Alarm Troubleshooting

This chapter gives a description, severity, and troubleshooting procedure for each commonly encountered Cisco CPT alarm and condition. Sections Critical (CR) Alarms, on page 3 through NR Conditions, on page 5 provide lists of CPT alarms organized by severity. Table 6: Alphabetical List of CPT Alarms and Conditions, on page 5 provides a list of alarms organized alphabetically. Table 7: Alarm Logical Object Type Definitions, on page 7 gives definitions of all CPT alarm logical objects, which are the basis of the alarm profile list in Alarm List by Logical Object Type, on page 8.

If the troubleshooting procedure does not clear the alarm, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html or call at the Cisco Technical Assistance Center (1 800 553-2447).

- Cisco CPT Alarms, page 1
- CPT Alarm Indexes, page 3
- Alarm Logical Objects, page 7
- NTP -J125 Suppress Alarms in CTC, page 9
- Trouble Characterizations, page 11
- Trouble-Clearing Procedures, page 12

Cisco CPT Alarms

The Cisco Carrier Packet Transport (CPT) supports the following alarms:

- Alarms specific to Cisco CPT. See Table 6: Alphabetical List of CPT Alarms and Conditions, on page 5.

Note The Switching Provider Edge (SPE) alarms are not displayed in CTC. These alarms can be viewed in an IOS console using the **show ons simple ether_alarms** command.

- Alarms that are common to Cisco CPT and Cisco ONS 15454 DWDM. See the following table. For more info, see the

  http://www.cisco.com/en/US/docs/optical/15000r10_0/dwdm/troubleshooting/guide/b_454d98_10_ts.html.

Table 1: Cisco ONS 15454 Alarms Supported by CPT

CTNEQPT-MISMATCH (NA)	MANRESET (NA)
DIAG (CR)	MEA (CR)
EQPT (CR)	MEM-GONE (MJ)
EQPT-DEGRADE (MN)	MEM-LOW (MN)
EXCCOL (MN)	OPEN-SLOT (NA)
FAILTOSW (NA)	PEER-NORESPONSE (MJ)
FAPS-CONFIG-MISMATCH (MN)	PROTNA (MN)
FORCED-REQ (NA)	PWR-FAIL-A (MN)
FP-LINK-LOSS (MN)	PWR-FAIL-B (MN)
FTA-MISMATCH (NA)	PWR-FAIL-RET-A (MN)
HI-LASERBIAS (MN)	PWR-FAIL-RET-B (MN)
HI-LASERTEMP (MN)	RS-EOC (MN)
HI-TXPOWER (MN)	RS-TIM (CR)
HITEMP (MN)	RUNCFG-SAVENEED (NA)
IMPROPRMVL (CR)	SFTWDOWN (MN)
INHSWPR (NA)	SW-MISMATCH (NA)
INHSWWKG (NA)	UNEQ-P (CR)
LO-LASERBIAS (MN)	VOA-DISABLED (CR)
LO-LASERTEMP (MN)	WKSWBK (NA)
LO-TXPOWER (MN)	WKSWPR (NA)
LOCKOUT-REQ (NA)	WORK-QUEUE-FULL (NA)
MAN-REQ (NA)	WTR (NA)

CPT Alarm Indexes

The following tables group alarms and conditions by their default severities in the Cisco CPT system.

Note The CTC default alarm profile contains some alarms or conditions that are not currently implemented but are reserved for future use.

Note The CTC default alarm profile in some cases contains two severities for one alarm (for example, MJ/MN). The platform default severity comes first (in this example, MJ), but the alarm can be demoted to the second severity in the presence of a higher-ranking alarm.

- Critical (CR) Alarms, on page 3
- Major Alarms (MJ), on page 4
- Minor Alarms (MN), on page 4
- NA Conditions, on page 5
- NR Conditions, on page 5
- Alarms and Conditions Listed By Alphabetical Entry, on page 5

Critical (CR) Alarms

The following table alphabetically lists Critical (CR) alarms.

Table 2: Critical Alarms List

	SAT-FAN-MEA (EQPT)
LIC-EXPIRED (EQPT)	SAT-FAN-MFGMEM (EQPT)
LIC-MISSING (DWDM_TRUNK, DWDM_CLIENT)	SAT-FAN-MISSING (EQPT)
	SAT-HITEMP (EQPT)
PTS-FAIL (PTS)	SAT-IHITEMP (EQPT)
SAT-COMM-FAIL (EQPT)	SAT-IMPROPER-CONFIG (EQPT)

Major Alarms (MJ)

The following table alphabetically lists Major (MJ) alarms.

Table 3: Major Alarms List

EFP-FAIL (PORT)	PW-DP-FLT (PORT)
	PRT-PW-RX_FLT (PORT)
	SAT-BAT-FAIL-A (EQPT)
LIC-EXPIRING-SHORTLY (EQPT)	SAT-BAT-FAIL-B (EQPT)
LIC-EXPIRING-SOON (EQPT)	
	TE-TUNNEL-DOWN (PTS)
PRT-LOC-PW-NOT-FWD (PTS)	TP-TUNNEL-DOWN (PTS)
PRT-PW-LOC-AC-RX-FLT (PORT)	WKG-LOC-PW-NOT-FWD (PTS)
PRT-PW-LOC-AC-TX-FLT (PORT)	WKG-PW-LOC-AC-RX-FLT (PORT)

Minor Alarms (MN)

The following table alphabetically lists Minor (MN) alarms.

Table 4: Minor Alarms List

BFD-DOWN (PORT)	PW-WKSWPR (PORT)
CUTOVER (EQPT)	RESOURCES-GONE (EQPT)
EVAL-LIC (EQPT)	RESOURCES-LOW (EQPT)
MAC-BD-LIMT-REACHED (PTS)	SAT-ACT-LINK-FAIL (FAC)
MAC-SYS-LIMT-REACHED (PTS)	TEMP-LIC (EQPT)
PROT-CONFIG-MISMATCH (EQPT)	WKG-LSP-DOWN (PORT)
PRT-LSP-DOWN (PORT)	WKG-LSP-LKR (FAC)
PRT-LSP-LKR (FAC)	WKG-PW-CC-DOWN (PORT)

PRT-PW-CC-DOWN (PORT)	WKG-PW-CP-DOWN (PORT)
PRT-PW-CP-DOWN (PORT)	--

NA Conditions

The following table alphabetically lists Not Alarmed (NA) conditions.

Table 5: NA Conditions List

PRT-LSP-LDI (PORT, FAC)	
PRT-PW-REM-AC-RX-FLT (PORT)	WKG-LSP-LDI (PORT, FAC)
PRT-PW-REM-AC-TX-FLT (PORT)	WKG-PW-REM-AC-RX-FLT (PORT)
PRT-REM-PW-NOT-FWD (PTS)	WKG-PW-REM-AC-TX-FLT (PORT)
PRT-TP-LOCKOUT (PORT)	WKG-REM-PW-NOT-FWD (PTS)

NR Conditions

The following is the list of Not Reported (NR) conditions.

