

## ● Conditional Access Service

HyC presents a conditional access service for DVB that covers Digital TV operators' need of a revenue protection by restricting content access only to paying subscribers.

Hierba TV CAS Service is specifically designed for small/medium regional and local operators. It is based on a Conax CAS7 platform and a distributed architecture with a central system hosted at HyC premises and distributed elements in each operator.



## ● Key benefits

### ■ Strong, modular, flexible and scalable solution

- Capacity of the system can be easily upgraded to match business growth.
- Basic services can be provided at the beginning and evolve to added-value services such as Event PPV or VOD.
- Wide range of functionalities and configurations for subscription products.
- Electronics measures against piracy (monitoring activities, etc.).

### ■ Cost-effective distributed solution

- Hierba TV distributed architecture allows to reduce operator's initial investment without sacrificing any functionality. Only ECM Generator and EMM Injector are hosted at operator's Head-End where scrambling is performed. The authorizations are sent from HyC central.

### ■ Secure solution

- Hierba TV CAS Service is based on Conax technology which has proved its efficiency against commercial piracy.

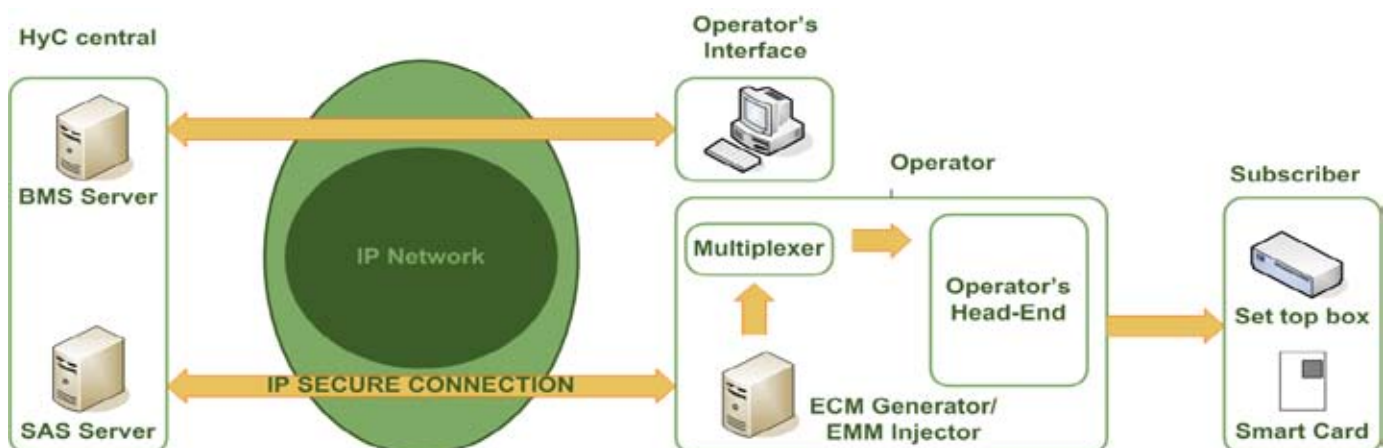
### ■ Operations and maintenance of the system

- 24x7 or 8x5 operation and support models are available to guarantee peace of mind operation. Hierba TV service assures the provision to its costumers of diagnosis, fault resolution and technical support, both on-site and remote.






### ■ Compatible solution

- Hierba TV CAS Service can be used on satellite, IP distributed networks such as XDSL or FTTH, as well as cable and terrestrial transmissions.
- It supports a wide range of STB manufacturers, multiplexers and any STB middleware. It is compliant with open standards such as MPEG2/MPEG4, DVB Simulcrypt and Common Interface, OpenCable, OpenCAS and DOCSIS.

## ● How Hierba TV works



## ● Hierba TV system architecture

-  Subscriber Authorization System (SAS) server located at HyC premises, it manages the generation of authorizations (EMMs) and maintains status of the entire smart card population under the direction of the Business Management System.
-  Business Management System (BMS) server located at HyC premises, it is based on Conax BMS.7. It is the business centre which activates the smart cards and provides billing information. It stores information about the subscribers, the serial numbers of the decoders and smart cards, as well as the service available to each subscriber.
-  Entitlement Control Message (ECM) Generator is located at the operator's head-end; it manages encryption and packaging of entitlements of control words for scrambled services.
-  Entitlement Management Message (EMM) Injector is located at the operator's head-end; it receives EMMs from SAS server, manages EMM playout queues, and feeds EMMs into the DVB multiplexer.
-  Smart Card performs EMM and ECM decryption and interpretation in order to determine if the subscriber is granted access to a service. It must be located in the customer's set top box.



## ● Main features

### BMS Features

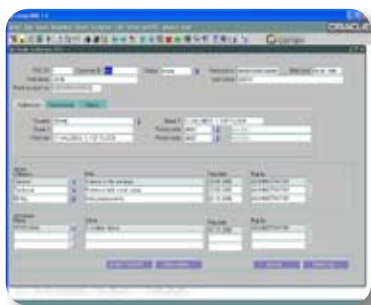
- It is based on Oracle's latest 3-tier technology and Java Enabled in terms of compatibility with other systems, offering openness to all future extensions.

### Multi-operator scheme

- The system is configured to support more than one digital TV operator. The information belonging to one operator is kept confidential and can not be accessed by any other operator.

### Graphical interface

- Hierba TV allows operators administer and configure the CAS service through the BMS database using a web client interface that includes online help. Graphical interface is designed to handle operations including: new subscriber's registration, activation and deactivation of smart cards, smart card and set top box pairing, subscriber information updating, and importing and updating payment status for each subscriber.



### CAS Features

- A scheduling facility is available for time-controlled change of conditional access configuration.
- Supports key replacement in smart cards.
- Supports parental control.

### Hardware

- SAS/BMS hosted in a Sunfire V120 server with Solaris 8.0 Operating System.
- ECM Generator and EMM Injector hosted in a Sunfire V100 server with Solaris 8.0 Operative System.

