CISCO™

DTACS 1.2 Release Notes

Overview

Introduction

These release notes describe the Digital Transport Adapter Control System (DTACS) version 1.2 software release. The DTACS controls subscriber DTA boxes that convert digital signals to analog for analog TVs. The DTACS is installed adjacent to the DNCS (Digital Network Control System) and provides provisioning of basic and extended services, code downloads, package support, EAS, and AMMs for DTA authorization.

These release notes contain the following information:

- New feature descriptions

- Media and software versions for this release

- Descriptions of implemented and open CRs (Change Requests)

- General information on contacting Cisco® Services

Purpose

The purpose of this release is to distribute new features, feature enhancements and software fixes for DTACS 1.2.

Scope

These release notes provide an executive overview of DTACS 1.2.

Audience

These release notes are for sales and program managers, customer verification labs personnel, and system operators.

Online Help

DTACS 1.2 has Online Help, which can be accessed at the DTACS user interface. A PC version, which can be viewed separately from the DTACS application is also available (see *DTACS 1.2.0.5 Online Help (PC)* (part number 4036706).

Document Version

This is the second formal release of this document.

In This Document

New Features

New features for this release are described in this section.

VCT_ID Management

VTC ID Management is an enhancement of package management in DTACS 1.2 that lets operators map any VCT to multiple package combinations. The VCT_ID is also used for DTA authorization.

For configuration instructions, see *VCT Provisioning* in the Online Help.

Notes:

- The DTACS will not allow duplicate package combinations

- When sources are deleted from the DNCS, channel maps on the DTACS must be updated with the new source information. This requires database synchronization. For this reason, operators should be required to synchronize the DTACS database after making changes to sources on the DNCS.

BSG Management

DTACS 1.2 lets operators configure BSGs (Broadcast Service Groups) to localize QAMs. A BSG is a group of QAM channels that service a subset of the DTA device population. A QAM channel cannot be associated with more than one BSG. All QAM channels within a BSG illuminate a single RF plant.

For configuration instructions, see *BSG Provisioning* in the Online Help.

Notes:

- BSGs are analogous to hubs on the DNCS

- The DTACS leverages channel maps created on the DNCS

Plant Split/Merge Operation

DTACS 1.2 provides the Universal Controller Location ID option, which when selected, activates a plant split/merge mode. In this mode, the Location ID is set to zero for all site announcement messages, while configuration messages continue to be sent with the configured Location ID.

For configuration instructions, see *System Configuration* in the Online Help.

User-Defined PID Routes

The DTACS creates PID (Packet Identifier) routes for AMM (Authorization Management Message) and SI (System Information) streams automatically. However, when sourcing the PSIP/EAS from upstream, the DTACS needs information on the multicast source of the PSIP/EAS aggregate and the EIT0-3 multicast streams. DTACS 1.2 gives operators the ability to configure multicast addresses for these streams. The DTACS will automatically create the PID routes for these data sources on the QAM carriers carrying DTA content.

For configuration instructions, see *PID Route Provisioning* in the Online Help.

Site Requirements

This section provides information to help you prepare for the upgrade to DTACS 1.2. Please read this entire section before you upgrade.

Upgrade Logistics

Introduction

This section contains information that can help system operators plan an upgrade to DTACS 1.2.

Time to Complete

The entire upgrade to DTACS 1.2 must be completed within a single maintenance window that usually starts around midnight. A few pre-upgrade procedures, consisting mainly of system checks, backups, and various operations upon the metadevices of the DNCS, can be completed *before* the maintenance window begins.

Cisco engineers have determined that a typical site can be upgraded within one maintenance window. See *Scheduling Requirements* (on page 6) for additional details.

Supported Upgrade Path

Note these important upgrade requirements:

- To perform the software upgrade, the DTACS must currently be operating DTACS 1.1 or later.

- The upgrade software is on DVD. For upgrade instructions, refer to the *DTACS 1.2 Installation and Operation Guide* (part number 4036705). Rollback procedures and software are also provided in the event that the upgrade is unsuccessful.

- Some tasks must be performed on the DNCS (Digital Network Control System). Refer to the *DTACS 1.2 Installation and Operation Guide* (part number 4036705) for details.

System Performance Impact

Interactive services will not be available during the maintenance window.

DNCS and Application Server Hardware Platforms

Introduction

This section describes the hardware configurations that are supported by DTACS 1.2.

