



C4® CMTS

System Release 7.2



Features

- DOCSIS® 3.0 Upstream Channel Bonding, bonding up to four upstream channels
- Advanced CM configuration file verification to prevent theft of service
- Intermediate Station to Intermediate Station (IS-IS) and Border Gateway Protocol (BGPv4) support
- Secure Shell v2 (SSHv2) for secure, encrypted CLI access to the C4® CMTS
- Enhanced Chassis Scaling with support for up to 40,000 devices
- Very High Speed Data (VHSD) services with DOCSIS 3.0 Downstream & Upstream channel bonding and full DOCSIS 2.0 upstream channel speeds

Release 7.2 delivers the latest set of major feature additions for the DOCSIS® 3.0 ARRIS C4® CMTS, an industry-leading carrier-class wideband platform. The C4 CMTS allows an operator to cost effectively deploy DOCSIS, PacketCable™, DSG/ADSG, and PacketCable Multimedia (PCMM) services. Its 99.999% system availability, unsurpassed in the industry, increases subscriber satisfaction and retention via a self-healing design that maintains system services without interruption. Release 7.2 provides another set of business-and-operations-enhancing features, building upon the DOCSIS 3.0 foundation established by earlier 7.x releases. Release 7.2 includes DOCSIS 3.0 upstream channel bonding, IS-IS and BGP routing protocols, secure shell v2 for encrypted CLI access, mixed annex support, modem steering enhancements, and increases in chassis scaling. All of these features are supported with high availability, at maximum subscriber density, and with independent configuration of upstream and downstream channels using dedicated downstream (16D) and upstream (12U) cable access modules (CAMs). The C4 CMTS is often selected by operators desiring a highly available, highly dense, and highly stable solution for large-scale deployments of converged services.

The ARRIS C4 CMTS utilizes a 21 slot chassis with a mid-plane based architecture designed for continuous system operation. This unique architecture allows the ARRIS C4 CMTS to provide carrier-grade integrated Layer 3 edge routing, RF sparing, and advanced CMTS functionality combined in a single chassis. Five types of modules are available:

- System Control Module (SCM)
- Router Control Module (RCM)
- 16D Cable Access Module (16D CAM)
- 12U Cable Access Module (12U CAM)
- 2Dx12U Cable Access Module (2Dx12U CAM)

Upstream Channel Bonding

The C4 CMTS is capable of bonding up to four upstream channels compliant with the DOCSIS 3.0 channel bonding specifications. These channels can use any valid DOCSIS configuration and are not required to be contiguous in spectrum. Furthermore, this release supports upstream channel bonding across all subscribers on the chassis using currently deployed hardware.

Advanced CM Configuration File Verification

Common theft-of-service attacks involve cable modems being provided configuration information that is different from the DHCP-specified configuration file. This Advanced CM Configuration File Verification feature assures that the cable modem gets its configuration from the correct file on the correct server, and that there are no modifications to the configuration before completing modem registration.

IS-IS & BGP Routing

The C4 CMTS provides the Intermediate Station to Intermediate Station (IS-IS) routing protocol for IPv4. IS-IS is an interior gateway protocol as an option to the already provided OSPF and RIP protocols supported in the C4 CMTS. Border Gateway Protocol (BGP) is supported as an exterior gateway protocol in the C4 CMTS. BGPv4 is primarily used to link separate network domains within an operator's network, and may also be used to communicate with other networks.

Secure Shell v2

Secure Shell v2 (SSHv2) provides for secure, encrypted CLI access to the C4 CMTS for configuration and management. Legacy unsecured Telnet to the C4 CMTS is still available but can be disabled in order to require access via SSHv2.

Chassis Scaling

The C4 CMTS with Release 7.2 will support a total device count of up to 40,000 devices. The scaling enhancement requires the use of the System Control Module II Enhanced Memory (SCM II EM). Current SCM II hardware will support up to 24,000 devices.

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Find more information about C4® CMTS Software and other C4® products.

- Product Specifications—C4 Cable Modem Termination Software Technical Specifications (Publication Code: C4_CMTS_v72_TS.pdf)

Customer Care

Contact Customer Care for product information and sales

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