Traffic Management Debugging Cints for DNX Devices

KB0025684

27 Views
Date Published: 08-Nov-2017
Author: Kesem Sharabi
Affected Products: BCM88370 (Qumran-MX), BCM88270 (Qumran-UX), 88470 (Qumran-AX), BCM88670 (Jericho), BCM88680 (Jericho+), BCM88750 (FE1600), BCM88770 (FE3200)
Legacy ID: PI2491
Related Articles:
Attachments: TM Diag Scripts.zip

This article contains diagnostic scripts for debugging Traffic Management (TM) related issues.

Current Version: 2.3 (9/11/2017)

Using the Scripts

Use the scripts for:

- Live debugging during traffic
- Additional information for register dump

Customers are free to integrate the scripts into their diagnostic tools / shell.

Note: Files ending with "_qax" are meant for QAX/QUX usage.

Cints

Table 1: TM Debugging Scripts provides an up to date list of TM debugging scripts.

TM Debugging Scripts

Cint	Purpose	Description

Cint	Purpose	Description
diag_rates.c diag_rates_qax.c diag_rates_fe.c	Debugging performance issues. Can help identifying bottlenecks.	Displays: - Traffic rate per block - Discarded traffic rate - Can measure max bursts - Cell rate per block (Fabric devices)
		Displays: - Active queues max size

diag_iqm.c	Debugging ingress congestion and traffic loss. Configuring IQM reject thresholds.	• Reject thresholds • Configured resources • Current available resources • Packet reject reasons Set recommended reject thresholds
diag_sch.c diag_sch_qax.c	Debugging the credit flows. Configuring the DRM table.	Displays: • Current active flows • DRM table values Sets DRM table to recommended values
diag_ipt.c	Debugging IPT flow control.	Displays: • Max occupancy per FIFO • Active FC indications
diag_fdr.c	Debugging FDR/FDA congestion.	Displays: • Max occupancy per FDR FIFO • Max occupancy per EGQ FIFO

Cint	Purpose	Description
diag_tm_command.c	Debugging TM/PP interface. Debugging buffer and queue selections.	Displays: • Last TM command (IHB -> IRE) • Last buffer selection (IDR) • Last packet constructor (IDR -> IRR) • Last enqueue command (IRR -> IQM)
		Displays:

diag_ips.c diag_ips_qax.c	Debugging IPS credit usage and status.	- Deleted/returned credit rate - Max active queue count - Active FC indications - Active queues statistics Recommended to use together with diag_ipt.c when debugging FC.
diag_fc.c diag_fc_qax.c	Debugging Flow Control indications.	Displays: - NIF to EGQ FC indications - EGQ to SCH FC indications - CFC to EGQ FC indications - SCH RCI status - FDR RCI status

Add your comment

Rate this article   Submit