DNCS Hardware Configurations

Ensure your site meets the following DTACS hardware requirements before upgrading to DTACS 1.2. The following table lists the minimum requirements for the DTACS hardware platforms that are supported by DTACS 1.2.

DTACS Server Platform	Hard Drive Configuration	Memory	Processor
Sun Netra T5440	▪ 4 x 146 GB	▪ 32 GB min.	▪ 2 x UltraSPARC T2 1.2 GHz 8 core
Sun Netra T5220	▪ 2 x 146 GB	▪ 8 GB min.	▪ 1 x UltraSPARC T2 1.2 GHz 4 core

Scheduling Requirements

With the live upgrade, your site only needs to be down for 2 to 3 hours during the entire upgrade process. Most of the upgrade procedures have no system impact. The pre-install and pre-upgrade steps can be performed at any time of day. However, the actual upgrade process normally takes place during a maintenance window beginning at midnight. The following table provides a breakdown of each upgrade process.

Process	Length of Time	Activity
Pre-install	1-3 hours	Activities are performed by Cisco Services, including checking the overall health of the system. These activities do not impact the system.
Pre-upgrade	3-4 hours	Backing up the system: ▪ Back up the DTACS components ▪ Back up the DNCS and Application Server files ▪ Complete system checks These activities do not impact the system.

Process	Length of Time	Activity
Upgrade	6-8 hours total; 2-3 of these hours require system outage **Note:** Actual time may vary based on the number of devices being upgraded.	Upgrade the DBDS network: ■ Back up the DNCS database ■ Install the DNCS and Application Server software ■ Determine which optional features (licensed or unlicensed) need to be enabled as a result of this upgrade ■ Install and download the component software (QAM, MQAM, GENERIC QAM, and QPSK modulator) ■ Reboot the hardware ■ Complete functional checks QPSK modulator upgrades and some QAM and MQAM upgrades can be completed with little or no subscriber impact. However, 2-3 hours of the upgrade require system outage.
Post-Upgrade	3-4 hours	Back up the system: ■ Back up the file system ■ Back up the DNCS database These activities do not impact the system.

Software Configuration

Introduction

This section lists the software versions in each media kit supplied with DTACS 1.2.

Antecedents

This release succeeds and carries forward all of the enhancements, features, and improvements of previous system releases and related service packs.

Software Versions

The following tables list the contents of the DTACS 1.2 DVD and the DTACS 1.2 Patch CD. The software components will be loaded onto the DTACS server during the upgrade.

Components	Version Number
DVD	
DTACS DVD	1.2.0.4
Application Software	
DTACS Application (SAIdtacs)	d1.2.0.7
Support Software	
DTACS Online Help	1.2.0.3
Platform Software	
Informix	11.10FC2W2
Solaris	10 5/08
Solaris Patches	4.5.0.3
DTACS Platform (dtacsplat)	1.0.0.5
SAITools	4.2.1.30
SAIScpUpd	1.0.0.0
Backup and Restore	6.0.28

Components	Version Number
CD	
DTACS 1.2 Patch CD	1.2.0.7p3
Application Software	
DTACS Application	1.2.0.7p3

Implemented and Open CRs

This section contains information on implemented and open CRs for DTACS 1.2.

Implemented CRs

This section provides a list of CRs found in previous DTACS releases that have been implemented in software for DTACS 1.2. CRs are indexed by ID number in ascending order.

CR ID	Title
98903-05	dtacsStart failed
100294-02	dtacsNeMgr cored in 1.0.0.5p1
103176-02	Script for adding vendor and hardware ID to DTACS is needed
103682	dtacsInitd out disk usage grows about 100M a day
103945 (HPQC15451)	CVT packet ID is shown in decimal but DTA is in hex
103947 (HPQC15453)	Vendor and hardware version IDs are in different units on different screens
104717-02	dncsDbData unload fails table length exceeded
105187-01 (HPQC15869, 15071, 2243)	DTACS christmas tree always selects the top process after action
105209 (HPQC15905)	DTACS CVT Management WUI has a query function with no options
105448-01	Image associations are getting deleted when deleting vendor/HW ID association
105510 (HPQC19772)	DTA deactivation fails intermittently when connect messages are repeated
105960 (HPQC20182)	dtacsResMon does not start
106166-02	DTACS cronjob entries for manage_dtacsLog and newdtacsLog need correcting
106224	dtacsIpStreamer should not change state on IP stream changes
106230-02	DTACS: Make the CDS indexes match with EIA channel line up
106337 HPQC15183)	DTACS support in Announce Message for location ID of 0
106506-02 (HPQC18805	DTACS - Datapump dumps core