- OTUK-BIAE (DWDM_TRUNK, DWDM_CLIENT)

Alarms and Conditions Listed By Alphabetical Entry

The following table alphabetically lists all CPT alarms and conditions.

Table 6: Alphabetical List of CPT Alarms and Conditions

	PW-DP-FLT (PORT)
BFD-DOWN (PORT)	
CUTOVER (EQPT)	
	RESOURCES-GONE (EQPT)
	RESOURCES-LOW (EQPT)
EFP-FAIL (PORT)	RESOURCE-ALLOC-FAIL (EQPT)

	SAT-ACT-LINK-FAIL (FAC)
	SAT-BAT-FAIL-A (EQPT)
LIC-EXPIRED (EQPT)	SAT-BAT-FAIL-B (EQPT)
LIC-EXPIRING-SHORTLY (EQPT)	SAT-COMM-FAIL (EQPT)
EVAL-LIC (EQPT)	SAT-FAN-DEGRADE (EQPT)
LIC-EXPIRING-SOON (EQPT)	SAT-FAN-FAIL (EQPT)
LIC-MISSING (DWDM-CLIENT)	SAT-FAN-MEA (EQPT)
LIC-MISSING (DWDM-TRUNK)	SAT-FAN-MFGMEM (EQPT)
	SAT-FAN-MISSING (EQPT)
MAC-BD-LIMT-REACHED (PTS)	SAT-HITEMP (EQPT)
MAC-SYS-LIMT-REACHED (PTS)	SAT-IHITEMP (EQPT)
	SAT-IMPROPER-CONFIG (EQPT)
OTUK-BIAE (DWDM-CLIENT)	SLA-TCA (PTS)
OTUK-BIAE (DWDM-TRUNK)	
PROT-CONFIG-MISMATCH (EQPT)	
PRT-LOC-PW-NOT-FWD (PTS)	TE-TUNNEL-DOWN (PTS)
PRT-LSP-DOWN (PORT)	TEMP-LIC (EQPT)
PRT-LSP-LDI (PORT)	TP-TUNNEL-DOWN (PTS)
PRT-LSP-LDI (FAC)	TP-WKSPWR (PORT)
PRT-LSP-LKR (FAC)	WKG-LOC-PW-NOT-FWD (PTS)
PRT-PW-CC-DOWN (PORT)	WKG-LSP-DOWN (PORT)
PRT-PW-CP-DOWN (PORT)	WKG-LSP-LDI (PORT)
PRT-PW-LOC-AC-RX-FLT (PORT)	WKG-LSP-LDI (FAC)
PRT-PW-LOC-AC-TX-FLT (PORT)	WKG-LSP-LKR (FAC)
PRT-PW-REM-AC-RX-FLT (PORT)	WKG-PW-CC-DOWN (PORT)

PRT-PW-REM-AC-TX-FLT (PORT)	WKG-PW-CP-DOWN (PORT)
PRT-REM-PW-NOT-FWD (PTS)	WKG-PW-LOC-AC-RX-FLT (PORT)
PRT-TP-LOCKOUT (PORT)	WKG-PW-LOC-AC-TX-FLT (PORT)
PROV-FAIL (EQPT)	WKG-PW-REM-AC-RX-FLT (PORT)
	WKG-PW-REM-AC-TX-FLT (PORT)
PRT-PW-RX-FLT (PORT)	WKG-REM-PW-NOT-FWD (PTS)
PTS-FAIL (PTS)	WKG-PW-RX-FLT (PORT)
PW-DOWN (PORT)	WKG-TP-LOCKOUT (PORT)
PW-WKSWPR (PORT)	--

Alarm Logical Objects

The CTC alarm profile list organizes all alarms and conditions according to the logical objects they are raised against. One alarm can appear in multiple entries. It can be raised against multiple objects.

Alarm profile list objects are defined in the following table.

Note Alarm logical object names can appear as abbreviated versions of standard terms used in the system and the documentation. Logical object names or industry-standard terms are used within the entries as appropriate.

Alarm Logical Objects

The following table lists all the logical alarm objects used in this chapter.

Table 7: Alarm Logical Object Type Definitions

Logical Object	Definition
DWDM_CLIENT	The client port on the optical or DWDM card carrying the high-speed signal.
DWDM_TRUNK	The trunk port on the optical or DWDM card carrying the high-speed signal.
EQPT	A card, its physical objects, and its logical objects as they are located in any of the noncommon card slots. The EQPT object is used for alarms that refer to the card itself and all other objects on the card including ports, and lines.

Logical Object	Definition
FAC	Facility payload.
PORT	Port on the fabric card, line card, or CPT 50 panel.
PTS	Packet transport system.

Alarm List by Logical Object Type

Lists all the alarms and logical objects as they are given in the system alarm profile. The list entries are organized by logical object name and then by alarm or condition name. Where appropriate, the alarm entries also contain troubleshooting procedures.

Table 8: Alarm List by Logical Object in Alarm Profile

DWDM_CLIENT: LIC-MISSING (CR)	PORT: PRT-PW-CP-DOWN (MN)
DWDM_CLIENT: OTUK-BIAE (NR)	PORT: PRT-PW-LOC-AC-RX-FLT (MJ)
DWDM_TRUNK: LIC-MISSING (CR)	PORT: PRT-PW-LOC-AC-TX-FLT (MJ)
DWDM_TRUNK: OTUK-BIAE (NR)	PORT: PRT-PW-REM-AC-RX-FLT (NA)
EQPT: CUTOVER (MN)	PORT: PRT-TP-LOCKOUT (NA)
EQPT: EVAL-LIC (MN)	PORT: PW-DOWN (MJ)
	PORT: PW-DP-FLT
	PORT: PW-WKSWPR (MN)
EQPT: LIC-EXPIRED (CR)	PORT: WKG-LSP-DOWN (MN)
EQPT: LIC-EXPIRING-SHORTLY (MJ)	PORT: WKG-LSP-LDI (NA)
EQPT: LIC-EXPIRING-SOON (MJ)	PORT: WKG-PW-CC-DOWN (MN)
EQPT: PROT-CONFIG-MISMATCH (MN)	PORT: WKG-PW-CP-DOWN (MN)
EQPT: PROV-FAIL (CR)	PORT: WKG-PW-LOC-AC-RX-FLT (MJ)
EQPT: RESOURCES-GONE (MN)	PORT: WKG-PW-LOC-AC-TX-FLT (MJ)
EQPT: RESOURCES-LOW (MN)	PORT: WKG-PW-REM-AC-RX-FLT (NA)
EQPT: RESOURCE-ALLOC-FAIL (MJ)	PORT: WKG-PW-REM-AC-TX-FLT (NA)

