Alarm Troubleshooting

This chapter provides a description, severity, and troubleshooting procedure for each commonly encountered Cisco NCS 1004 alarm and condition. When an alarm is raised, refer to its clearing procedure.

AIS

Default Severity: Major

Logical Object: CLIENT

AIS

The Alarm Indication Signal (AIS) condition indicates that this node is detecting an alarm indication signal in the incoming signal SONET overhead. Generally, any AIS is a special SONET signal that communicates

to the receiving node when the transmit node does not send a valid signal. AIS is not considered an error. It is raised by the receiving node on each input when it detects the AIS instead of a real signal. In most cases when this condition is raised, an upstream node is raising an alarm to indicate a signal failure; all nodes downstream from it only raise some type of AIS. This condition clears when you resolve the problem on the upstream node.

AIS-L

The AIS Line condition indicates that this node is detecting line-level AIS in the incoming signal. This alarm is secondary to another alarm occurring simultaneously in an upstream node. This condition can also be raised in conjunction with the TIM-S alarm if AIS-L is enabled.

MS-AIS

The Multiplex Section (MS) AIS condition indicates that there is a defect in the multiplexing section layer of the SONET overhead. The multiplex section refers to the segment between two SONET devices in the circuit and is also known as a maintenance span. The multiplex section layer of the SONET overhead deals with payload transport, and its functions include multiplexing and synchronization.

Clear the AIS-L Alarm

Procedure

Step 1 Verify that the remote configuration is correct.

Step 2 Check the line status at the remote end of the link.

If the alarm does not clear, log in to the Technical Support Website at http://www.cisco.com/c/en/us/support/index.html for more information or call Cisco TAC (1 800 553-2447).

XGE_EEPROM_ERROR

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

Logical Object: SC

XGE_EEPROM_ERROR is raised when system detects the XGE EEPROM corruption.

Clear the XGE_EEPROM_ERROR Alarm

Procedure

This alarm is cleared after the XGE EEPROM corruption is cleared.

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

AVST-Failure Alarm

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

Logical Object: LC

An AVST-Failure alarm is raised when the FPGA configuration fails on the line card inserted on any port from 0 to 13.

Clear the AVST-FAILURE Alarm

Copy the **Datapath FPGA** file to the /emmcdata/fpd location for the line card.

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

BH-CARD-NOT-SEATED

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

Logical Object: LC

The BH-CARD-NOT-SEATED alarm is raised when the line card is not inserted completely into the chassis.

Clear the BH-CARD-NOT-SEATED Alarm

Procedure

This alarm is cleared when the line card is reinserted properly into the chassis.

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

BH-CARD-POWER-OFF-STATUS

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

Logical Object: LC

The BH-CARD-POWER-OFF-STATUS alarm is raised in the following conditions: a. When you perform a line card shut operation b. When the line card fails to get the power allocation due to power budget.

Clear the BH-CARD-POWER-OFF-STATUS Alarm

Procedure

This alarm is cleared when line card is reloaded, OIR of the line card, or if the line card is successful in getting the power allocation.

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

BH-CARD-PWR-ON-TIMEOUT

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

Logical Object: LC

The BH-CARD-PWR-ON-TIMEOUT alarm is raised if there is a delay in getting the PWR_ON request from the shelf_mgr.

Clear the BH-CARD-PWR-ON-TIMEOUT Alarm

Procedure

This alarm is cleared immediately after the PWR_ON request is received from the shelf_mgr.

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

BH-CPU-CARD-NOT-SEATED

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

Logical Object: RP

The BH-CPU-CARD-NOT-SEATED alarm is raised when the CPU card is not inserted completely into the chassis.

Clear the BH-CPU-CARD-NOT-SEATED Alarm

Procedure

This alarm is cleared when the CPU card is reinserted properly by removing it and reinserting it into the chassis.

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

BH-INVALID-CARD-SLOT

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

Logical Object: LC

The BH-INVALID-CARD-SLOT alarm is raised when the line card EEPROM is corrupted or when the line card fails to connect within the timeout period of a maximum of two minutes.

Clear the BH-INVALID-CARD-SLOT Alarm

Procedure

This alarm is cleared when the line card is inserted with the proper EEPROM.

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

BIOS-IMAGE-CORRUPTION

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

Logical Object: RP

The BIOS-IMAGE-CORRUPTION alarm is raised when the BIOS image is corrupted and system is booted with the Golden image.

