

# Cisco ONS 15454 SDH Multiservice Provisioning Platform Release 3.4.0

Cisco Systems announces Release 3.4.0 for the Cisco ONS 15454 SDH, (refer to Figure 1) based on the industry-leading Cisco ONS 15454 Multiservice Provisioning Platform (MSPP). Release 3.4.0 focuses on delivering greater revenue-generating service densities, increasing network architecture/topology flexibility, and reducing operational costs for service providers and enterprise users. The new features and functionality include the following:

Figure 1  
 Cisco ONS 15454 SDH MSPP



## Release 3.4.0 Hardware Features

- **High-density STM-4 intra-office card**—The high-density STM-4 single-slot card features four ITU G.957-compliant STM-4 interfaces at 1310 nm with each delivering 622.08 Mbps of carrier-class service to bandwidth-intensive service exchanges that require a scalable, multiservice scalable solution. Utilizing the high-density STM-4 cards, users can now drop 10 Gb of bandwidth from a single Cisco ONS 15454 SDH chassis. The four-port STM-4 card expands flexibility in network architecture, advances footprint efficiency, and increases service density by a factor of four.
- **Alarm Interconnect Controller Card, (AIC-I)**—The AIC-I provides three main capabilities:
  - Environmental alarm collection—Up to 20 environmental alarms are supported on the Cisco ONS 15454 SDH shelf assembly.
  - Orderwire—Shelf-to-shelf communication over the SDH overhead channels is provided using the local and express orderwire bytes. The Cisco ONS 15454 SDH system supports selective dialing, integrated buzzer and visual LED for simple use.
  - User data channel access—The AIC-I card allows access to SDH overhead bytes, providing four point-to-point data circuits to satisfy a user's internal networking needs.

This card is an optional component and is not required for system operation.

## Release 3.4.0 Software Features

- **Protection Channel Access (PCA)**—PCA enables the service providers to use the protection bandwidth (ITU G.841) of a two- or four-fiber Multiplex Section-Shared Protection Ring (MS-SPR) network for working traffic. This capability, especially when coupled with data protocols, enables MS-SPR rings to carry more services, lowering the service provider's cost per bit and increasing its profitability and return on investment (ROI). Traditionally, the services offered by the service provider on the PCA bandwidth are data services, which are protected at a higher Open System Interconnection (OSI) layer, or are designed to provide a low-cost backup circuit.
- **Unified Control Plane (UCP)**—The UCP is an evolving industry control plane standard to enable a multivendor, interoperable control protocol that provides circuit and lightpath provisioning among network elements such as add drop multiplexers (ADMs), cross-connects, optical switches, routers, and ATM switches.

The initial release of the UCP initiative will support the UCP UNI-C feature, as outlined by the Optical Internetworking Forum (OIF) Optical-UNI 1.0 specification. The implementation will extend the simple, fast, and easy provisioning of the Cisco ONS 15454 to include cooperation with other third-party, O-UNI-compliant core optical transport products. The features of the UCP UNI-C will include addressing, signaling, transport configurations, automated neighbor discovery, and service discovery. This UNI-C capability on the Cisco ONS 15454 allows signaled circuit setup through an OIF O-UNI-compliant core optical transport network.

- **Network Element Default Override**—This feature simplifies day-to-day system provisioning by enabling user system defaults to be uploaded to a network element.
- **Greater than 16-node MS-SPR support**—This feature increases the number of MS-SPR nodes supported in a ring from 16 to 24. This exceeds the requirement set forth in ITU G.841 for supporting 16 nodes in a MS-SPR configuration.
- **Two-by-two-fiber MS-SPR support**—This feature allows a single Cisco ONS 15454 SDH node to support two 2-fiber MS-SPR rings. This feature will allow users to deploy Cisco ONS 15454 SDH nodes in applications that are traditionally supported by SDH digital cross-connects (DXCs) or multiple SDH ADMs.

## Compatibility Information

The following table outlines compatibility.

Table 1

Compatibility Matrix

Product	Requires
Release 3.4.0 Software	TCC-I Card
15454E-S4.1-4	R3.4.0 software or higher
15454E-AIC-I	R3.4.0 software or higher

For additional configuration and ordering information regarding Release 3.4.0, please contact your Cisco account representative or system engineer.

## Availability

Orderability for Release 3.4.0 is targeted for September 2002, with first customer shipment (FCS) planned within 30 days.

## Ordering Information

The Cisco ONS 15454 SDH Release 3.4.0 hardware and software products may be ordered from your sales representative or through the Cisco Networking Products Marketplace online order entry tool at <http://www.cisco.com/en/US/ordering>. The new product names and descriptions are provided in Table 2. To access current Common Language Equipment Identifier (CLEI) code information for all Cisco products, refer to the Cisco online CLEI code tool at <http://tools.cisco.com/emco/pcnclei/prsc>.

Table 2

Product Part Number and Descriptions

Product name	Description
15454E-S4.1-4	4port STM-4 SH 1310nm
15454E-AIC-I	Alarm Interconnect Card, ANSI/ETSI Support
15454E-R3.4.0SW/CD	Release 3.4.0 Feature Package, Cisco ONS 15454 SDH, CD-ROM
15454E-LIC-UPG	Upgrade License Package, Cisco ONS 15454 SDH, one required for each deployed network element being upgraded from a previous feature release; includes system software on CD-ROM, select appropriate software release
15454E-LIC-R3.4.0	Upgrade License, Release 3.4.0, Cisco ONS 15454 SDH, option in 15454E-LIC-UPG product name; one required for each deployed network element being upgraded from a previous feature release
SF15454E-R3.4.0	Release 3.4.0 Software, Cisco ONS 15454 SDH, preloaded on TCC-I card
15454E-DOC3.4.0PP	Release 3.4.0 documentation, Cisco ONS 15454 SDH, paper
15454E-DOC3.4.0CD	Release 3.4.0 documentation, Cisco ONS 15454 SDH, CD-ROM

Note: The systems and products described in this document are subject to New Product Hold (NPH), a status assigned to all new items that have not yet transacted through the Cisco manufacturing system and may not be available. Thus, product delivery dates can vary past the quoted FCS date.

For more information on the Cisco ONS 15454 SDH, contact your Cisco account representative, or visit

[http://www.cisco.com/en/US/products/hw/optical/ps2006/prod\\_literature.html](http://www.cisco.com/en/US/products/hw/optical/ps2006/prod_literature.html)



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