



Addressing an Incomplete Online Help Entry Regarding TSR Settings

Technical Reference

Overview

Background

Cisco engineers are aware that the online help entry for setting up transport stream routes (TSR) in some releases of the Digital Network Control System (DNCS) software is incomplete. The existing entry omits pointing out a needed condition concerning the program ID (PID) range and fails to mention a rule-of-thumb when configuring the number of programs to use in the transport stream.

Purpose

This technical reference draws attention to the oversight regarding the TSR online help entry, points out which releases are affected, and supplies the missing data.

Note: This technical reference does not provide the entire online help entry for setting up TSRs on the DNCS; only the missing data is provided. Use the existing online help, in conjunction with this technical reference, when setting up TSRs.

Affected Releases

The DNCS online help for system releases (SR) 4.3, 4.3.1, 4.3.2, and 5.0 lack complete information regarding the setting up of a transport stream route. Cisco expects that the online help for SR 5.1 and later will include the complete entry.

Audience

This document is written for system operators, headend technicians, and field service engineers who are responsible for configuring TSRs for the GQAM modulator.

Document Version

This is the first formal release of this document.

Completing the TSR Online Help Entry

Affected Window

The currently incomplete TSR online help entry concerns the Transport Stream Route window.

Note: The quick path to access this window is as follows:

DNCS Administrative Console > DNCS tab > Network Element Provisioning tab > QAM > [select GQAM] > Advanced Parameters tab > Transport Stream Route: Set up > Add

The screenshot shows the 'Transport Stream Route' configuration window. At the top, there is a title bar with the text 'Transport Stream Route'. Below the title bar, there are three input fields: 'Route ID:', 'Starting ECM Pid:', and 'Number of ECM Pids:'. Below these fields, there is a section divided into two columns: 'INPUT' and 'OUTPUT'. Under the 'INPUT' column, there are several fields: 'Qam Input Port:' (with a dropdown menu showing 'Ethernet 1'), 'Stream Delivery Type:' (with a dropdown menu), 'Source IP Address:', 'Source IP Address 2:', 'Source IP Address 3:', 'Destination IP Address:', and 'UDP Port:'. Under the 'OUTPUT' column, there is one field: 'Qam Output Port:' (with a dropdown menu showing '1'). At the bottom of the window, there are two buttons: 'Save' and 'Cancel'.

Current Online Help Entry

A segment of the current online help follows. The incomplete online help entry concerns the **Starting ECM Pid** field.

Transport Stream Route Settings

Use the following fields when you manage TSRs.

Field	Description
Route ID	A unique number that identifies this TSR. Valid values: Any 2-byte integer in the range of 1 to 65535.
Starting ECM Pid	Provides the starting PID value for the ECM PIDs for the TSR. This field, along with the Number of ECM Pids field, defines the range of PIDs for the TSR. PIDs from this range are used for inserting PowerKEY ECMs when encrypted sessions exist 'on top of' the TSR.
Number of ECM Pids	Provides the number of PIDs available for ECM PID allocation for the TSR. This field, along with the Starting ECM Pid field, defines the range of PIDs for the TSR.

Complete Online Help Entry

The complete entry should read similar to the following:

Provides the starting PID value for the ECM PIDs for the TSR. This field, along with the Number of ECM Pids field, defines the range of PIDs for the TSR. You must supply a non-zero PID range, and the general rule is to use three times the number of programs in the transport stream. This range must be defined and be non-zero, even if the operator does not intend to encrypt the session. The ECM PID value range must consist of unique PID values that are NOT used as any PMT or elementary stream PID value in the transport stream that is passed through the GQAM with the TSR configuration.

PIDs from this range are used for inserting PowerKEY ECMs when encrypted sessions exist 'on top of' the TSR.

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.



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April 2012 Printed in USA

Part Number 4038107 Rev A