Clear the BIOS-IMAGE-CORRUPTION Alarm

Procedure

This alarm is cleared after the BIOS corruption is corrected and reloaded.

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

BP_FPGA-SEU-UNCORRECTED-ERROR

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

Logical Object: SC

The BP_FPGA-SEU-UNCORRECTED-ERROR alarm is raised when the BP detects the corruption of the FPGA.

Clear the BP_FPGA-SEU-UNCORRECTED-ERROR Alarm

Procedure

This alarm is cleared when the hardware corrects the FPGA corruption.

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

BP-FPGA-ERROR

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

Logical Object: SC

The BP-FPGA-ERROR alarm is raised when the BP FPGA SPI flash is not accesible.

Clear the BP-FPGA-ERROR Alarm

Procedure

This alarm is cleared when the BP FPGA SPI Flash error is corrected.

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

CD Alarm

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

Logical Object: TRUNK

The Chromatic Dispersion (CD) alarm is raised when the detected chromatic dispersion value is above or below the configured threshold values.

Clear the CD Alarm

Procedure

Configure threshold value within range if CD value is not within the threshold range.

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

CPU-FPGA-PCIE-ERROR

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

Logical Object: RP

The CPU-FPGA-PCIE-ERROR alarm is raised when the device goes out of the PCIe tree.

Clear the CPU-FPGA-PCIE-ERROR Alarm

Procedure

This alarm is cleared when the device comes back to the PCIe tree.

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

CPU-FLASH-0-ERROR

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

Logical Object: RP

The CPU-FLASH-0-ERROR alarm is raised when the BIOS upgrade flash is not accessible.

Clear the CPU-FLASH-0-ERROR Alarm

Procedure

This alarm is cleared when the BIOS upgrade flash access is restored.

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

CPU-FLASH-1-ERROR

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

Logical Object: RP

The CPU-FLASH-1-ERROR alarm is raised when BIOS primary is not accessible.

Clear the CPU-FLASH-1-ERROR Alarm

Procedure

This alarm is cleared when the BIOS primary flash access is restored.

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

CPU_SSD_ATA-ERRORS Alarm

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

Logical Object: LC

The CPU_SSD_ATA-ERRORS alarm is raised when the CPU Solid State Disk (SSD) has ATA errors.

Clear the CPU_SSD_ATA-ERRORS Alarm

Procedure

The CPU_SSD_ATA-ERRORS alarm is cleared when the CPU SSD is replaced.

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

CPU_SSD-TEMPERATURE_HIGH Alarm

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

Logical Object: LC

The CPU_SSD-TEMPERATURE_HIGH alarm is raised when the CPU SSD temperature is high.

Clear the CPU_SSD-TEMPERATURE_HIGH Alarm Alarm

Procedure

The CPU_SSD-TEMPERATURE_HIGH alarm is cleared when the CPU SSD temperature returns to the normal range.

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

CRYPTO_HW_FAILURE

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

Logical Object: Shelf

The CRYPTO_HW_FAILURE alarm is raised whenever any one of the line card port related KAT tests fail and the card is locked that prevents any card configurations.

Clear the CRYPTO_HW_FAILURE Alarm

Procedure

If the line card is locked and in failed state due to KAT errors, power-cycle the line card to restart the KAT process again. If it is successful, the system continues its regular operations else contact TAC for further assistance.

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

CRYPTO-INDEX-MISMATCH

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

Logical Object: OTN

The CRYPTO-INDEX-MISMATCH alarm is raised when the AN# of Rx on the near end node does not match the AN# of Tx on the far end node, or

the AN# of Tx on the near end node does not match with the AN# of Rx on the far end node.

Note The CRYPTO-INDEX-MISMATCH alarm is interchangeably known as OTN-Sec-Association-Mismatch alarm.

Clear the CRYPTO-INDEX-MISMATCH Alarm

Procedure

The alarm is cleared when the index AN numbers match with the peer node.

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

CRYPTO-KEY-EXPIRED

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

Logical Object: OTN

The CRYPTO-KEY-EXPIRED alarm is raised when a hardware programmed key expires and there is no new key available for rollover.

Clear the CRYPTO-KEY-EXPIRED Alarm

Procedure

The alarm is cleared after the new sak key is made available.

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

DISASTER-RECOVERY-DISABLED Alarm

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

Logical Object: SC

The **Disaster recovery is disabled due to corrupted ISO** alarm is raised when the backup ISO image is not properly backed up and is corrupted.