EQPT: SAT-BAT-FAIL-A (MJ)	PORT: WKG-PW-RX-FLT
EQPT: SAT-BAT-FAIL-B (MJ)	PORT: WKG-TP-LOCKOUT (NA)
EQPT: SAT-COMM-FAIL (CR)	PTS: PRT-LOC-PW-NOT-FWD (MJ)
EQPT: SAT-FAN-DEGRADE (CR)	PTS: PRT-REM-PW-NOT-FWD (NA)
EQPT: SAT-FAN-FAIL (CR)	PTS: WKG-LOC-PW-NOT-FWD (MJ)
EQPT: SAT-FAN-MEA (CR)	PTS: WKG-REM-PW-NOT-FWD (NA)
EQPT: SAT-FAN-MISSING (CR)	PTS: TP-TUNNEL-DOWN (MJ)
EQPT: SAT-HITEMP (CR)	PTS: TE-TUNNEL-DOWN (MJ)
EQPT: SAT-IHITEMP (CR)	PTS: MAC-BD-LIMT-REACHED (MN)
EQPT: SAT-IMPROPER-CONFIG (CR)	PTS: MAC-SYS-LIMT-REACHED (MN)
EQPT: TEMP-LIC (MN)	PTS: PTS-FAIL (CR)
FAC: PRT-LSP-LDI (NA)	PTS: SLA-TCA (CR)
FAC: PRT-LSP-LKR (MN)	
FAC: SAT-ACT-LINK-FAIL (MN)	
FAC: WKG-LSP-LDI (NA)	
FAC: WKG-LSP-LKR (MN)	
PORT: BFD-DOWN (MN)	
PORT: EFP-FAIL (MJ)	
PORT: PRT-LSP-DOWN (MN)	

NTP -J125 Suppress Alarms in CTC

Purpose	This procedure suppresses alarms in CTC.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed

Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Procedure

Step 1 Complete the NTP-J22 Log into CTC procedure at a node where you want to suppress alarms.

Step 2 From the View menu, choose **Go to Home View**.

Step 3 Right-click the fabric or line card and choose **Open Packet Transport System View**. The Packet Transport System View dialog box appears.

Step 4 From the left pane, click **Alarm Profiles**. Perform the following tasks as required:

a) To suppress all the alarms at a specific node:

1. On the **Alarm Behavior** tab, choose **Default** from the Node Profile drop-down list.
2. Check the **Suppress Alarms** check box.
3. Click **Apply**.

b) To suppress all the alarms at a specific card:

1. On the **Alarm Behavior** tab, check the check box in the Suppress Alarm column next to the required card.
2. Repeat the earlier step for each card where you want to suppress the alarms.
3. Click **Apply**.

c) To suppress alarms irrespective of a node or card:

1. Click the **Alarm Profile Editor** tab.
2. Click **New**. The New Profile dialog box appears.
3. Enter a name for the alarm profile in the New Profile Name field.
4. Click **OK**. The new alarm profile appears on the **Alarm Profile Editor** tab.
5. Under the <*Alarm Profile Name*> column, choose **NA** or **NR** from the drop-down list that is displayed next to each alarm.
6. Repeat the earlier step for all the alarms that you want to suppress.
7. From the Node Names area, choose a node where you want to store the alarm profile.
8. Click **OK**.
9. Click the **Alarm Behavior** tab.
10. From the Node Profile drop-down list, choose the newly created alarm profile to suppress all the alarms that occur at the node where the alarm profile is stored.

Stop. You have completed this procedure.

Trouble Characterizations

The Cisco CPT system reports trouble by utilizing standard alarm and condition characteristics, standard severities, and graphical user interface (GUI) state indicators. These notifications are described in the following paragraphs.

The system reports trouble notifications as alarms and status or descriptive notifications (if configured to do so) as conditions in the CTC Alarms window. Alarms typically signify a problem that the user needs to remedy, such as a loss of signal. Conditions do not necessarily require troubleshooting.

Alarm Characteristics

The Cisco CPT system uses standard alarm entities to identify what is causing trouble. All alarms stem from hardware, software, environment, or operator-originated problems whether or not they affect service. Current alarms for the network, CTC session, node, or card are listed in the Alarms tab. (In addition, cleared alarms are also found in the History tab.)

Condition Characteristics

Conditions include any problem detected on an Cisco CPT shelf. They can include standing or transient notifications. A snapshot of all current raised, standing conditions on the network, node, or card can be retrieved in the CTC Conditions window. (In addition, some but not all cleared conditions are also found in the History tab.)

Severity

The Cisco CPT system uses standard severities for alarms and conditions: Critical (CR), Major (MJ), Minor (MN), Not Alarmed (NA), and Not Reported (NR). These are described below:

- A Critical (CR) alarm generally indicates severe, Service-Affecting trouble that needs immediate correction.
- A Major (MJ) alarm is a serious alarm, but the trouble has less impact on the network.
- Minor (MN) alarms generally are those that do not affect service.
- Not Alarmed (NA) conditions are information indicators. They could or could not require troubleshooting, as indicated in the entries.
- Not Reported (NR) conditions occur as a secondary result of another event. These conditions do not in themselves require troubleshooting, but are to be expected in the presence of primary alarms.

Severities can be customized for an entire network or for single nodes, from the network level down to the port level by changing or downloading customized alarm profiles.

Service Effect

Service-Affecting (SA) alarms are those that interrupt servicecould be Critical (CR), Major (MJ), or Minor (MN) severity alarms. Service-Affecting (SA) alarms indicate service is affected. Non-Service-Affecting (NSA) alarms always have a Minor (MN) default severity.

State

The Alarms or History tab State (ST) column indicate the disposition of the alarm or condition as follows:

- A raised (R) event is one that is active.
- A cleared (C) event is one that is no longer active.
- A transient (T) event is one that is automatically raised and cleared in CTC during system changes such as user login, logout, loss of connection to node/shelf view, etc. Transient events do not require user action.

Trouble-Clearing Procedures

This section list alarms alphabetically and includes some conditions commonly encountered when troubleshooting alarms. The severity, description, and troubleshooting procedure accompany each alarm and condition.

Note When you check the status of alarms for cards, ensure that the alarm filter icon in the lower right corner of the GUI is not indented. If it is, click it to turn it off. When you are done checking for alarms, you can click the alarm filter icon again to turn filtering back on.

Note When checking alarms, ensure that alarm suppression is not enabled on the card or port.

AIS

Default Severity: Not Reported (NR), Non-Service-Affecting (NSA)

Logical Object: TDM

The Alarm Indication Signal (AIS) alarm is raised when receiving of signal on an intermediate node fails.

Clear the AIS Alarm

Procedure

Clear the signal failure.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

BFD-DOWN

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: PORT

The Bidirectional Forward Detection Down (BFD-DOWN) alarm is raised when the bidirectional forward detection (BFD) is configured and label-switched path (LSP) is down.

