

Subscriber Networks

System Release 4.2

Description

System Release (SR) 4.2 is a minor release to SR 4.0 that enhances the functionality of the Digital Broadband Delivery System (DBDS). SR 4.2 includes many great features and enhancements that were implemented at the request of our customers.

Features

- **Switched Digital Video (SDV) Option Increases Bandwidth, Allows for High-Value Services** — SDV is an optional feature that allows service providers to recapture potentially wasted access network bandwidth by delivering selected services only where and when subscribers actively request the services. By increasing effective bandwidth, SDV allows for the expansion of high-value services such as high-definition TV (HDTV), standard-definition TV (SDTV), video-on-demand (VOD), Voice over Internet Protocol (VoIP), and high-speed data (HSD). Allocated bandwidth is driven by viewership and not by the number of programs offered.
- **Netcrypt Bulk Encryptor Optional Support Boosts Encryption Capabilities** — The Netcrypt™ Bulk Encryptor is a powerful encryption engine designed for use in Gigabit Ethernet (GbE) transport networks. With a maximum throughput of 4 Gbps, the Netcrypt Bulk Encryptor provides the technology to multicast both input and output using Internet Group Management Protocol, Version 2 (IGMPv2).
- **Staging Bridges Reduce DNCS Load when Staging Set-Tops** — By dedicating a specific bridge (or hub) for staging, sites can eliminate the need to broadcast staging communications—entitlement management message (EMM) distribution—throughout the entire network. As a result, staging bridges reduce Digital Network Control System (DNCS) load when staging set-tops.
- **Support for Multiflow/Multicast Provides More Services, Programming** — Implemented to support the advanced DOCSIS® Set-top Gateway (ADSG) standard, Multiflow/Multicast allows set-tops to “discover” for themselves where the out-of-band (OOB) data flows are located and enables you to harness the power of DOCSIS to provide subscribers additional services and programming.
- **Display Data on DNCS Processes with the Performance Monitoring Tool** — A Performance Monitoring tool has been added to the DNCS Administrative Console. This tool allows system operators to display data collected from DNCS processes in a graphical format for easy analysis. This tool also includes data about set-top and VOD performance.
- **Increase Processing Capability with Solaris 10 Support** — With support for Solaris 10, the new operating system from Sun Microsystems, you have access to a number of innovative and improved utilities, such as Dynamic Tracing (DTrace), Solaris Containers, Predictive Self-Healing, and improved networking (new TCP/IP stack).
- **Support for Sun Fire V890** — The Sun Fire V890, powered by the new UltraSPARC IV+ processor delivers over two times the performance of UltraSPARC IV servers (Sun Fire V880) in the same footprint. It scales up to eight UltraSPARC IV+ chip multithreading (CMT) processors, executing 16 concurrent threads, and delivers up to 128 GB of memory. The Sun Fire V890 server is optimized for the most demanding departmental and enterprise applications.

System Release 4.2

- **Enhanced Channel Maps Offer More Flexibility in Assigning Channel Maps —** The Enhanced Channel Maps feature offers greater flexibility in assigning channel maps by allowing system operators to create channel maps that are not associated with hubs. For example, system operators can use this feature to add a channel that is visible to all HD set-tops, but does not appear on SD set-tops.
- **Dynamically Configure Daylight Saving Time —** To comply with the Energy Policy Act of 2005, a new Daylight Saving Time tool has been added to the DNCS Administrative Console. This tool allows system operators to dynamically configure set-tops at the hub level so they conform to local daylight saving time.
- **Dual GbE GQAM Increases System Reliability —** The new Dual GbE QAM Modulator (GQAM) includes support for dual GbE port dejitter with automatic redundant switching between ports. This redundancy increases system reliability by providing an efficient fail-over method with minimal service interruption.
- **Copy Protection MMI Screen Supports Manual Authorization of One-Way and Two-Way CableCARD Hosts —** Support for the Copy Protection Man Machine Interface (MMI) screen allows one-way and two-way multi-stream CableCARD™ hosts to display this screen when a CableCARD module is inserted into a host device. The screen provides information useful in setting the service level of an OpenCable™ host in the billing system and prompts subscribers to telephone for CableCARD authorization. During authorization, the CableCARD module is bound to the host. Once bound, the host can use the copy protection features for which the subscriber is authorized.
- **Improved QPSK Modulator Software Reduces Set-Top Sign-On Time —** Enhancements to the D9482 QPSK Modulator software subsystem save relevant set-top data in random access memory (RAM). As a result, following short reboots, the QPSK uses the stored data to refurbish the set-top database, reducing the time required for the sign-on process to complete.
- **Redesigned DNCS Administrative Console Makes Element Provisioning Easier —** The DNCS Element Provisioning tab has now been split into the following tabs: the Network Element Provisioning tab and the Home Element Provisioning tab. The Network Element Provisioning tab provides access to tools for provisioning and configuring all network hardware and software elements (devices). The Home Element Provisioning tab provides access to tools for provisioning and configuring all hardware and software elements that provide services to subscribers' homes.

System Release 4.2



Ordering Information

Contact your Sales Representative for product availability in your area.

New Sale Software and Documentation Kits	Part Number
SR 4.2 OCAP, New System Sale	4014053
Upgrade Software and Documentation Kits	Part Number
SR 4.2 Upgrade from SR 3.X	4017837
Upgrade Support from SciCare™ Broadband Services	730208NA
SR 4.2 Upgrade from SR 2.x	4014054
Upgrade Support from SciCare Broadband Services	730208NA
Standalone Products	Part Number
Enhanced Interactive Session Performance Version1.0	4000397
Session-Based Encryption Version 1.0	4000396
EAS Filtering Version 1.0	4000392
CA Overlay™ 1.1 Package	4017869
OCAP Object Carousel Platform, Software and License	4013823
Regional Control System 1.0 ¹	4009933
Remote Network Control Server 2.0	4017840
Switched Digital Manager 1.0	4017822
QPSK Modulator Version E14 and QPSK Demodulator Version A62	4014792
QAM Modulator Version 2.5.1	4016662
MQAM Modulator Version 2.6.10	4016549
GQAM Modulator Version 4.0.6	4016551

¹Prices for RCS installation must be determined by site, based on configuration.



Scientific Atlanta is a registered trademark of Scientific-Atlanta, Inc.
Netcrypt, Overlay, and SciCare are trademarks of Scientific-Atlanta, Inc.
DOCSIS is a registered trademark of Cable Television Laboratories.
CableCARD and OpenCable are trademarks of Cable Television Laboratories.
Cisco, Cisco Systems, and the Cisco Systems logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries.
Specifications and product availability are subject to change without notice.
© 2007 Scientific-Atlanta, Inc. All rights reserved.

Scientific-Atlanta, Inc.
1-800-722-2009 or 770-236-6900
www.scientificatlanta.com

Part Number 7011178 Rev A
January 2007