Clear the DISASTER-RECOVERY-DISABLED Alarm

To clear the alarm, log in to the Technical Support Website at http://www.cisco.com/c/en/us/support/index.html for more information or call Cisco TAC (1 800 553-2447).

DATAPATH-DEV-FAILURE Alarm

Default Severity: Major (MJ)

Logical Object: LC

The DATAPATH-DEV-FAILURE alarm is raised when the datapath FPGA fails to configure on the line card inserted, which will imapct ports from 0 - 13.

Clear the DATAPATH-DEV-FAILURE Alarm

Reload the line card.

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

DGD Alarm

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

Logical Object: TRUNK

The Differential Group Delay (DGD) alarm is raised when the value of the differential group delay read by the pluggable port module exceeds the configured threshold value.

Clear the DGD Alarm

Procedure

Configure the threshold value within range if DGD value is not within the threshold range.

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

EQUIPMENT_FAILURE

Default Severity: Major/Minor (MJ/MI), Service-Affecting (SA) / Non Service-Affecting(NSA)

Logical Object: LC

The EQUIPMENT_FAILURE alarm is raised when an optical module, PLL device, CDR device, line card RAM device, line card, FPGA, or line card disk has failed.

Clear the EQUIPMENT_FAILURE Alarm

Procedure

This alarm is cleared when the failed device is recovers.

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

EQUIPMENT-FAILURE Alarm

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

Logical Object:

The EQUIPMENT-FAILURE alarm is raised because of one of these reasons:

- When the system fails to detect equipment on IO port 12.
- When the system fails to detect equipment on IO port 13.
- When a software sequence failure occurs on any port from 0 - 13, and it fails to turn on the motherboard successfully.

Clear the EQUIPMENT-FAILURE Alarm

Reload the line card.

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

FAN FAIL Alarm

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

Logical Object: ENVMON

The FAN FAIL alarm is raised on the NCS 1004 when one of the three fans fail. When any fan fails, the temperature of the NCS 1004 can rise above its normal operating range. This condition can trigger the TEMPERATURE alarm.

Clear the FAN FAIL Alarm

Procedure

Verify that a fan is correctly inserted. The fan should run immediately when correctly inserted.

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

FAN-POWER-ERROR

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

Logical Object: Environ

The FAN-POWER-ERROR alarm is raised when POWER to FT has failed.

Clear the FAN-POWER-ERROR Alarm

Procedure

This alarm Is cleared when the power failure is recovered or OIR of the FT.

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

FAN SPEED SENSOR 0: OUT OF TOLERANCE FAULT Alarm

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

Logical Object: Environ

The FAN SPEED SENSOR 0: OUT OF TOLERANCE FAULT alarm is raised when one or more fans in the fan tray are faulty.

Clear the FAN SPEED SENSOR 0: OUT OF TOLERANCE FAULT Alarm

Procedure

Replace the fans in the chassis.

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

FAN-TRAY-REMOVAL Alarm

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

Logical Object: Environ

The FAN-TRAY-REMOVAL alarm is raised on the NCS 1004 when all the fan trays are removed from the chassis.

Clear the FAN-TRAY-REMOVAL Alarm

Procedure

Insert the fan trays into the chassis.

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

Flexo-LOF Alarm

Default Severity: Critical

Logical Object: Trunk

Flexo LOF alarm is raised when loss of alignment is detected on the Flexo frame for more than 3ms.

Clear the Flexo-LOF Alarm

Procedure

Identify and correct the underlying cause of mis-alignment. The Flexo LOF (Loss of Frame) alarm is cleared when good alignment is detected on the Flexo frame for more than 3ms.

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

Flexo-LOM Alarm

Default Severity: Critical

Logical Object: Trunk

Flexo LOM (Loss of Multi-Frame) is raised when loss of multi-frame alignment is detected on the Flexo multi-frame for more than 10ms

Clear the Flexo-LOM Alarm

Procedure

Identify and correct the underlying cause of mis-alignment. The Flexo LOM alarm is cleared when good multi-frame alignment is detected on the Flexo multi-frame.

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

Flexo MM Alarm

Default Severity: Critical

Logical Object: Trunk

The Flexo MM alarm is raised when the received Flexo Map is not equal to the expected Flexo Map.