Clear the BFD-DOWN Alarm

Procedure

Perform any of the following, as appropriate:

- Activate the LSP.
- Verify that LSP does not have any errors.
- Verify that BFD is configured at both ends of the tunnel.

If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

CUTOVER

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: EQPT

The Planned Switchover (CUTOVER) alarm is raised when a planned switchover of the fabric card from working card to protect card or protect card to working card occurs.

Clear the CUTOVER Alarm

Procedure

The alarm clears after the fabric card switchover is complete.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

DB-LOSS

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: PTS

The DB LOSS alarm is raised when a PTF card notifies the TNC card to clear the database.

Clear the DB-LOSS Alarm

Procedure

Reload the PTF and the TNC card.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

EFP-FAIL

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: PORT

The Ethernet Flow Point Failed (EFP-FAIL) alarm is raised when the Ethernet flow point (EFP) fails due to incomplete hardware provisioning or when the interface on which the EFP present is down .

Clear the EFP-FAIL Alarm

Procedure

Activate the EFP with correct hardware provisioning.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

EQPT-FAIL

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: EQPT

The Equipment Failure (EQPT_FAIL) alarm is raised:

- When a CPT 50 card is provisioned with the CPT 200 or CPT 600, but physically it is not present.
- When the Hardware Table parity errors present on a particular card.
- When the card detects defects during self diagnostics (FMEA).

Clear the EQPT-FAIL Alarm

Procedure

Attach the CPT 50 card with the CPT 200 or CPT 600 or perform soft reset for the card.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

EVAL-LIC

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: EQPT

The Evaluation License (EVAL-LIC) alarm is raised to indicate that an valid evaluation license is in use.

Clear the EVAL-LIC Alarm

Procedure

Procure and install a permanent license. For more information on installing a license, see the Licensing Configuration Guide.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

Facility Loopback

Default Severity: Not Alarmed (NA), Non-Service-Affecting (NSA)

Logical Object: TDM

The Facility Loopback alarm is raised when the software facility (line) loopback is active for a port.

Clear the Facility Loopback Alarm

Procedure

Correct the facility (line) loopback configuration for a port.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

IMPROPRMVL

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: EQPT

The Improper Removal (IMPROPRMVL) alarm is raised when all provisioned nodes are not available during multiple span failure.

Clear the IMPROPRMVL Alarm

Procedure

Make all the provisioned nodes, available.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

LICENSE-EXPIRED

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: EQPT

The License Expired (LICENSE-EXPIRED) alarm is raised when an evaluation license or a temporary license expires and there is no other valid license installed on the device.

Traffic continues to flow even after this alarm is raised. However, the traffic will stop once the CPT 50 panel, TNC card, TSC card, fabric card, or line card is reset. To prevent traffic disruption, ensure that a valid license is installed on the device.

Traffic on the base functionality is not affected when LICENSE-EXPIRED alarm is raised.

Clear the LICENSE-EXPIRED Alarm

Procedure

Procure and install a permanent license. For more information on installing a license, see the Licensing Configuration guide.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

LIC-EXPIRING-SOON

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: EQPT

The License Expiring Soon (LIC-EXPIRING-SOON)alarm is raised when the cumulative validity period of the existing evaluation and temporary licenses is in the range of 1 to 14 days.

An evaluation license and multiple temporary licenses can co-exist on a device and the validity period of each license can vary.

Clear the LIC-EXPIRING-SOON Alarm

Procedure

Procure and install a permanent license. For more information on installing a license, see the Licensing Configuration guide.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

LIC-EXPIRING-SHORTLY

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: EQPT

The License Expiring Shortly (LIC-EXPIRING-SHORTLY) alarm is raised when the cumulative validity period of the existing evaluation and temporary licenses is in the range of 0 to 24 hours.

An evaluation license and multiple temporary licenses can co-exist on a device and the validity period of each license can vary.

Clear the LIC-EXPIRING-SHORTLY Alarm

Procedure

Procure and install a permanent license. For more information on installing a license, see the Licensing Configuration guide.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

LIC-MISSING

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: PORT

The License Missing (LIC-MISSING) alarm is raised when a valid license on the one Gigabit Ethernet port of the CPT 50 panel expires.

Clear the LIC-MISSING Alarm

Procedure

Procure and install a valid license for the one Gigabit Ethernet port on CPT 50 panel. For more information on installing a license, see the Licensing Configuration guide.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

LoS

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: TDM

The LoS alarm is raised when the signal is not received or low frequency signal is received.

Clear the LoS Alarm

Procedure

Rectify the reason of the signal failure.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

MAC-BD-LIMT-REACHED

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: PTS

The MAC Bridge Domain Limit Reached (MAC-BD-LIMT-REACHED) alarm is raised when the MAC address learnt on the bridge domain has reached a limit of 128,000.

Clear the MAC-BD-LIMT-REACHED Alarm

Procedure

Reduce the MAC address size on the bridge domain.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

MAC-SYS-LIMT-REACHED

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: PTS

The MAC System Limit Reached (MAC-SYS-LIMT-REACHED) alarm is raised when the system MAC address limit of 256,000 is reached.

Clear the MAC-SYS-LIMT-REACHED Alarm

Procedure

Reduce the system MAC address size to less than 256,000.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

MULTIPLE-SPAN-FAIL

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: RING

The Multiple Span Failure (MULTIPLE-SPAN-FAIL) alarm is raised when multiple links of a ring are down.

Clear the MULTIPLE-SPAN-FAIL Alarm

Procedure

Activate those links of the ring that are down.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

OTUK-BIAE Alarm

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: DWDM-CLIENT, DWDM-TRUNK

The Backward Incoming Alignment Error (OTUK-BIAE) alarm is raised when the incoming OTU2 frame contain backward incoming alignment error bits.

Clear the OTUK-BIAE Alarm

Procedure

Clear the backward incoming alignment error bits from the incoming OTU2 frame.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PROT-CONFIG-MISMATCH

Default Severity: Major (MN), Non-Service-Affecting (NSA)

Logical Object: EQPT

The Protection Card Configuration Mismatch (PROT-CONFIG-MISMATCH) alarm occurs when the protect card configuration does not match the active card configuration.

Clear the PROT-CONFIG-MISMATCH Alarm

Procedure

Configure the protect card similar to the working card.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PROTNA

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: EQPT

The PROTNA alarm is raised when the GCC link between Working Ring Controller and Protecting Ring Controller goes down.

Clear the PROTNA Alarm

Procedure

Activate the GCC link.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PROV-FAIL

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: EQPT

The Provisioning Failed (PROV-FAIL) alarm is raised when the Cisco IOS sends a negative acknowledgment for a received provisioning request.

Clear the PROV-FAIL Alarm

Perform any of the following, as appropriate:

- Reset the uplink card.
- Perform a switchover of the uplink card.

If the alarm does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country in order to report a Service-affecting (SA) problem.