CR ID	Title
106560	SAIdtacs package install modifies /etc/hosts
107270	DTACS Online Help call on main page needs to open in new window
107442-02 (HPQC19645)	DTACS stops processing after "setPin"
107571 (HPQC20005)	A DTA MAC address can be added multiple times to the DTACS system without errors
107721-01 (HPQC19819)	DTACS does not create a list of encoded images upon startup
107771 (HPQC20260)	Cannot remove package from VCT
107827-01 (HPQC19171)	DTACS -- VCTs toggle with hidden Source ID
108464	DTACS: Database layout is changing on 5440 when upgrading to d1.1.0.4
108472	DTACS: Incorrect date on several log files
108655-01	Don't generate CAT/PidRoutes for Non-DTA sources on TSIDS in BSGs
108667-01	DTACS neMgr not closing DB connections when no longer in use.
108927-01 HPQC21628	In Edit VCT, able to create the duplicate package sets.
108986-01	DTACS: IP Streamer failed to respond cvtManager's RPC call
108991-01	Support DTACS user-defined PID Route Source changes in the Web UI
109114-01 HPQC21529	DTACS BSG WUI Available Port screen is not wide enough
109121-01 HPQC21528	DTACS BSG screen displays the multicast address instead of the port number
109191-01 HPQC21535	DTACS --- Upgrade from 1.1.0.4p1 to 1.2.0.3 required apache2 restart
109221-01	BSG Provisioning should allow association to hub 0, the hub of the default channel map
109515-01 HPQC21851	Unable to remove source from a specific VCT in DTACS BSG
109621-01 HPQC21843	The same DTACS SI IP stream can be associated to multiple BSGs
109641-01 HPQC21638	DTACS BSG Provisioning default has an invalid name
109716-01	Deleting a User Defined PID on DTACS causes a WUI exception
109789-01	Unable to configure sources to BSG
109809-01	DTACS User Defined PID routes for GQAMs get deleted during upgrade

CR ID	Title
109956-01	The Time Zone value is not populated after an NVM reset and instant hit
110286-01	Newly Created VCTs Not Updating Until a DbSync is executed
110317-01 HPQC22501	DTACS displays incorrect PID route QAM port values
113659-02	Show exceptions while saving BSG sources
113661-02	DTACS: Same source on multiple channels causing the dta to show black screen

Enhancement CRs

This section provides a list of enhancement CRs found in previous DTACS releases that have been implemented in software for DTACS 1.2. CRs are indexed by ID number in ascending order.

CR ID	Title
98280	Provide qtail utility support in DTACS
102329-01 HPQC1078, 15071, 15073	DTACS process status takes a long time to update
104241-01 HPQC21531	DTACS online help links are incorrect

Open CRs

This section provides a list of open CRs that were identified during testing of DTACS 1.2. CRs are indexed by ID number in ascending order. Resolutions to these CRs are currently under investigation or in development.

This list is not intended to be comprehensive. If you have questions about a particular CR, contact your account representative.

CR ID	Title and Impact
106331-02 (HPQC18433)	DTACS DTA Management does not always populate the VCT pull-down
	Impact: This does not happen every time. When it does, the operator is unable to edit the VCT parameter on the DTA.
	Workaround: Reverting to the main console window, then reopening the Edit DTA Entry window will fix the issue in some, but not all instances.
107811-01	DTACS BSG WUI contains references to CVT in link shortcut
	Impact: The link displayed in the top left corner of the page may be erroneous.
	Workaround: There is no workaround.
107843-01	BSG Source Association and VCT Name association is not displaying orig config
	Impact: After saving changes of source associations to a BSG specific VCT, the UI does not immediately reflect the update.
	Workaround: The user must deselect and then reselect the VCT name before the most recent changes are reflected in the UI.
108028-01	dtacsNeMgr cored while creation/deletion of BSG
	Impact: While doing BSG creation and deletion, dtacsNeMgr cored once.
	Workaround: There is no workaround.
	Note: Testers have been unable to reproduce the same results.
108243-01	DTA Provisioning performance is poor
	Impact: DTACS 1.0 permits provisioning of up to 63 DTAs per second. DTACS 1.2 permits provisioning of no more than 21 DTAs per second, i.e., provisioning performance has dropped by two thirds.
108501-01	DTACS User Defined PID Routes show wrong state
	Impact: After defining a user PID (not SI or AMM), the operational state is shown as "ASI Provisioned" and instead of "Active" on the PID Route Provisioning WUI. This is incorrect behavior.

