

Conditional Access Training

- QUALIFIED TRAINER WITH EXPERIENCE IN CONFIGURATION AND TROUBLESHOOTING
- TAILORED PROGRAMS TO MEET UNIQUE NEEDS
- COMPREHENSIVE COVERAGE OF TOPICS, WITH VALUABLE HANDS-ON LAB EXPERIENCE
- FLEXIBLE ON-SITE AND OFF-SITE TRAINING OPTIONS

EXPERTISE AND TARGETED COURSEWORK TO PREPARE OPERATORS FOR PAY-TV SERVICES

The foundation of a successful pay TV operation lies in having a best-in-class conditional access system (CAS) to protect the operator’s content and having a well-trained team to operate and manage it to the optimum. To help operators build this foundation and continue expanding their knowledge, Irdeto offers CAS training that can be tailored to meet the unique needs of the operator.

Irdeto’s training covers a variety of topics to address different audiences within the operator’s organization who may have varying functional roles and involvement with the Irdeto CAS. Training is conducted in a small classroom setting; either at the operator’s premises or at an Irdeto training center based on the operator’s preference, to ensure that attendees receive maximum value from the session and have sufficient hands-on lab time.

With the help of Irdeto’s professional trainers, operators can quickly prepare for new pay TV operations as well as optimize their current operations by increasing the knowledge levels of their staff in a safe classroom environment.

TAILORED TRAINING

Every organization has different business objectives, operations requirements and fields of expertise, therefore effective training requires a tailored approach to ensure the organization’s needs are properly addressed. Irdeto works with customers to assess their situations and determine the most suitable training methods, course content and program length for their staff. A tailored training is created by designing an agenda that combines various modules to cover topics relevant to the operator’s business models and CA configuration, and typically consists of a three-day foundation program plus supplementary sessions as needed:

KEY BENEFITS

PROVEN EXPERIENCE IN DVB, IP AND MOBILE TV

Irdeto has extensive experience in training operators’ staff to manage and maximize the value of the CAS. Common topics covered in training include:

- Irdeto CAS security and feature overview
- Irdeto CAS head-end installation and configuration for various pay TV services
- Redundancy setup for servers and databases
- Ongoing operations, administration and maintenance (OA&M)

TAILORED PROGRAMS TO MEET UNIQUE NEEDS

To address the operator’s training needs, Irdeto first works with the operator to assess its business models, training objectives and trainee background in order to design the right combination of modules and schedule. Typically a three-day foundation program is recommended for all conditional access (CA) administrators and users in an operator’s organization, with the first day being useful even to non-technical staff or high-level managers as it provides an essential introduction to the features and benefits of the Irdeto CAS. In addition to the foundation program, supplementary sessions are advisable for staff involved in specialized management or administration functions such as OA&M and system redundancy. At the end of the training, Irdeto collects feedback from the customer to ensure that the training objectives have been met to the customer’s satisfaction.

Flexible On-Site and Off-Site Training Options Training can be conducted at either the operator’s facility or an Irdeto training center based on the training objectives and attendee needs. The length and agenda of the course can also be tailored to accommodate different audiences within an operator’s organization.

FOUNDATION PROGRAM

Duration: Three Days

Suitable for all CA administrators and users

Day 1: Introduction to Irdeto Conditional Access System

Topics covered:

- Broadcasting terminology
- DVB transport stream multiplexing
- Conditional access system components and messages (ECM and EMM)
- Irdeto key hierarchy
- Irdeto CAS security and feature overview

Day 2: General System Functionality

Topics covered:

- CAS installation
- Head-end configuration to support pay TV services
- Bandwidth usage management
- Subscriber Management System (SMS) configuration to grant subscriber access rights
- STB and SoftCell integration, smart card versions
- Guided tour of the Irdeto CAS graphical user interface (GUI)
- Redundancy and performance

Day 3: Operator-Licensed Functionality

Topics covered:

Customized content based on the product licenses purchased and the operator's network and services; examples include:

- Pay-per-view service
- Event scheduling, service information (SI) tables for playing out multi-day electronic program guides (EPG), costs, copy protection and conditional access of scheduled events
- STB or CAM deployment with secure chipsets
- FlexiFlash and other software tools for updating smart cards and STB software images over the air
- Latest, or new, release of the Irdeto CAS most relevant to the operator
- IP or mobile TV services

SUPPLEMENTARY SESSIONS

Duration: One Day Each

ADMINISTRATION, OPERATIONS, AND MAINTENANCE (OA &M)

This module covers tasks that need to be executed on a one-time or recurring basis to keep the CAS in optimal operating condition. It introduces tools for monitoring and exploring events and system details, such as EMM bandwidth and DVB protocols as well as troubleshooting methods for pinpointing issues and taking corrective actions. Database (DB) maintenance procedures are also covered in detail, as the database is the main repository for all smart card, entitlement and transport network data.

Topics covered:

- Monitoring and analyzing event logs
- Performance monitoring
- Service access criteria
- Database backup and restore
- Installation and upgrade of Irdeto CAS head-end
- Smart card upload
- Basic troubleshooting
- Irdeto customer support web portal
- Request for support

Optional:

- DB maintenance, including DB size management, migration during a CAS software upgrade and useful SQL queries
- Ethereal analysis
- SMS command analysis
- SNMP

FULL SYSTEM REDUNDANCY (FSR)

This module covers topics related to hardware and software redundancy. For medium-sized to large operators, the Irdeto CAS is typically split into an application and database server and clustered for redundancy, using RAID disk array. This session trains administrators to configure and manage the FSR setup, and to bring servers online and offline for maintenance.

Topics covered:

- Irdeto CAS head-end control service
- System configuration
- Application switch-over
- Database cluster
- SQL cluster resources
- Database switch-over
- RAID disk configuration
- DS3X00 storage solution
- HBA/iSCSI/FC NAS

Optional:

- Dual-machine configuration
- Microsoft iSCSI initiator
- Fiber channel zoning
- Switch configuration
- DS3X00 configuration

DIFFERENCES AFTER CAS MIGRATION, UPGRADES AND/OR SECURITY UPDATES

This module covers feature, security, GUI and/or operational differences after one of the following types of events:

- Migration from a previously supported CAS such as M-Crypt or CryptoWorks to the latest Irdeto CAS
- Software upgrade of the Irdeto CAS
- Security updates