PRT-LOC-PW-NOT-FWD

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: PTS

The Protect Local Pseudowire Not Forwarding (PRT-LOC-PW-NOT-FWD) alarm is raised when the local protect pseudowire is not forwarding traffic.

Clear the PRT-LOC-PW-NOT-FWD Alarm

Procedure

The alarm clears when the local protect pseudowire starts forwarding traffic.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

PRT-LSP-DOWN

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: PORT

The Protect Label-Switched Path Down (PRT-LSP-DOWN) alarm is raised when the protect label-switched path (LSP) fails on the port.

Clear the PRT-LSP-DOWN Alarm

Procedure

Perform any of the following, as appropriate:

- Verify that the LSP does not have any connectivity issues.
- Administratively shutdown the tunnel. Traffic drops when the tunnel is administratively shut down.

If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PRT-LSP-LDI

Default Severity: Not Alarmed (NA), Non-Service-Affecting (NSA)

Logical Object: PORT

The Protect Label-Switched Path Link Defect Indication (PRT-LSP-LDI) alarm is raised when the protect label-switched path (LSP) receives an LSP link defect indication signal. The PRT-LSP-LDI alarm suppresses the PRT-LSP-LKR alarm, if present.

Clear the PRT-LSP-LDI Alarm

Procedure

Perform any of the following, as appropriate:

- Verify that the LSP does not have any connectivity issues.
- Administratively shutdown the tunnel. Traffic drops when the tunnel is administratively shut down.

If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PRT-LSP-LKR

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: FAC

The Protect Label-Switched Path Lock Report (PRT-LSP-LKR) alarm is raised when an interface is administratively locked and a lockout request (LKR) is generated on the near reachable endpoint. The PRT-LSP-LKR alarm suppresses the PRT-LSP-LDI alarm, if present.

Clear the PRT-LSP-LKR Alarm

Procedure

Perform any of the following, as appropriate:

- Clear the lock out condition on the interface and LSP.
- Verify that the LSP does not have any connectivity issues.
- Administratively shutdown the tunnel. Traffic drops when the tunnel is administratively shut down.

If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PRT-PW-CC-DOWN

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: PORT

The Protect Pseudowire Continuity Check Down (PRT-PW-CC-DOWN) alarm is raised when the virtual circuit connectivity verification (VCCV) BFD fails on the port or when the port-channel is configured as attachment circuit (AC) port.

Clear the PRT-PW-CC-DOWN Alarm

Procedure

Activate the protect pseudowire continuity check.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PRT-PW-CP-DOWN

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: PORT

The Protect Pseudowire Control Plane Down (PRT-PW-CP-DOWN) alarm is raised on the port when the control plane of the protect pseudowire fails.

Clear the PRT-PW-CP-DOWN Alarm

Procedure

Activate the control plane of the protect pseudowire.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PRT-PW-LOC-AC-RX-FLT

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: PORT

The Protect Pseudowire Local AC RX Port Fault (PRT-PW-LOC-AC-RX-FLT) alarm is raised when the port fault on the receive side is detected on the local attachment circuit of the protect pseudowire.

Clear the PRT-PW-LOC-AC-RX-FLT Alarm

Procedure

Remove the port fault on the receive side that is detected on the local attachment circuit of the protect pseudowire.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

PRT-PW-LOC-AC-TX-FLT

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: PORT

The Protect Pseudowire Local AC TX Port Fault (PRT-PW-LOC-AC-TX-FLT) alarm is raised when the port fault on the transmit side is detected on the local attachment circuit of the protect pseudowire.

Clear the PRT-PW-LOC-AC-TX-FLT Alarm

Procedure

Remove the port fault on the transmit side that is detected on the local attachment circuit of the protect pseudowire.

If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

PRT-PW-REM-AC-RX-FLT

Default Severity: Not Alarmed (NA), Non-Service-Affecting (NSA)

Logical Object: PORT

The Protect Pseudowire Remote AC RX Port Fault (PRT-PW-REM-AC-RX-FLT) alarm is raised when the port fault on the receive side is detected on the remote attachment circuit of the protect pseudowire.

Clear the PRT-PW-REM-AC-RX-FLT Alarm

Procedure

Remove the port fault on the receive side that is detected on the remote attachment circuit of the protect pseudowire.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PRT-PW-REM-AC-TX-FLT

Default Severity: Not Alarmed (NA), Non-Service-Affecting (NSA)

Logical Object: PORT

The Protect Pseudowire Remote AC TX Port Fault (PRT-PW-REM-AC-TX-FLT) alarm is raised when the port fault on the transmit side is detected on the remote attachment circuit of the protect pseudowire.

Clear the PRT-PW-REM-AC-TX-FLT Alarm

Procedure

Remove the port fault on the transmit side that is detected on the remote attachment circuit of the protect pseudowire.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PRT-PW-RX-FLT

Default Severity: Major (MJ), Non-Service-Affecting (NSA)

Logical Object: PORT

The Protected Pseudowire RX Fault (PRT-PW-RX-FLT) alarm is raised when the state of the MPLS-TP tunnel, on which a protected pseudowire is created, is changed to DOWN.

Clear the PRT-PW-RX_FLT Alarm

Perform any of the following, as appropriate:

- Change the state of the MPLS-TP tunnel to UP.
- Delete the pseudowire.

If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PRT-REM-PW-NOT-FWD

Default Severity: Not Alarmed (NA), Non-Service-Affecting (NSA)

Logical Object: PTS

The Protect Remote Pseudowire Not Forwarding (PRT-REM-PW-NOT-FWD) alarm is raised when the remote protect pseudowire is not forwarding traffic.

Clear the PRT-REM-PW-NOT-FWD Alarm

Procedure

The alarm clears when the remote protect pseudowire starts forwarding traffic.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PRT-TP-LOCKOUT

Default Severity: Not Alarmed (NA), Non-Service-Affecting (NSA)

Logical Object: PORT

The Protect Transport Profile Lockout (PRT-TP-LOCKOUT) alarm is raised when the LOCK-OUT request is set to ON for the protect Multiprotocol Label Switching - Transport Profile (MPLS-TP).

Clear the PRT-TP-LOCKOUT Alarm

Procedure

Set the LOCK-OUT request to OFF for the protect MPLS-TP.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PTS-FAIL

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: EQPT, SLOT

The Packet Transport Service Failed (PTS-FAIL) alarm is raised under the following conditions:

- When there is no active fabric card present.
- When the fabric card is not up and working.

