

Oracle Communications ASAP Cartridge for NagraVision CAS

The *ASAP Cartridge for NagraVision CAS* is an optional software component that enables ASAP to activate Digital Mass Market (DMM) related services for NagraVision CAS DMM system

Supported Services

The *ASAP Cartridge NagraVision CAS D4A* supports the following services:

CAS 2.7.6 Version Services:

Service	Actions & Description
Smart Card	<ul style="list-style-type: none">Initialize the Management Operator (MOP) zone of a new smart card.
Set Top Box	<ul style="list-style-type: none">Swap the set top boxSwap the set top box and smart card
Product	<ul style="list-style-type: none">Add a new product subscription to the end-user smart card.Remove the product (subscription service) from smart card in case of error or if a subscriber asked for cancellationRemove all the subscriptions and PPC stored in the smart card.
Event Product	<ul style="list-style-type: none">Add an event product subscription to the end-user smart card.
Subscriber	<ul style="list-style-type: none">Create the credit data structure in a given smart card. This will allow the subscriber to perform impulse pay per view purchase.Suspend all the subscriptions on the smart card for a subscriber and the impulse purchase capability, buy "free access" services can still be watchedRestore the subscriber access to all the subscriptions.
Call Back IP Address	<ul style="list-style-type: none">Sets or updated the ICC field containing the IP address of the call collectorSets or update the parameter "phone-number" in the ICC.Request a smart card or set top box to call back the

	<p>Conditional Access System (CAS) immediately.</p> <ul style="list-style-type: none">• Turn on the automatic feedback feature of the set top box.• The Call Collector utilizes this data to increment the credit in the smart card during any callback.
Supplementary services	<ul style="list-style-type: none">• Reset the set top box pin via IRD command• Reset the set top box to factory settings• Enable the software download features.• Modify the set top box community type• Forces the set-top box to format the HDD partition(s) containing the push-VOD content• Verify the set top box to check the download stream is available to perform the software download/upgrade• Formats one or several disks of the set-top box.

CAS - ELK 3.0/EIS 2.7 Version Services:

Service	Actions & Description
Products:	<ul style="list-style-type: none"> • Init and Add list of products [902] • Add Enhanced list of products [905] • Add List of Products [903] • Cancel list of products [904] • All Product Cancellation [007]
IRD Command	<ul style="list-style-type: none"> • IRD Command - 1 way [069] • IRD Command - 2 way [099]
Call Back IP Address	<ul style="list-style-type: none"> • Immediate Call Back [060]
Pair ICC and STU	<ul style="list-style-type: none"> • Command to pair a UA with the STB. [052]
Subscriber	<ul style="list-style-type: none"> • Suspend Subscriber ICC [020] • Reactivate Subscriber ICC [021]
Management Operator (MOP)	<ul style="list-style-type: none"> • Create MOP [035] • Cancel MOP [036] • Suspend decryption capabilities for all MOP [023] • Reactivate Dcryption Capabilities of all MOP [024]
ICC:	<ul style="list-style-type: none"> • Initialize ICC [051] • Cancel ICC [050]

CAS – CLK /EIS 2.7 Version Services:

Service	Actions & Description
Activate Smart Card II	<p>This macro command (923) is a one-shot initialization command designed to improve the performances of the CAS when initializing a new card in the CAS database.</p> <p>This Command can be used as a substitute for several SMS commands to initialize a smart card.</p>

Cartridge Contents

The *ASAP Cartridge for Nagravision CAS DMM* includes:

- Common Service Description Layer Commands (CSDLs)
- Atomic Service Description Layer Commands (ASDLs)
- Java methods
- Installation scripts
- Sample work orders
- Cartridge manual

This cartridge can be extended by any of the following:

- Customers
- Systems Integrators
- Oracle Communications Professional Services

The *ASAP Cartridge Development Kit (CDK) for Service Activation* provides guidelines for extending a cartridge.

Technical Specifications

Hardware & Software Requirements

The *ASAP Cartridge for Nagravision CAS D4A* is designed to operate with the following hardware and software:

- *Nagravision CAS 2-7-6*
- *Nagravision CAS - ELK 3.0/EIS 2.7*
- *Nagravision CAS - CLK EIS 2.7*

Network Element Interface

The ASAP cartridge will interface to Nagravision CAS DMM using the following communication layers.

1. SMSgw protocol
2. Device IO
3. TCP/IP

The cartridge will use socket connection to communicate with the NE. The lowest level is TCP/IP and the most abstract level is the SMSgw protocol. Between them, there is the Device IO layer whose role is to gather the command from the TCP/IP stream