



A COMPLETE NETWORK SYSTEM

CONAX IPTV – EMPLOYING BROADBAND IP NETWORKS AS TRANSMISSION CARRIERS OPENS UP THE POSSIBILITY FOR OPERATORS TO USE THE SAME NETWORK INFRASTRUCTURE FOR ALL TYPES OF SERVICES

CONAX IPTV

SECURING THE FUTURE





CONDITIONAL ACCESS (CA) SYSTEM FOR DVB OVER IP

CONAX WAS AMONG THE PIONEERS DEFINING THE BROADCAST SECURITY ARCHITECTURE NOW USED ALL OVER THE WORLD, AND IN USING SMART CARDS AS THE USER SECURITY MODULE.

THE IPTV REVOLUTION

IPTV is one of the key trends in the TV industry, with the introduction of IPTV leading to a revolutionary new approach to the distribution of TV services. Employing broadband IP networks as transmission carriers opens up the possibility for operators to use the same network infrastructure for all types of services; high speed Internet access, telephony, Video On Demand (VOD) and television content. Procuring the best security solution for distributing television and video is a key element for the success of commercial IPTV.

SECURING REVENUE STREAMS

As a leading conditional access provider, Conax aims to best secure its customers' revenue streams. Conax focuses on ensuring the security necessary to prevent unauthorized consumption and redistribution of premium content distributed by the TV operators' one-way broadcast operations.

ONE CA SYSTEM - SUPPORT FOR BOTH IP AND TRADITIONAL DVB

Providing broadcast TV within an IP environment is the most cost-effective way to distribute content.

Conax IPTV solutions provide:

- Capability to reuse DVB signals
- Power to encapsulate and distribute signals via IP networks

OPERATORS CAN EMPLOY BROADCAST TV TO BUILD A PLATFORM OF CUSTOMERS WHO WILL USE THE MORE ADVANCED SERVICES OFFERED OVER IP THAT ARE CRITICAL FOR DEVELOPING A HEALTHY IPTV OPERATION. CONAX IPTV SOLUTIONS PROVIDE CUSTOMERS WITH THE TOOLS THEY NEED FOR A WORLD CLASS CA SOLUTION.

DVB OVER IP

IP is the most advanced medium, and probably the best solution available for delivering point-to-point services. IPTV is a business opportunity for operators who are controlling networks ready for IP traffic and seamless distribution of broadcast TV.

Conax CAS - open, horizontal, proven and cost effective:

- Conax CAS7 is perfectly suited for broadcast IPTV. Most IPTV operators provide IPTV in broadcast mode where DVB over IP is commonly used
- Conax CAS7 supports operations where "on-demand TV" is delivered point-to-point over IP (typically VOD)
- Conax integrates on-demand services with the existing Conax CA for the level of security necessary for delivery of broadcast TV

Why operators choose DVB scrambling and DVB over IP for IP Television?

- Broadcasters' confidence in the DVB scrambling system simplifies content negotiations
- Single point of content processing
- Employing the same CA system for both DVB and IP infrastructures
- DVB-based STBs are cost effective

HYBRID TV

Hybrid TV in this context means DVB broadcasting coexisting with IP on-demand services and IP for VOD. Choosing Hybrid TV including Conax CA you will:

- Profit on already having the broadcast level of security for on-demand services in place - no need to introduce a second security scheme
- Profit on easy integration of smart card technology for VOD services

THE IP ADVANTAGE

The advantage of using an IP network is utilizing the opportunity that IP offers for improving on-demand services. Today, most on-demand services still run over IP. Hybrid STBs will be made available in many markets where operators can offer on-demand services over IP, regardless of how broadcast TV is provided.

Consolidating networks to broadcast mode for profitability

As broadcast mode becomes essential in all operations for profitability, operators choose a security solution ready to support broadcast distribution. The best and most cost-effective solution is to integrate video-on-demand services, games and other advanced services with the existing security regime (hardware security token; often smart cards). Integration adds only marginal costs to a profitable business case for on-demand services.