Clear the PTS-FAIL Alarm

Procedure

Reset and activate at least one fabric card.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

PW-DOWN

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: PORT

The Pseudowire Down (PW-DOWN) alarm is raised on the port when both the working and protect pseudowire has one of the following alarms:

- WKG-PW-CP-DOWN
- PRT-PW-CP-DOWN
- WKG-PW-CC-DOWN
- PRT-PW-CC-DOWN
- WKG-PW-LOC-AC-TX-FLT
- PRT-PW-LOC-AC-TX-FLT
- WKG-LOC-PW-NOT-FWD
- PRT-LOC-PW-NOT-FWD

Clear the PW-DOWN Alarm

Procedure

Clear the following alarms, as appropriate:

- Clear the WKG-PW-CP-DOWN Alarm
- Clear the PRT-PW-CP-DOWN Alarm
- Clear the WKG-PW-CC-DOWN Alarm
- Clear the PRT-PW-CC-DOWN Alarm
- Clear the WKG-PW-LOC-AC-TX-FLT Alarm
- Clear the PRT-PW-LOC-AC-TX-FLT Alarm
- Clear the WKG-LOC-PW-NOT-FWD Alarm
- Clear the PRT-LOC-PW-NOT-FWD Alarm

If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

PW-DP-FLT

Default Severity: Major (MJ), Non-Service-Affecting (NSA)

Logical Object: PORT

The Pseudowire Dataplane Fault (PW-DP-FLT) alarm is raised when the state of the MPLS-TP tunnel, on which a pseudowire is created, is changed to DOWN.

Clear the PW-DP-FLT Alarm

Perform any of the following, as appropriate:

- Change the state of the MPLS-TP tunnel to UP.
- Delete the pseudowire.

If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

PW-WKSWPR

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: PORT

The Pseudowire Traffic Switched to Protection (PW-WKSWPR) alarm is raised on the port when the pseudowire traffic is switched from the working path to the protected path.

Clear the PW-WKSWPR Alarm

Procedure

Switch the pseudowire traffic from the protected path to the working path.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

RAI

Default Severity: Not Affected(NA), Non-Service-Affecting (NSA)

Logical Object: TDM

The Remote Alarm Indication (RAI) alarm is raised when the received signal is degraded.

Clear the RAI Alarm

Procedure

The alarm gets clear when the high frequency signals are received.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

RDI

Default Severity: Not Affected (NA), Non-Service-Affecting (NSA)

Logical Object: TDM

The Remote Defect Indication (RDI) alarm is raised when the received signal is degraded.

Clear the RDI Alarm

Procedure

The alarm gets clear when the high frequency signals are received.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

RESOURCE-ALLOC-FAIL

Default Severity: Minor (MJ), Service-Affecting (SA)

Logical Object: EQPT

The Resource Allocation Failed (RESOURCE-ALLOC-FAIL) alarm is raised when Quality of Service (QoS) cannot be configured due to lack of resources.

Clear the RESOURCE-ALLOC-FAIL Alarm

Procedure

Find the resources that are using more memory and free up the memory.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

RESOURCES-GONE

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: EQPT

The No More Resources Available (RESOURCES-GONE) alarm is raised, if any of the following condition is there:

- If the resource memory is used completely.
- When resources cannot be configured.
- When SEU FPGA bit error detected on the PTF card. To confirm the SEU FPGA bit error, connect to the respective PTF card using IOS command and check for any alarm on LEONE FPGA using the command “fmea alarm”.

Clear the RESOURCES-GONE Alarm

Procedure

Perform any of the following, as appropriate:

- Find the resources that are using more memory and free up the memory.
- Incase of SEU FPGA bit error, reset the PTF card.

If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

RESOURCES-LOW

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: EQPT

The Running Low on Resources (RESOURCES-LOW) alarm is raised if the resource memory is very low or when more resources cannot be configured.

Clear the RESOURCES-LOW Alarm

Procedure

Find the resources that are using more memory and free up the memory.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

SAT-ACT-LINK-FAIL

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: FAC

The CPT 50 Panel Active Link Failure (SAT-ACT-LINK-FAIL) alarm is raised when the Satellite Discovery Protocol fails on an active link between the line card and the CPT 50 panel fails.

Clear the SAT-ACT-LINK-FAIL Alarm

Procedure

Activate the link between the line card and the CPT 50 panel.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

SAT-BAT-FAIL-A

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: EQPT

The CPT 50 Panel Battery Failure A (SAT-BAT-FAIL-A) alarm is raised when the battery A fails. This could be because the battery is removed or is not operational.

Clear the SAT-BAT-FAIL-A Alarm

Procedure

Step 1 At the site, verify if the battery is present and operational.

Step 2 Remove the power cable from the faulty supply. Reverse the power cable installation procedure.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

SAT-BAT-FAIL-B

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: EQPT

The CPT 50 Shelf Battery Failure B alarm occurs when battery B is down or not detected. This could be because the battery is removed or is not operational.

Clear the SAT-BAT-FAIL-B Alarm

Procedure

Activate the battery B of the CPT 50 panel.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

SAT-COMM-FAIL

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: EQPT, SLOT

The CPT 50 Panel Communication Failure (SAT-COMM-FAIL) alarm is raised when the Satellite Discovery Protocol fails on all the interconnect links that constitute a fan out group (FOG) are down.

Clear the SAT-COMM-FAIL Alarm

Procedure

Activate at least one of the interconnect links that constitute a FOG.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

SAT-FAN-DEGRADE

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: EQPT, SLOT

The CPT 50 Panel Partial Fan Failure (SAT-FAN-DEGRADE) alarm is raised when the fan-tray assembly partially fails or degrades.

Clear the SAT-FAN-DEGRADE Alarm

Procedure

Replace the fan-tray assembly in the CPT 50 panel.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

SAT-FAN-FAIL

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: EQPT, SLOT

The CPT 50 Panel Fan Failure (SAT-FAN-FAIL) alarm is raised when there is a faulty fan-tray assembly.

Clear the SAT-FAN-FAIL Alarm

Procedure

Repair or replace the fan-tray assembly in the CPT 50 panel.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into

http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

SAT-FAN-MEA

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: EQPT, SLOT

The CPT 50 Panel Fan Mismatch of Equipment and Attributes (SAT-FAN-MEA) alarm is raised when there is a mismatch between the CPT 50 panel and the fan-tray assembly.

Clear the SAT-FAN-MEA Alarm

Procedure

Insert the correct fan-tray assembly in the CPT 50 panel.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

SAT-FAN-MFGMEM

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: EQPT, SLOT

The CPT 50 Panel Fan Manufacturing Data Memory (EEPROM) Failure (SAT-FAN-MFGMEM) alarm is raised when the fan-tray assembly manufacturing data memory (or EEPROM) fails.

Clear the SAT-FAN-MFGMEM Alarm

Procedure

Recover the fan-tray assembly manufacturing data memory (or EEPROM).
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

SAT-FAN-MISSING

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: EQPT, SLOT

The CPT 50 Panel Fan Unit is Missing (SAT-FAN-MISSING) alarm is raised when the fan-tray assembly is not present in the CPT 50 panel.

Clear the SAT-FAN-MISSING Alarm

Procedure

Insert the fan-tray assembly in the CPT 50 panel.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

SAT-HITEMP

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: EQPT, SLOT

The CPT 50 Panel Fan High Temperature (SAT-HITEMP) alarm is raised when the temperature of the CPT 50 panel is above 149 degrees Fahrenheit (65 degrees Celsius) or below –40 degrees Fahrenheit (–40 degrees Celsius).