CR ID	Title and Impact
108635	dtacsdbsync should recursively set group permissions to +w for POD_Data
	Impact: Incorrect permissions setting prevents writing to POD_Data files.
	Workaround: Run the following command as root:
	# chmod -R g+w /dev/dvsFiles/POD_Data/*
108707	DTACS online help: BSG Provisioning screen help call is incorrect
	Impact: The Help link for "This Window" on the BSG Provisioning window is broken.
	Workaround: Choose the Help link "About DTACS," then navigate to Network Elements/BSG Provisioning.
108939-02	DTACS User-Defined PID Routes not getting built
	Impact: DTACS cannot perform EAS when user-defined PID routes are not created properly.
	Workaround: The operator needs to create the PID route with UDP=0 to match the GigE multicast video/audio session.
109078-01	DTAs could display the SIM barker for a few seconds repeatedly during a CVT
	Impact: Some DTAs could lose video and display the SIM barker for a few seconds repeatedly during a CVT download on a remote hub.
	Workaround: There is no workaround.
109201-02	DTACS DTA Management WUI needs extra spacing in the displayed message
	Impact: Status messages in the bottom left corner of the WUI run together.
109238-01	Leading zero on DTACS Activation Timeout sends out wrong value
	Impact: The DTA displays an erroneous value for the Activation Timeout when a leading zero is entered at the DTACS.
	Workaround: Do not enter leading zeros.
109239-01	DTACS DTA Management WUI does not display MAC address when editing
	Impact: Status messages for other commands include the MAC address for the DTA. Messaging should be consistent.
109264-01	Odd behavior for DTACS 1.2.0.3 system Channel Map updates
	Impact: Changes to DTAs do not always post in a timely fashion after a DTACS database synchronization.
	Workaround: If changes are slow, bounce the DTACS.

CR ID	Title and Impact
109401-01	DTACS PID Route Provisioning WUI shows Define Sources button in wrong location Impact: View/Define Sources is currently shown as a link on the DTACS PID Route Provisioning window. It should implemented as a button on the bottom of the screen.
109403-01	DTACS BSG Provisioning WUI shows the Associate Source in wrong location on WUI Impact: Associate Source is currently shown as a link on the DTACS BSG Provisioning window. It should implemented as a button on the bottom of the screen.
109443-01	Stopping a DTACS process provides no confirmation message Impact: Stopping a DTACS process is a critical activity. Operators need a confirmation message so that they have the opportunity to cancel the request.
109642-01	DTACS IP Stream Add or Edit allows for an invalid PID entry Impact: A PID value different from what the user entered is used by the system (modulo 65535). Workaround: Be careful not to enter a PID value outside of the valid range (0x1-0x1FFF). Note: Certain PID values are reserved (CAT=0001, AMM=1FF0 and PSIP=1FFB).
109645-01	DTACS search box on the DTA Entry WUI does not work Impact: Operators cannot search for a specific DTA.
109665-01	DTACS VCT can be saved with invalid package set description Impact: There is no impact. Workaround: Take care to enter package set descriptions that do not include the following characters (, < > ' - # &).
109993	DTAs fail to receive AMM messages when tuned to MQAM frequency Impact: No impact unless the interval between dropped AMMs is several weeks. Workaround: Raise the AMM data rate to 3-5 AMMs per second on the PID Route Provisioning page. This is needed for MQAMs because a DCM is used to combine and transmit DTA/PID traffic, and the DCM needs a high data rate to keep the port active and passing the mulitcast traffic.
110083-02	The main DTACS WUI will also close when closing a DTACS help WUI. Impact: The DTACS Administrative Console closes when the DTACS Help is closed. Workaround: The Quit option closes all Firefox windows. The Close option closes only the current window. Use the Close option to close the Online Help Window.