Clear the Flexo-MM Alarm

Procedure

The Flexo-MM alarm is cleared when the received Flexo MAP is equal to the expected Flexo MAP. Ensure that the IID programmed on the remote trunk and the local trunk ports match.

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

GIDM Alarm

Default Severity: Critical

Logical Object: Trunk

The GIDM (Group ID Mismatch) alarm is raised when the received GID is not equal to the expcted GID.

Clear the GIDM Alarm

Procedure

The GIDM alarm is cleared when the received GID is equal to the expected GID on all the flexo group members. Ensure that the GID programmed on the remote trunk and local trunk ports match.

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

FPD IN NEED UPGD Alarm

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

Logical Object: ANY

The FPD IN NEED UPGD alarm is raised when the FPD image is not aligned with the avaliable package version.

Clear the FPD IN NEED UPGD Alarm

Procedure

Upgrade the respective FPD with the **upgrade hw-module location 0/x fpd y** command.

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

FPD Infra Alarm

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

Logical Object: ANY

The FPD Infra alarm is raised when LC_CPU_MOD_FW is corrupt and the system is booted with golden copy.

Clear the FPD Infra Alarm

Procedure

You must do FPD upgrade to clear the alarm.

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

HIBER Alarm

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

Logical Object: CLIENT

The High Bit Error Rate (HIBER) alarm is raised when the client and trunk ports receive 16 or more invalid sync-headers in 125 microseconds.

Clear the HIBER Alarm

Procedure

Step 1 Ensure the card port does not receive a high bit error rate.

Step 2 Clean the optical connectors.

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

HI-SER Alarm

Default Severity: Major

Logical Object: Client

The High Symbol Error Rate alarm is raised when 5560 or more errored FEC symbols are present in 8000 codewords.

Clear the HI-SER Alarm

Procedure

Identify the cause of high FEC errors and clear them.

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

HI-LASERBIAS Alarm

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

Logical Object: PPM

The HI-LASERBIAS alarm is raised when the physical pluggable port laser detects a laser bias value beyond the configured high threshold.

Clear the HI-LASERBIAS Alarm

Procedure

Configure the threshold value within range if high laser bias threshold value is not within the threshold range.

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

HI-RXPOWER Alarm

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

Logical Object: PPM

The HI-RXPOWER alarm occurs on the client optics controller when the measured individual lane optical signal power of the received signal exceeds the default or user-defined threshold. The HI-RXPOWER alarm occurs on the trunk optics controller when the total optical signal power of the received signal exceeds the default or user-defined threshold.

Clear the HI-RXPOWER Alarm

Procedure

Configure the high receive power threshold value in range. If the value is within the range of the high receive power threshold, physically verify, that the optical input power is overcoming the expected power threshold using a standard power meter.

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

HI-TXPOWER Alarm

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

Logical Object: PPM

The HI-TXPOWER alarm occurs on the client optics controller when the measured individual lane optical signal power of the transmitted signal exceeds the default or user-defined threshold. The HI-TXPOWER alarm occurs on the trunk optics controller when the total optical signal power of the transmitted signal exceeds the default or user-defined threshold.

Clear the HI-TXPOWER Alarm

Procedure

Configure the high transmit power threshold in range. If the value is within the range of the high transmit power threshold, physically verify, that the optical output power is overcoming the expected power threshold using a standard power meter .

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

IMPROPRMVL Alarm

Default Severity: Critical(CR), Service affecting (SA)

Logical Object: LC

The IMPROPRMVL Alarm is raised when the configured line card is physically removed from the chassis.

Clear the IMPROPRMVL Alarm

Procedure

The IMPROPRMVL Alarm is cleared when the line card is re-inserted into the chassis.

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

IMPROPRMVL Alarm

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

Logical Object: PPM

The Improper Removal (IMPROPRMVL) alarm is raised when a physical pluggable is not present on a service-provisioned port.

Clear the IMPROPRMVL Alarm

Procedure

Insert the appropriate QSFP.

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

INSTALL IN PROGRESS Alarm

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

Logical Object: Environ

The INSTALL IN PROGRESS alarm is raised when the install operation is in progress or if an install commit is not performed after activating a new image or package.

Clear the INSTALL IN PROGRESS Alarm

Procedure

Step 1 Wait until the install operation is over.

Step 2 Perform the "install commit" operation after the "install activate" operation.

