



Simple Content Protection Video Session Support

Cisco cBR Converged Broadband routers provide support for Simple Content Protection (SCP) video encryption licensing, which enables third-party products, such as Digital Transport Adapters (DTA), avail the capability of encrypting video streams compatible with Cisco's SCP conditional access (CA) system.

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Support for SCP Conditional Access System

Cisco cBR Converged Broadband Router supports uDTA-SCP for broadcast (linear) services and thus removes the need for a bulk encryptor.

SCP is a conditional access system. When a Cisco controller system is combined with an Entitlement Control Message (ECM) generator, along with the licensed encryption device, it enables the Cisco conditional access systems to provide protection for various services. These are services such as linear broadcast (Basic, Expanded Basic, Digital Basic, Premium, PPV, and IPPV), switched digital video (SDV), and on-demand content (VoD).

The Cisco Conditional Access technologies that are enabled by this license include PowerKEY and Simple Content Protection. The technologies are enabled in modes compliant with the existing deployed CPE devices that employ those CA technologies.

Prerequisites

The following are the prerequisites for configuring SCP on Cisco cBR routers:

- SCP services are configured in DTACS/EC and sessions are configured on SCP-PCG.
- These multicast session configurations on SCP QAM must be manually configured on the Cisco cBR-8 routers as static table-based sessions.
- The DCM is configured for SCP scrambling along with the ROSA SI server (AC Manager, SCS configurator, and Scrambling control task).

Configure Cisco cBR Routers for SCP

To configure and enable SCP on Cisco cBR Converged Broadband routers, do the following tasks:

- Create a Virtual Carrier Group (VCG) with the QAM channel, which carries the SCP content.
- Create Service Distribution Group (SDG) for SCP.
- Create VCG-SDG bind.

Create SDG and VCG

To create SDG and VCG, use the following commands:

```
service-distribution-group service distribution group name ID
rf-port integrated-cable slot/bay/port
virtual-carrier-group name [id number]
service-type narrowcast
rf-channel start_channel-end_channel tsid start_tsid-end_tsid output-port-number
start_number-end_number
bind-vcg
vcg vcg-name sdg sdg-name
```

Example: Creating SDG and VCG

The following example shows how to create the SDG and the VCG:

```
service-distribution-group sdg1 id 1
rf-port integrated-cable 1/0/0
virtual-carrier-group vcg1 id 1
service-type narrowcast
rf-channel 20-24 tsid 120-124 output-port-number 120-124
bind-vcg
vcg vcg1 sdg sdg1
```

Create a Table-based LED for SCP

To create a table-based LED for SCP, use the following commands:

```
logical-edge-device name id ID
protocol table-based
virtual-edge-input-ip ip-address input-port-number port-number
vcg vcg-name
active
```

Example: Creating a Table-based LED for SCP

The following example shows how to create a table-based LED:

```
logical-edge-device led1 id 1
protocol table-based
virtual-edge-input-ip 198.51.100.1 input-port-number 1
vcg vcg1
active
```

Configure Table-based and PSIP Sessions

Configure table-based sessions with the same output service ID as the one configured in DTACS (service ID) or DCM output service ID (for example, 209). You should also configure PSIP session that carries SI data required for the uDTA box.

```
cable video
table-based
vcg vcg-name
rf-channel ID
session sess-name group <IP address> processing-type remap start-program n
session SESS_PSIP group <IP address> processing-type passthru psip
```

Example: Configuring Table-based and PSIP Sessions

The following example shows how to configure table-based session and PSIP session:

```
cable video
table-based
vcg vcg1
rf-channel 21
session SESS_SCP group 203.0.113.1 processing-type remap start-program 209
session SESS_PSIP group 203.0.113.32 processing-type passthru psip
```

Feature Information for SCP Video Session Support



Note The following table lists the software release in which a given feature is introduced. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Table 1: Feature Information for PMV Support for Table-Based Videos

Feature Name	Releases	Feature Information
SCP Video Session Support	Cisco IOS XE Fuji 16.9.1a	This feature was introduced on the Cisco cBR Series Converged Broadband Router.

