



## Provision Optical Service Channel Cards

This chapter describes the Optical Service Channel cards used in Cisco NCS 2000 SVO and its related tasks.

This table lists the package support for the OSC-CSM card.

Card	SSON Package (12.xx-xxxx-xx.xx-S-SPA)	MSTP Package (12.xx-xxxx-xx.xx-L-SPA)
OSC-CSM		✓

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## OSC-CSM Card

*Table 1: Feature History*

Feature Name	Release Information	Description
OSC-CSM Card	Cisco NCS 2000 Release 12.2	The OSC-Combiner or Splitter Module (OSC-CSM) card provides access to the OSC received signal, while expressing the remaining wavelengths and its transmitted signal is optically coupled into the fiber together with the transmitted wavelengths, in an unamplified node. The OSC-CSM card is used in nodes without a booster amplifier for OSC-CSM operation. The optical interface of the card provides extended optical reach to meet the node-to-node distances that are found in typical metro and regional networks. The OSC-CSM card can be installed in NCS 2006 and NCS 2015 chassis.

The OSC-CSM receives the optical signal and separates the optical service channel from the optical payload. The card is supported only on the Multiservice Transport Platforms (MSTP) package. The optical interfaces of the card support threshold, performance monitoring, and safety parameters. The OSC-CSM can be installed in Slots 2–7 of M6 shelf. The card supports OSC-RX and OSC-TX as internal interfaces.

The OSC-CSM supports the following features:

- Optical combiner and separator module for multiplexing and demultiplexing the optical service channel to or from the wavelength division multiplexing (WDM) signal
- OC-3/STM-1 formatted OSC
- Optical safety: Signal loss detection and alarming, fast transmitted power shut down by an optical 1x1 switch
- Optical safety remote interlock (OSRI), a feature capable of shutting down the optical output power
- Automatic laser shutdown (ALS), a safety mechanism used in the event of a fiber cut.

You can provision OSC only on OC-3/STM-1 UDC at the node configuration level. To manage provisioning of the OSC-CSM card, see [Manage OSC](#).

For more information, such as the block diagrams and the card specifications, see the [OSC-CSM card](#).

## Provision Interface Parameters

Use this task to change the optical interface parameters of OSC-CSM cards.

### Before you begin

- [Log into the SVO Web Interface](#)
- [Open the Card View](#)

### Procedure

**Step 1** Click the **Provisioning** > **Interface** tabs.

**Step 2** Modify the settings described in the following table. The provisionable parameters are listed in the Options column in the table.

**Table 2: Interface Options**

Parameter	Description	Options
Port	(Display only) Displays the port number, port type, and direction (RX or TX)	All the RX and TX ports

Parameter	Description	Options
Admin State	Sets the administrative state of the port.	From the drop-down list, choose one of the following: <ul style="list-style-type: none"> <li>• Unlocked (ETSI)/ IS (ANSI)</li> <li>• Locked, disabled (ETSI)/OOS, DSBLD (ANSI)</li> <li>• Locked, maintenance (ETSI)/OOS, MT (ANSI)</li> <li>• Unlocked, automaticInService (ETSI)/ IS, AINS (ANSI)</li> </ul>
Service State	(Display only) Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State.	<ul style="list-style-type: none"> <li>• IS-NR/ Unlocked-enabled</li> <li>• OOS-AU,AINS/ Unlocked-disabled, automaticInService</li> <li>• OOS-MA,DSBLD/ Locked-enabled,disabled</li> <li>• OOS-MA,MT/ Locked-enabled,maintenance</li> </ul>
Optical Power (dBm)	(Display only) Displays the optical power for each port.	—
OSC Power (dBm)	(Display only) Displays the service-channel power level for each port.	—
Optical PSD Setpoint (dBm/GHz)	Target output Power Spectral Density requested by the user.	-50 to 10
Attenuator Value (dB)	Sets the attenuator value.	—
Optical Power Threshold Low (dBm)	Fail low threshold used to detect the LOS alarm on the port.	—
OSC Power Threshold Low (dBm)	(Display only) Displays the OSC power level for each port.	—

Parameter	Description	Options
Current Power Degrad High (dBm)	(Display only) Shows the current value of the optical power degrade high threshold configured in the card.  Power Degrad High refers to the Signal Output Power value of the port and is automatically calculated by the control card.	—
Current Power Degrad Low (dBm)	(Display only) Shows the current value of the optical power degrade low threshold configured in the card.  Power Degrad Low refers to the Signal Output Power value of the port and is automatically calculated by the control card.	—
Current Power Failure Low (dBm)	(Display only) Shows the optical power failure low threshold for the port.	—
VOA Attenuation Setpoint (dB)	Sets the VOA attenuation value	0 to 25
VOA Attenuation Offset (dB)	Sets the offset with respect to the set setpoint	—
VOA Current Attenuation (dB)	(Display only) Shows the VOA current attenuation	—

**Step 3** Click **Apply** to save the changes.

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