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

BP-FPGA-PCIE-ERROR

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

Logical Object: SC

The BP-FPGA-PCIE-ERROR alarm is raised when the BP device goes out of the PCIe tree.

Clear the BP-FPGA-PCIE-ERROR Alarm

Procedure

This alarm is cleared when the BP device comes back to the PCIe tree.

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

BP-FPGA-IMAGE-CORRUPTION

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

Logical Object: SC

The BP-FPGA-IMAGE-CORRUPTION alarm is raised when the system detects the BP corruption and boots with the Golden image.

Clear the BP-FPGA-IMAGE-CORRUPTION Alarm

Procedure

This alarm is cleared after the BP corruption is corrected and reloaded.

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

BP_FPGA_XR_EP-FPGA-PCIE-ERROR

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

Logical Object: SC

The BP_FPGA_XR_EP-FPGA-PCIE-ERROR alarm is raised when the BP device XR end point goes out of the PCIe tree.

Clear the BP_FPGA_XR_EP-FPGA-PCIE-ERROR Alarm

Procedure

This alarm is cleared when BP device XR end point comes back to the PCIe tree.

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

LCMODE-CONFIG-CHANGED Alarm

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

Logical Object: EQPT

The LCMODE-CONFIG-CHANGED alarm is raised when the LC Mode configuration of the line card is changed.

Note This alarm is specific to OTN-XP line card on NCS 1004. It is not supported for 1.2T card.

Clear the LCMODE-CONFIG-CHANGED Alarm

Delete the existing configuration on the line card and reload the card.

LCMODE-CONFIG-INVALID Alarm

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

Logical Object: EQPT

The LCMODE-CONFIG-INVALID alarm is raised when the LC-MODE configuration is invalid for the chosen line card.

Note This alarm is specific to OTN-XP line card on NCS 1004. It is not supported for 1.2T card.

Clear the LCMODE-CONFIG-INVALID Alarm

Configure the line card with a configuration that is supported on the card.

LCMODE-NOT-CONFIG Alarm

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

Logical Object: EQPT

The LCMODE-NOT-CONFIG alarm is raised when the LC-MODE configuration is not successfully configured for the chosen line card.

Note This alarm is specific to OTN-XP Line card on NCS 1004. It is not supported for 1.2T card.

Clear the LCMODE-NOT-CONFIG Alarm

Configure the line card with a configuration that is supported on the card.

LC_BOOT_TIMEOUT Alarm

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

Logical Object: LC

The LC_BOOT_TIMEOUT Alarm is raised when the line card fails to boot in the expected amount of time or when the line card modules do not boot correctly.

Clear the LC_BOOT_TIMEOUT Alarm Alarm

Procedure

The LC_BOOT_TIMEOUT alarm is cleared when the line card successfully reboots.

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

LC-CPU-IMAGE-CORRUPTION

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

Logical Object: LC

The LC-CPU-IMAGE-CORRUPTION alarm is raised when the line card is booted with the Golden image.

Clear the LC-CPU-IMAGE-CORRUPTION Alarm

Procedure

This alarm is cleared when the line card boots with a proper CPU image.

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

LC-DP-IMAGE-CORRUPTION Alarm

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

Logical Object: EQPT

The LC-DP-IMAGE-CORRUPTION alarm is raised when the Datapath FPGA bootup with back up or golden image due to corruption of primary image.

Clear the LC-DP-IMAGE-CORRUPTION Alarm

Perform a force upgrade of DP FPD to load proper image to the line card.

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

TEMPERATURE Alarm

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

Logical Object: Environ

The TEMPERATURE alarm is raised when the temperature is not within the operating range.

Clear the TEMPERATURE Alarm

Procedure

This alarm clears when the temperature falls within the operating range.

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

LC-DISCONNECTED

Default Severity: Major (MJ)

Logical Object: LC

The LC-DISCONNECTED alarm is raised in IOS XR if the Line Card Application (LCAPP) crashes or restarts.

Clear the LC- DISCONNECTED Alarm

Procedure

The LC-DISCONNECTED alarm is raised until the LCAPP connects back to the line card. The administrator must log in to the line card and verify if the LCAPP is running fine.

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

LC-OFFLINE-ERROR

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

Logical Object: LC

The LC-OFFLINE-ERROR alarm is raised when the LC app is disconnected due to lcapp crash, restart, or warm reload of lcapp.

Clear the LC-OFFLINE-ERROR Alarm

Procedure

This alarm is cleared if the LC app connects within one minute.