CONAX IPTV SOLUTIONS

Conax CAS7 is designed for use in IPTV operations where MPEG Transport Streams (TS) are the main carrier for transmission of the audio/video signal. The TS can carry MPEG2/MPEG4/H.264/AVC compression and encoding in both Standard Format and High Definition Format.

CONAX CAS7 FOR IPTV

Conax CAS7 for IPTV works on MPEG-TS layer both for the scrambling/encryption of the content and the Conax CAS7 conditional access protocol (Entitlement Control Messages and Entitlement Management Messages), based on proven, standardized technology deployed world-wide.

A number of open standardized third-party IP streamers and DVB scramblers are available supporting DVB Simulcrypt. This prevents the Digital TV operator from being locked in by a DRM vendor's proprietary ciphers and encryption format. Using a low cost DVB chipset for descrambling and decoding substantially reduces the price of IPTV STBs.

ADVANCED SERVICES FOR IPTV

CONAX IPTV SOLUTIONS PROVIDE CUSTOMERS WITH THE TOOLS THEY NEED FOR A WORLD CLASS CA SOLUTION

THE CORE OF CONAX CONTENT PROTECTION

The basis for all Conax product offerings is the Conax CAS7 subscription components necessary for securing a pay-TV operation.

For extended digital TV services, optional Conax CAS7 components and associated products can be added:

- **Conax CAS7 On-demand** for On-demand services such as PPV events, VOD and push VOD
- **Conax CAS7 Pairing** for additional security level and protection against STB hijacking
- **Conax CAS7 Messaging** for directly addressing the end-users STBs
- **Conax CAS7 Mobile** for ordering of TV services via mobile phone SMS text messages
- **Conax CAS7 Vouchers** for purchase of access through prepaid solutions, i.e. scratch cards/vouchers
- **Conax CAS7 Tokens** for PPV tokens mode support
- **Conax CAS7 Fingerprinting** for enabling tracing of illegally distributed copies of content
- **Conax CAS7 IPTV** for DVB over IP
- **Conax Data Playout Manager** for management and play-out of any data to STBs
- **Conax PreEncryptor** for encrypting content prior to broadcasting

Head office
Conax AS
Kongens gate 8
P.O. Box 425 Sentrum
NO-0103 Oslo
Norway
Tel: +47 22 40 52 00
Fax: +47 22 41 70 39
info@conax.com

Conax Singapore
Conax Singapore
152 Beach Rd., #28-01
Gateway East,
Singapore 189721
Tel: +65 68279761
Fax: +65 62952567

Conax India
Conax Access Systems
Private Limited,
5th floor, Kaisons Alpha Square,
A – 3, Alpha Commercial Belt,
Sector Alpha - 1, Greater Noida,
Uttar Pradesh 201310
India
Tel: +91 120 467 43 00
Fax: +91 120 467 43 99

Conax USA
Conax USA, Inc.
31102 Via Cristal,
San Juan Capistrano,
CA 92675
USA
Tel: +1 (949)-690-4880

Conax China
Conax China
1102, Guangming Building,
Liangmaqiao Road
Chaoyang District
Beijing 100125
China
Tel: +86 10 6465 6490
Fax: +86 10 6465 6483

Conax Germany
Conax GmbH
Charlottenstrasse 68
10117 Berlin
Germany
Tel: +49 3020 188 332
Fax: +49 3020 188 333

Conax Latin America
Conax Latin America
Rua Fidêncio Ramos, 101 cj-81
Vila Olímpia
São Paulo - SP - CEP: 04551-010
Brazil
Tel: +55 11 3846-1726
Fax: +55 11 3044-1923

Conax Russia
Conax Russia
Akademika Koroleva street,
13, office 5
129515, Moscow, Russia
Cell: +7 903 625 68 13

Conax South Korea
Conax South Korea
#704 Taesung Bldg. 265-6,
Seohyung-dong, Bundang-gu,
Seongnam-si, Gyeonggi-do
Korea 463-824
Tel: +82-31-781-6684/5
Fax : +82-31-781-6604

Conax Canada
Conax Canada
Toronto
Canada
Tel: +1 647 404 9920