CR ID	Title and Impact
110340-01	Data should not be removed on dtacsdbsync fail
	Impact: When a DbSync fails, all sources, service, and session information is removed and DTAs cannot receive channel maps.
	Workaround: There is no workaround.
110657	Incorrect behavior during error on adding a DTACS User Defined PID Route Source
	Impact: An error message is returned that says the user-defined route could not be created (correct behavior), but the RF Port Name pulldown list is changed to the default BSG ports (incorrect behavior).
	Workaround: Exit the DTACS WUI and re-enter all data.
110830-01	Help link shows an error for the DTACS Carousel Config WUI
	Impact: The online help link is broken on the DTACS Carousel Config window.
	Workaround. Access online help via Help/About DTACS link.
110936-01	Invalid characters are allowed in the CVT Field entry and result in a WUI error
	Impact: When the operator attempts to edit the CVT entry, an xml parser error is returned.
	Workaround: Delete the CVT entry and re-enter all information.
111002-01	DTACS CVT Provisioning WUI does not show the 18th entry to edit
	Impact: Once there are 18 or more CVT entries, the last one is not displayed. It cannot be edited or deleted either.
	Workaround: After entering 18 or more CVTs, add one more that is bogus. This way, it doesn't matter if you can't see the last entry.
111021-01	DTACS allows creation of the same PID on same output port
	Impact: A route error is returned when an operator attempts to telnet to the device.
	Workaround: Delete the second source route.
111057-01	DTACS upgrade overwrites the .profile variables
	Impact: Any differences in .profile variables are lost.
	Workaround: No workaround is required. As a matter of standard practice, the operator should review the possible settings in the Installation and Operation guide and set them according to the site needs.
111158-01	The DTACS process dtacsNeMgr audits all QAMs that ever had a PID Route
	Impact: The log may have entries for QAMs that are no longer in use.
	Workaround: There is no workaround.

CR ID	Title and Impact
111335-01	DTACS CVT provisioning does not validate the vendor and hardware ID entries Impact: The operator can create CVT entries with invalid hardware and vendor IDs. Workaround: Manually verify hardware and vendor IDs before entering the information.
111674-01	DTACS eventManager can only be stopped / started one time individually Impact: eventManager cannot be stopped and started individually more than once. Workaround: Stop and start all processes. **Note:** There is seldom a reason to stop and and start eventManager individually, so this issue should rarely, if ever, occur.
112500-01	DTACS: Mini root on DVD does not support XVR300 video card Impact: The behavior occurred during a file system restore. Output to the monitor freezes. Workaound: Connect a laptop to the serial port and watch the console output on the laptop monitor. Continue making console entries from the console keyboard.
112661	DTACS ammDistributor should not restart the refresh cycle on SysConfig changes Impact: If the IP stream data rate is exceeded, some messages will not be delivered immediately and error messages will be logged. Workaround: Avoid multiple back-to-back SysConfig updates.
113283	Valid DTACS Vendor ID values are reported out of range Impact: Vendor IDs that contain the hex value 'E' are rejected. Workaround: Use database population scripts.
114050	DTACS CVT WUI error should be more explicit with duplicated IDs Impact: The error message, "Unable to update DTACS CVT Entry," is displayed. It is an unhelpful message. Workaround: Refer to the /var/log/dtacsLog file. The log message is sufficiently explicit and helpful.
114174	DTACS WUI allows for the creation of two PID routes with same PID on same port Impact: The QAM builds the first PID route, but not the second. Operators would be unaware that the second route was not being built. Workaround: Operators can use one user-defined PID route and merge the two streams further upstream.

CR ID	Title and Impact
114752	Alter and restore of PID value for SI streams causes DTA to not receive SI data Impact: The DTA may not receive SI data. Workaround: Restart DTACS processes to restore SI data delivery.
114807	DTACS should return invalid-pkg error to billing system for reqs w/ invalid pkgs Impact: The misconfiguration of the billing system may go unnoticed. Workaround: There is no workaround.
114810	DTACS UI should allow UdpPort 0 to 64K for UserDefinedPidRouteSrcs without preference Impact: There is no impact. Workaround: Zero is the preferred UDP port. Operators should use zero and avoid using non-zero numbers.
114811	DTACS DTA Mgt UI crashes on attempts to delete large numbers of DTAs Impact: The operator must restart the UI. Workaround: Operators must delete fewer than 200 DTAs at a time.
114812	DTACS DTA Mgt UI needs changes to message displayed to the user Impact: Some status messages are vague. Clearer status messages will give the operator a better idea of what action was taken.
114813	DTACS UI screen timeouts have inconsistent behavior Impact: It may be necessary for operators to exit and re-enter the UI to regain functionality.

For Information

If You Have Questions

If you have technical questions, call Cisco Services for assistance. Follow the menu options to speak with a service engineer.