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

LC-SUDI-CERT-VERIFICATION-FAILURE Alarm

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

Logical Object: LC

The LC-SUDI-CERT-VERIFICATION-FAILURE alarm is raised when the SUDI certificates are not programmed.

Clear the LC-SUDI-CERT-VERIFICATION-FAILURE Alarm

To clear the alarm, log into the Technical Support Website at http://www.cisco.com/c/en/us/support/index.html for more information or call Cisco TAC (1 800 553-2447).

LO-RXPOWER Alarm

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

Logical Object: PPM

The LO-RXPOWER alarm is raised on the client or trunk optics controller when the measured individual lane optical signal power of the received signal falls below the default or user-defined threshold.

Clear the LO-RXPOWER Alarm

Procedure

Step 1 Configure low receive power threshold in range.

Step 2 or

Step 3 Verify that the trunk-rx port is cabled correctly, and clean the fiber connecting the faulty TXP/MXP card to the drop port of the DWDM card.

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

LO-TXPOWER Alarm

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

Logical Object: PPM

The LO-TXPOWER alarm is raised on the client or trunk optics controller when the measured individual lane optical signal power of the transmitted signal falls below the default or user-defined threshold.

Clear the LO-TXPOWER Alarm

Procedure

Configure low transmit power threshold in range.

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

LOCAL-FAULT Alarm

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

Logical Object: CLIENT

The LOCAL-FAULT alarm is raised when a local fault character sequence is received in the incoming MAC stream.

Clear the LOCAL-FAULT Alarm

Procedure

Verify that the port receives proper MAC streams from the far-end router or switch.

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

LOCAL-DEG-SER Alarm

Default Severity: Major

Logical Object: Client

The Local FEC DEG-SER (Degraded SER) alarm is received from remote end when it detects excessive FEC errors on the receiver side or when it sees AIS on the mapper ODU.

Clear the LOCAL-DEG-SER Alarm

Procedure

This alarm is cleared when you clear the errors at the remote end.

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

LOF

Default Severity: Critical

Logical Object: CLIENT

LOF(Loss of Frame) alarm indicates that the receiving ONS system has lost frame delineation in the incoming data from trunk that serves the cards. LOF occurs when the SONET overhead loses a valid framing pattern for 3 milliseconds. Receiving two consecutive valid A1/A2 framing patterns clears the alarm.

Clear the LOF Alarm

Procedure

Step 1 Check the fiber optic cable to make sure the cable is plugged in and is not damaged.

Step 2 Ensure that the framing format on the port matches the format that is configured on the line:

If the alarm does not clear, log in to the Technical Support Website at http://www.cisco.com/c/en/us/support/index.html for more information or call Cisco TAC (1 800 553-2447).

LOM Alarm

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

Logical Object: TRUNK

The Loss of Multiframe (LOM) alarm is raised when the MFAS overhead field is invalid for more than five frames and persists for more than three milliseconds.

Clear the LOM Alarm

Procedure

Step 1 If the bit error rate (BER) threshold is correct and at the expected level, use an optical test set to measure the power level of the line to ensure it is within guidelines.

Step 2 If the optical power level is good, verify that optical receive levels are within the acceptable range.

Step 3 If the receive levels are good, clean the fibers at both ends according to site practice.

Step 4 If the condition does not clear, verify that a single-mode fiber is used.

Step 5 If the fiber is of the correct type, verify that a single-mode laser is used at the far-end node.

Step 6 Clean the fiber connectors at both ends for a signal degrade according to site practice.

Step 7 Verify that a single-mode laser is used at the far end.

Step 8 If the problem does not clear, the transmitter at the other end of the optical line could be failing and requires replacement.

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

LOS Alarm

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

Logical Object: CLIENT

The Equipment Low Receive Power alarm is an indicator for the received optical signal power. LOS occurs when the measured optical power of the received signal falls below the threshold value.

In non-Optical Signal to Noise Ratio (OSNR) loaded links, the RX power threshold for LOS condition (as LOS is expected before the actual traffic) goes down approximately to –23 dBm.

Clear the LOS Alarm

Procedure

Step 1 Verify that the client port is configured with the proper wavelength.

Step 2 Verify whether there is a loss of received optical power. Compare the actual power levels with the expected power range.

Step 3 Verify the fiber continuity to the port of NCS 1004 and fix the fiber connection.

