FCS Checklist for DNX Customers

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Author: Or Verbin

Affected Products: StrataDNX

Legacy ID: HT2720 Related Articles:

Attachments: cint debug dumps.c DNX FCS.pdf

This article provides a checklist for First Customer Shipment (FCS).

Overview

Before FCS customers are required to complete the attached checklist.

Checklist Requirements

Verify that the following requirements are met:

- · A sustainable SDK version is used
- · The AE team checked the register dumps for misconfigurations
- The AE team verified the SOC files
- · SER protection is implemented
- WarmBoot has been validated (if applicable)
- · Debug terminal is available and working
- · Interrupt handling is implemented
- There is a procedure describing the course of action in case of device failure (see Collecting Information after a Device Failure)
- The external errata sheet has been reviewed

Tools for Collecting Information

Use the following tools to collect information during normal operationand device failure:

- Interrupt log and counters used to understand the starting point of a failure
- Register dump provides a snapshot of the system status and configuration after a failure, see Debug Dumps Cint
- **Diag shell commands** SDK shell commands that collect information required for understanding complex problems, see First Customer Shipment Checklist
- API logging using the BSL logging layer
- Knowledge Management (KM) The KM tool contains articles describing debugging procedures

Debug Dumps Cint

The debug dump cint is designed for FE/FAP devices. **Table 1: Debug Dump Cint** lists the features that the cint supports.

To run the Debug Dumps Cint:

- 1. Download the cint cint_debug_dumps.c attached to this article.
- 2. On your system, run the appropriate command according to the list in Table 1: Debug Dump Cint.

Debug Dump Cint

	P 1
FAP/AE Command	Function
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FAP/AE	Command	Function
FAP		Dumps the following:
	fap_diag_pp_dump(unit)	All the "diag pp …" functionalitiesThe register dumps
	fap_diag_pp_dump_full(unit)	Dumps the following:
		fap_diag_pp_dump()The L2 table
	fap_diag_tm_dump(unit)	Dumps the following:
		Queue statesRegistersFabric reachabilityConnectivity
		Requirements:
		 Setting the diag_fabric_reachibility_mod_idvariab (set to 0 by default) Setting the diag_cosq_is_voq_or_sysportand diag_cosq_for the diag cosq print_flow_and_up is_voq_conn
	fap_diag_tm_dump_full(unit)	Dumps the following: • fap_diag_tm_dump() • All the important TM related tables (~150MB) Requirments: Setting the fap_diag_tm_dump() variables
FE	fe_diag_tm_dump(unit)	Dumps the following: Fabric reachability Fabric connectivity Requirements: Setting the diag_fabric_reachibility_mod_id variable for default)
	fe_diag_tm_dump_full(unit)	Calls for the following: • fe_diag_tm_dump() • RTP tables dump

First Customer Shipment Checklist

The First Customer Shipment Checklist PDF provides a list of commands for running DNX diagnostics.

To use the First Customer Shipment Checklist PDF:

- 1. Download the **DNX_FCS** PDF.
- 2. Review the list of commands.
- 3. On your system, execute the relevant commands.

Note: The First Customer Shipment Checklist also provides a string of commands for a quick execution of multiple commands.

Collecting Information during Normal Operation

Capture the system status on a daily basis, this includes:

- Interrupt log file and counters interrupt handler output and counters from the device used by the customer
- · Diag shell commands see attached document
- · Register and table dump see attached document

Collecting Information after a Device Failure

After a device failure, collect the following information:

- Two consecutive register dumps (g * debug) illustrates changes in counters
- Diag shell commands see attached document
- Table dump see attached document

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