *ASAP Administration 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 Motorola DAC 6000 cartridge.

```
<?xml version="1.0" encoding="UTF-8"?>
<activationConfig
xmlns="http://www.metasolv.com/ServiceActivation/2003/ActivationConfig">
     <connectionPool name="MOT_POOL">
          <device name="N_MOTOROLA-DAC6000_1-0_HOST_conn_1">
               <environment/>
               <lineType>SOCKET_CONNECTION</lineType>
          </device>
     </connectionPool>
     <element name="N_MOTOROLA-DAC6000_1-0_HOST">
          <vendor>MOTOROLA</vendor>
          <technology>DAC6000</technology>
          <softwareLoad>1.0</softwareLoad>
          <nepServerName>$NEP</nepServerName>
          <primaryPool>MOT_POOL</primaryPool>
```

```
          <maximumConnections>5</maximumConnections>
          <dropTimeout>4</dropTimeout>
          <spawnThreshold>8</spawnThreshold>
          <killThreshold>3</killThreshold>
          <routingElement name="N_MOTOROLA-DAC6000_1-0_HOST"/>
          <communicationParameter>
               <label>IDLE_TIMER_ASDL</label>
               <value>
                    <value>A_PING_DAC</value>
               </value>
               <description>The idle ASDL after a period of inactivity on the
connection.</description>
               <lineType>SOCKET_CONNECTION</lineType>
          </communicationParameter>
          <communicationParameter>
               <label>IDLE_TIMER_INT</label>
               <value>
                    <value>60</value>
               </value>
               <description>The idle timer(value between 60-300). If this
parameter is not defined or is set to zero, the IDLE_TIMER_ASDL is not triggered
regardless of how long a connection remains idle.</description>
               <lineType>SOCKET_CONNECTION</lineType>
          </communicationParameter>
          <communicationParameter>
               <label>PORT</label>
               <value>
                    <value>6011</value>
               </value>
               <description>Port of the remote socket listener.</description>
               <lineType>SOCKET_CONNECTION</lineType>
          </communicationParameter>
          <communicationParameter>
               <label>OPEN_TIMEOUT</label>
               <value>
                    <value>5</value>
               </value>
               <description>The wait timeout period, in seconds, that ASAP waits
to open the device. The wait timeout parameter is only applicable to the serial
interface.</description>
               <lineType>SOCKET_CONNECTION</lineType>
          </communicationParameter>
          <communicationParameter>
               <label>WRITE_TIMEOUT</label>
               <value>
                    <value>5</value>
               </value>
               <description>The wait timeout period, in seconds, that ASAP waits
to write to the device.</description>
               <lineType>SOCKET_CONNECTION</lineType>
          </communicationParameter>
          <communicationParameter>
               <label>READ_TIMEOUT</label>
               <value>
                    <value>1</value>
               </value>
               <description>The wait timeout period, in seconds, that ASAP waits
to read from the device. Currently, this is only applicable to the socket
interface.</description>
               <lineType>SOCKET_CONNECTION</lineType>
```

```
            </communicationParameter>
            <communicationParameter>
                 <label>HOST_NAME</label>
                 <value>
                      <value>VPADAMAT-idc.idc.oracle.com</value>
                 </value>
                 <description>Machine name for the host NE.</description>
                 <lineType>SOCKET_CONNECTION</lineType>
            </communicationParameter>
            <communicationParameter>
                 <label>HOST_IPADDR</label>
                 <value>
                      <value>141.144.192.9</value>
                 </value>
                 <description>Network IP address for the host NE.</description>
                 <lineType>SOCKET_CONNECTION</lineType>
            </communicationParameter>
            <communicationParameter>
                 <label>RESPONSE_WAIT_DELAY</label>
                 <value>
                      <value>30</value>
                 </value>
                 <description>Wait for the response from NE.</description>
                 <lineType>SOCKET_CONNECTION</lineType>
            </communicationParameter>
            <communicationParameter>
                 <label>RESPONSELOG</label>
                 <value>
                      <value>true</value>
                 </value>
                 <description>To indicate whether to Log MML Request and Response to
tbl srq log.</description>
                 <lineType>SOCKET_CONNECTION</lineType>
            </communicationParameter>
       </element>
</activationConfig>
```