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

MB_SSD_ATA-ERRORS Alarm

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

Logical Object: LC

The MB_SSD_ATA-ERRORS alarm is raised when the chassis SSD has ATA errors.

Clear the MB_SSD_ATA-ERRORS Alarm Alarm

Procedure

The MB_SSD_ATA-ERRORS alarm is cleared when the chassis SSD is replaced.

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

MB_SSD_FAILURE Alarm

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

Logical Object: Chassis

The MB_SSD_FAILURE alarm is raised when the chassis SSD is damaged and becomes unresponsive to the Linux kernel.

Clear the MB_SSD_FAILURE Alarm

Procedure

This alarm is cleared when the faulty chassis is replaced. To replace the chassis, contact TAC to open a Return Material Authorization (RMA) request.

Log into the Technical Support Website at http://www.cisco.com/c/en/us/support/index.html for more information or call Cisco TAC (1 800 553-2447).

MEA Alarm

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

Logical Object: PPM

The Mismatch Equipment Attributes (MEA) alarm for the PPM or QSFP is raised on a pluggable port when there is a mismatch in the configured client data rate and the supported QSFP physical data rate.

The Line-card slot is capable of holding different type of cards supported by the platform. The Mismatch Equipment Attributes (MEA) alarm for Line-card is raised, when you replace the current type of card with a different type of card in the working slot.

Clear the MEA Alarm

Procedure

Step 1 Verify the supported physical data rate of the QSFP on NCS 1004 using the **show inventory** command.

Step 2 Verify the configured client data rate on NCS 1004 using the **show hw-module slice** command.

Step 3 If the above values do not match, insert the appropriate QSFP pluggable or configure the required client data rate.

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

Note
When you mistakenly insert a different card in a previously configured slot, the solution is to have a new configuration to couple specific slot with card type. The MEA alarm is raised , when the card type inserted is different than the configuration.

The Card-type keywords to be fetched from supported LCs for a given platform.

NODE-OBFL-ERROR

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

Logical Object: RP

The NODE-OBFL-ERROR alarm is raised when there is an OBFL read or write failure for the NODE scope.

Clear the NODE-OBFL-ERROR Alarm

Procedure

This alarm is cleared when the OBFL flash access is restored.

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

ODU-AIS Alarm

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

Logical Object: TRUNK-ODU

The ODU-AIS alarm is raised on ODU controllers when there is an alarm on the upstream data.

Clear the ODU-AIS Alarm

Procedure

The ODU-AIS alarm clears when the alarm clears on the upstream data.

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

ODU-BDI Alarm

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

Logical Object: TRUNK-ODU

The Optical Data Unit Backward Defect Indication (ODU BDI) alarm is raised when there is a path termination error in the upstream data. This error is read as a BDI bit in the path monitoring area of the ODU controller.

Clear the ODU-BDI Alarm

Procedure

The ODU-BDI alarm clears when the path termination error clears on the upstream data.

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

ODU-CSF Alarm

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

Logical Object: TRUNK-ODU

The ODU-CSF alarm is raised when there is a failure of the client signal.

Clear the ODU-CSF Alarm

Procedure

This alarm clears when no alarm exists on the client port.

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

ODU-IAE/BIAE

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

Logical Object: TRUNK-ODU

The ODU-IAE/BIAE alarm is raised when there are incoming alignment errors on the upstream data.

Clear the ODU-IAE/BIAE Alarm

Procedure

This alarm is cleared when the alignment errors are cleared on the upstream data.

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

ODU-LCK

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

Logical Object: TRUNK-ODU

The Locked (ODU-LCK) signal is raised when an OTN interface is administratively locked out and not available to carry traffic.

Clear the ODU-LCK Alarm

Procedure

This alarm is cleared when the administrator releases the lock out on the OTN interface.

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

ODU-OCI

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

Logical Object: TRUNK-ODU

The Open Connection Indication (ODU-OCI) alarm is raised when there is no connection between the client and trunk ports.

Clear the ODU-OCI Alarm

Procedure

This alarm is cleared when the connection is created between the client and trunk ports.

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

OSNR Alarm

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

Logical Object: TRUNK

The Optical Signal Noise Ratio (OSNR) alarm occurs when the measured OSNR falls below the threshold.

Clear the OSNR Alarm

Procedure

Step 1 Verify the value of the minimum acceptable OSNR value of NCS 1004 using the **show controller optics R/S/I/P** command.