Clear the SAT-HITEMP Alarm

Procedure

Complete the Clear the SAT-IHITEMP Alarm procedure.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

SAT-IHITEMP

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: EQPT, SLOT

The CPT 50 Panel Fan Industrial High Temperature (SAT-IHITEMP) alarm is raised when the temperature of the CPT 50 panel is above 122 degrees Fahrenheit (50 degrees Celsius).

Clear the SAT-IHITEMP Alarm

Procedure

Step 1 Verify that the environmental temperature of the room is not abnormally high.

Step 2 If the room temperature is not abnormal, physically ensure that nothing prevents the fan-tray assembly from passing air through the CPT 50 panel

Step 3 If the airflow is not blocked, physically ensure that blank faceplates fill the CPT 50 panel empty slots. Blank faceplates help airflow.

Step 4 If faceplates fill the empty slots, determine whether the air filter needs replacement.

Step 5 If the fan does not run or the alarm persists, replace the fan-tray assembly.
The fan should run immediately when correctly inserted.

If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

SAT-IMPROPER-CONFIG

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: EQPT, SLOT

The CPT 50 Panel Improper Configuration (SAT-IMPROPER-CONFIG) alarm is raised when the CPT 50 panel is configured incorrectly.

Clear the SAT-IMPROPER-CONFIG Alarm

Procedure

Verify the following:

- The CTP 50 panel has a unique FOG identifier.
- All interconnect links on the CPT 50 panel are part of a single FOG.
- Interconnect links on the CPT 50 panel is connected to only one card (fabric card or line card).

If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

SINGLE-SPAN-FAIL

Default Severity: Major (MJ), Non-Service-Affecting (NSA)

Logical Object: RING

The Single Span Failure (SINGLE-SPAN-FAIL) alarm is raised when a single link of a ring is down.

Clear the SINGLE-SPAN-FAIL Alarm

Procedure

Activate the link of the ring that is down.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

SLA-TCA

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: PTS

The Service Level Agreement-Threshold Crossover (SLA-TCA) alarm is raised when the configured rising threshold for the IP SLA Delay Management (DM) session is exceeded.

Clear the SLA-TCA Alarm

Perform any of the following, as appropriate:

- Ensure that the measured delay is less than the falling threshold.
- Restart the SLA session.
- Delete the SLA session.

Note To clear the SLA-TCA alarm from CTC, ensure that the alarm condition does not exist for any IP SLA session.

If the alarm does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country in order to report a Service-affecting (SA) problem.

TEMP-LIC

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: EQPT

The Temporary License (TEMP-LIC) alarm is raised to indicate that a valid temporary license is in use.

Clear the TEMP-LIC Alarm

Procedure

Procure and install a permanent license. For more information on installing a license, see the Licensing Configuration guide.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

Terminal Loopback

Default Severity: Not Alarmed (NA), Non-Service-Affecting (NSA)

Logical Object: TDM

The Terminal Loopback alarm is raised when the software terminal (inward) loopback is active for a port.

Clear the Terminal Loopback Alarm

Procedure

Correct the terminal (inward) loopback configuration for a port.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

TE-TUNNEL-DOWN

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: PTS

The TE Tunnel Down (TE-TUNNEL-DOWN) alarm is raised when the working or protect Multiprotocol Label Switching - Label-Switched Path (MPLS-LSP) is inactive. Traffic will be down.

Clear the TE-TUNNEL-DOWN Alarm

Procedure

Perform any of the following, as appropriate:

- Verify that the LSP does not have any connectivity issues.
- Administratively shut down the tunnel. Traffic drops when the tunnel is administratively shut down.

If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

TOPO-MIS-CONF

Default Severity: Critical (CR), Service-Affecting (SA)

Logical Object: RING

The Topology Misconfiguration (TOPO-MIS-CONF) alarm is raised when the topology discovery detects the topology with any of these conditions:

- Some provisioned nodes are missing from the network.
- Some un-provisioned nodes exist in the network.
- Actual configuration of the nodes is different from the provisioned configuration.

Clear the TOPO-MIS-CONF Alarm

Procedure

Either change the topology of the nodes according to the actual configuration, or re-configure the nodes according to the topology in the network.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

TP-TUNNEL-DOWN

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: PTS

The MPLS-TP Tunnel Down (TP-TUNNEL-DOWN) alarms is raised when the working or protect label-switched path (LSP) is inactive. Traffic will be down.

Clear the TP-TUNNEL-DOWN Alarm

Procedure

Perform any of the following, as appropriate:

- Verify that the LSP does not have any connectivity issues.
- Administratively shut down the tunnel. Traffic drops when the tunnel is administratively shut down.

If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

TP-WKSPWR

Default Severity: Not Alarmed (NA), Non-Service-Affecting (NSA)

Logical Object: PORT

The Transport Profile Traffic Switched to Protection (TP-WKSPWR) alarm is raised when the MPSL-TP traffic switches from the working pseudowire to the protected pseudowire.

Clear the TP-WKSPWR Alarm

Procedure

Switch traffic from the protected pseudowire to the working pseudowire.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

WKG-LOC-PW-NOT-FWD

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: PTS

The Working Local Pseudowire Not Forwarding (WKG-LOC-PW-NOT-FWD) alarm is raised when the local working pseudowire is not forwarding traffic.

Clear the WKG-LOC-PW-NOT-FWD Alarm

Procedure

Perform any of the following, as appropriate:

- Verify that the pseudowire does not have any connectivity issues.
- Verify that the LSP does not have any connectivity issues.
- Administratively shut down the tunnel. Traffic drops when the tunnel is administratively shut down.

If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

WKG-LSP-DOWN

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: PORT

The Working Label-Switched Path Down (WKG-LSP-DOWN) alarm is raised on the port if the working label-switched path (LSP) is inactive.

Clear the WKG-LSP-DOWN Alarm

Procedure

Perform any of the following, as appropriate:

- Verify that the LSP does not have any connectivity issues.
- Administratively shut down the tunnel. Traffic drops when the tunnel is administratively shut down.

If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

WKG-LSP-LDI

Default Severity: Not Alarmed (NA), Non-Service-Affecting (NSA)

Logical Object: PORT

The Working Label-Switched Path Link Defect Indication (WKG-LSP-LDI) alarm is raised when the working label switched path (LSP) receives an LSP link defect indication signal. The WKG-LSP-LDI alarm suppresses the WKG-LSP-LKR alarm, if present.

Clear the WKG-LSP-LDI Alarm

Procedure

Perform any of the following, as appropriate:

- Verify that the LSP does not have any connectivity issues.
- Administratively shut down the tunnel. Traffic drops when the tunnel is administratively shut down.

