New and Changed Information

This chapter lists the new and changed information for each release.

- New and Changed Information, on page 1

New and Changed Information

See Data Models Configuration Guide for Cisco NCS 1004 and Telemetry Configuration Guide for Cisco NCS 1000 Series to refer the other configuration guides of NCS 1004.

This table summarizes new and changed information for Release 7.2.0, and lists where the features are documented.

Table 1: New and Changed Features - R7.2.0

Feature	Description	Where Documented
Support for the NCS1K4-1.2TL-K9 L-Band Line Card	The NCS1K4-1.2TL-K9 (or 800 Gbps) L-band line card has 12 QSFP-28 based clients and two DWDM trunk ports. **Note** There is no support for L1 encryption, GMPLS, remote management using GCC, and smart licensing. The features of the 1.2TL line card are: • The card provides up to eight 100G or OTU4 client ports. • The client ports map to two trunk ports that operate on any rate between 200G and 400G with 50G increments. • The modulation format can be controlled between QPSK, 8 QAM, and 16 QAM. • The baud rate can be controlled between 31.5Gbd/s and 72Gbd/s. • The frequency range is 186.10 to 190.85 THz with a default value of 188.50 THz. Only 100 Mhz spacing is supported. • Hybrids between modulation formats can be configured to achieve 1/128 bits/symbol of granularity. • Forward Error Correction (FEC) is 27% overhead.	*Configuration Guide for Cisco NCS 1004, IOS XR Release 7.2.0*

This table summarizes new and changed information for configuration guide for Release 7.1.1, and lists where the features are documented.

Table 2: New and Changed Features - R7.1.1

Feature	Description	Where Documented
Fault Profiles	The Fault Profiling feature enables the user to create a unique fault profile for faults on the system or the line card. Each fault profile can contain one or more faults with user-defined severities.	Fault Profiles
Air Filter	The air filter removes dust from the air drawn into the chassisby the fan units. If the air filters are damaged,dirty, or clogged with dust, they must be replaced with a new air filter. Cisco NCS 1004 air filter has the following components: • Two air filter side brackets • One air filter frame • One air filter	Air Filter
Sub 50G configuration	The sub 50G or coupled mode can be configured on the 1.2T card only in the muxponder mode. The supported trunk data rates are 150G, 250G, 350G, 450G, and 550G.	Sub 50G Configuration
Remote Node Management Using GCC	The remote node management feature allows the user to remotely manage the NCS 1004 nodes over the General Communication Channel (GCC) interface. The remote nodes that are not connected to the management network over the Ethernet interface can be managed over the GCC interface. This feature supports remote management of up to eight nodes in hub topology and up to two nodes in linear topology. GCC2 and GCC0 are supported in NCS 1004.	Remote Node Management Using GCC
Regeneration Mode	The 1.2T card can be configured in Regeneration (regen) mode. In regen mode, only trunk optics Controller and CoherentDSP controllers are created.	Regeneration Mode

Feature	Description	Where Documented
PRBS	Pseudo Random Binary Sequence (PRBS) feature enables you to perform data integrity checks between the NCS1004 trunk links without enabling the actual client traffic.	PRBS
Ethernet Statistics	The ethernet statistics are displayed for the current and historical performance monitoring parameters of ethernet controller in 30 second intervals.	Configuring PM Parameters
LLDP on Management Port	LLDP support on management interface feature requires a system to form LLDP neighborship over the system management interface, through which it advertises and learns LLDP neighbor information. This information about neighbors can be used to learn about the neighbors and in turn the topology of the devices for Operations, Administration, and Maintenance (OAM) purposes.	Link Layer Discovery Protocol (LLDP) Support on Management Interface
Open Config Enhancements	**CLI Over NETCONF** A new yang model, Cisco-IOS-XR-cli-cfg.yang is defined, which consists of a leaf node called 'cli'. The leaf node can be used to either send or receive the CLI configurations. **OpenConfig Terminal Device** This is a terminal optics device model for managing the terminal systems (client and line side) in a DWDM transport network. **Ethernet Statistics Addition** The user can configure and view the performance monitoring parameters for the Optics, Ethernet, and coherent DSP controllers.	Terminal Device Model