If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

WKG-LSP-LKR

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: FAC

The Working Label-Switched Path Lock Report (WKG-LSP-LKR) alarm is raised when an interface is administratively shut down on a working path in an MPLS-TP tunnel. The WKG-LSP-LKR alarm suppresses the WKG-LSP-LDI alarm, if present.

Clear the WKG-LSP-LKR Alarm

Procedure

Perform any of the following, as appropriate:

- Verify that the LSP does not have any connectivity issues.
- Administratively shut down the tunnel. Traffic drops when the tunnel is administratively shut down.

If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

WKG-PW-CC-DOWN

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: PORT

The Working Pseudowire Continuity Check Down (WKG-PW-CC-DOWN) alarm is raised when the virtual circuit connectivity verification (VCCV) BFD fails on the port or when the port-channel is configured as AC port.

Clear the WKG-PW-CC-DOWN Alarm

Procedure

Activate the working pseudowire continuity check.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

WKG-PW-CP-DOWN

Default Severity: Minor (MN), Non-Service-Affecting (NSA)

Logical Object: PORT

The Working Pseudowire Control Plane Down (WKG-PW-CP-DOWN) alarm is raised on the port when the control plane of the working pseudowire fails.

Clear the WKG-PW-CP-DOWN Alarm

Procedure

Activate the control plane of the working pseudowire.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

WKG-PW-LOC-AC-RX-FLT

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: PORT

The Working Pseudowire Local AC RX Port Fault (WKG-PW-LOC-AC-RX-FLT) alarm is raised when the port fault on the receive side is detected on the local attachment circuit of the working pseudowire.

Clear the WKG-PW-LOC-AC-RX-FLT Alarm

Procedure

Remove the port fault on the receive side that is detected on the local attachment circuit of the working pseudowire.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

WKG-PW-LOC-AC-TX-FLT

Default Severity: Major (MJ), Service-Affecting (SA)

Logical Object: PORT

The Working Pseudowire Local AC TX Port Fault (WKG-PW-LOC-AC-TX-FLT) alarm is raised when the port fault on the transmit side is detected on the local attachment circuit of the working pseudowire.

Clear the WKG-PW-LOC-AC-TX-FLT Alarm

Procedure

Remove the port fault on the transmit side that is detected on the local attachment circuit of the working pseudowire.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

WKG-PW-REM-AC-RX-FLT

Default Severity: Not Alarmed (NA), Non-Service-Affecting (NSA)

Logical Object: PORT

The Working Pseudowire Remote AC RX Port Fault (WKG-PW-REM-AC-RX-FLT) alarm is raised when the port fault on the receive side is detected on the remote attachment circuit of the working pseudowire.

Clear the WKG-PW-REM-AC-RX-FLT Alarm

Procedure

Remove the port fault on the receive side that is detected on the remote attachment circuit of the working pseudowire.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

WKG-PW-REM-AC-TX-FLT

Default Severity: Not Alarmed (NA), Non-Service-Affecting (NSA)

Logical Object: PORT

The Working Pseudowire Remote AC TX Port Fault (WKG-PW-REM-AC-TX-FLT) alarm is raised when the port fault on the transmit side is detected on the remote attachment circuit of the working pseudowire.

Clear the WKG-PW-REM-AC-TX-FLT Alarm

Procedure

Remove the port fault on the transmit side that is detected on the remote attachment circuit of the working pseudowire.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

WKG-PW-RX-FLT

Default Severity: Major (MJ), Non-Service-Affecting (NSA)

Logical Object: PORT

The Working Pseudowire RX Fault (WKG-PW-RX-FLT) alarm is raised when the state of the MPLS-TP tunnel, on which a working pseudowire is created, is changed to DOWN.

Clear the WKG-PW-RX-FLT Alarm

Perform any of the following, as appropriate:

- Change the state of the MPLS-TP tunnel to UP.
- Delete the pseudowire.

If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

WKG-REM-PW-NOT-FWD

Default Severity: Not Alarmed (NA), Non-Service-Affecting (NSA)

Logical Object: PTS

The Working Remote Pseudowire Not Forwarding (WKG-REM-PW-NOT-FWD) alarm is raised when the remote working pseudowire is not forwarding traffic.

Clear the WKG-REM-PW-NOT-FWD Alarm

Procedure

The alarm clears when the remote working pseudowire starts forwarding traffic.
If the condition does not clear, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or call Cisco TAC (1 800 553-2447).

WKG-TP-LOCKOUT

Default Severity: Not Alarmed (NA), Non-Service-Affecting (NSA)

Logical Object: PORT

The Working Transport Profile Lockout (WKG-TP-LOCKOUT) alarm is raised when the LOCK-OUT request is set to ON for the working MPLS-TP.

Clear the WKG-TP-LOCKOUT Alarm

Procedure

Set the LOCK-OUT request to OFF for the working MPLS-TP.
If the alarm does not get cleared, you need to report a Service-Affecting (SA) problem. Log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information or log into http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html to obtain a directory of toll-free Technical Support numbers for your country.

NTP-J73 Display Alarms that Affect Services Using CTC

Purpose	This procedure displays the alarms that affect the services.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Procedure

Step 1 Complete the NTP-J22 Log into CTC procedure at a node on the network where you want to display the alarms that affect the services.

Step 2 Right-click the fabric or line card and choose **Open Packet Transport System View**. The Packet Transport System View dialog box appears.

Step 3 Click the **Service Level Alarm** tab.

Step 4 In the Retrieve Alarm Affecting Services area, click **PT System** or **Port** or **Channel Group**.

Step 5 (Only for Port) From the Slot drop-down list, choose a slot.

Step 6 (Only for Port) From the Port drop-down list, choose a port.

Step 7 From the Service Type drop-down list, choose an appropriate service (EVC, PW, TUNNEL–TE, or TUNNEL–TP)

Step 8 From the Service Alarm drop-down list, choose an appropriate service alarm.
The service alarms are populated based on the chosen service type.

Step 9 Click **Show**.
The alarm affecting services are displayed.

NTP-J74 Display Alarms on Service Using CTC

Purpose	This procedure displays the alarms that are on service.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote

Security Level	Provisioning or higher

Procedure

Step 1 Complete the NTP-J22 Log into CTC procedure at a node on the network where you want to display the alarms that are on service.

Step 2 Right-click the fabric or line card and choose **Open Packet Transport System View**. The Packet Transport System View dialog box appears.

Step 3 Click the **Service Level Alarm** tab.

Step 4 In the Retrieve Alarms on Service area, click **PT System** or **Port** or **Channel Group**.

Step 5 (Only for Port) From the Slot drop-down list, choose a slot.

Step 6 (Only for Port) From the Port drop-down list, choose a port.

Step 7 From the Service Type drop-down list, choose an appropriate service (EVC, PW, TUNNEL–TE, or TUNNEL–TP)

Step 8 Enter the service ID in the Service ID field.

Step 9 Click **Show**.
The alarms that are on service are displayed.