Step 2 If the value is not within the OSNR threshold range, configure the minimum acceptable OSNR value using the **controller optics R/S/I/P osnr-low-threshold** command in the configuration mode. The range is 0 to 4000 (in units of 0.1db).

Step 3 If the value is within the range of the minimum acceptable OSNR, contact TAC .

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

OTNSEC-LOCALLY-SECURED

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

Logical Object: Software

The OTNSEC-LOCALLY-SECURED alarm is raised when the IKE session goes down and the OTNsec session is locally secured.

Clear the OTNSEC-LOCALLY-SECURED Alarm

Procedure

This alarm is cleared when the respective IKE session is up.

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

OTUK-AIS

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

Logical Object: TRUNK

An Alarm Indication Signal (AIS) signal communicates to the receiving node when the transmit node does not send a valid signal. AIS is not an error. The OTUK-AIS alarm is raised by the receiving node on each input when it detects the AIS instead of an actual signal.

Clear the OTUK-AIS Alarm

Procedure

This alarm will be cleared when the signal recovers.

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

OTUK-BDI Alarm

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

Logical Object: TRUNK

The Optical Transport Unit Backward Defect Indication (OTUK BDI) alarm is raised when there is a path termination error in the upstream data. This error is read as a BDI bit in the path monitoring area of the digital wrapper overhead.

Clear the OTUK-BDI Alarm

Procedure

Step 1 At the near-end node, use site practices to clean trunk transmitting fiber toward the far-end node and the client receiving fiber.

Step 2 At the far-end node, determine whether any OTUK-AIS condition, is present on the trunk rx port. If yes, inspect the trunk rx side on the near-end card (the one alarmed for OTUK-BDI) because the AIS bit must be inserted in that section.

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

OTUK-LOF Alarm

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

Logical Object: TRUNK

The Optical Transport Unit Loss of Frame (OTUK-LOF) alarm is raised when a frame loss is detected by an invalid frame alignment in the received frames. This alarm indicates that the card has lost frame delineation on the input data. Loss of frame occurs when the optical transport unit overhead frame alignment (FAS) area is invalid for more than five frames and that the error persists more than three milliseconds.

This alarm is also raised when the FEC settings on the trunk ports of the source and destination cards are different.

Clear the OTUK-LOF Alarm

Procedure

Verify whether the FEC settings on the trunk ports of the source and destination cards are the same.

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

OTUK-SD Alarm

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

Logical Object: TRUNK

The Optical Transport Unit Signal Degrade (OTUK-SD) alarm is raised when the quality of signal is poor that the bit error rate on the incoming optical line exceeds the signal degrade threshold.

Clear the OTUK-SD Alarm

Procedure

Identify the cause for poor quality signal and resolve. This alarm typically indicates poor incoming signal strength due to bad fiber or dirt in the pluggable or fiber.

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

OTUK-SF Alarm

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

Logical Object: TRUNK

The Optical Transport Unit Signal Fail (OTUK-SF) is raised on hardware and software when LOS, LOF, and LOM alarms exist.

Clear the OTUK-SF Alarm

Procedure

The alarm is cleared when the LOS, LOF, or LOM alarms are cleared.

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

OTUK-TIM Alarm

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

Logical Object: TRUNK

The Trail Trace Identifier Mismatch (OTUK-TIM) alarm is raised when the expected TTI string does not match the received TTI string.

Clear the OTUK-TIM Alarm

Procedure

Identify the cause for different expected and received TTI strings and resolve. The TIM mismatch can be caused due to mismatch in fiber connections.

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

OTN-XP-DP-FPD-PKG-MISSING Alarm

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

Logical Object: EQPT

The OTN-XP-DP-FPD-PKG-MISSING alarm is raised when the user tries to update DP FPD without installing the OTN-XP-DP-FPD software package.

Clear the OTN-XP-DP-FPD-PKG-MISSING Alarm

This alarm is cleared when you download and install the OTN-XP-DP-FPD package.

PEX_SWITCH_ACCESS_FAILURE Alarm

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

Logical Object: LC

The PEX_SWITCH_ACCESS_FAILURE Alarm is raised when the Chassis PEX PCIe switch is not accessible.

Clear the PEX_SWITCH_ACCESS_FAILURE Alarm Alarm

Procedure

The PEX_SWITCH_ACCESS_FAILURE Alarm is cleared when the PEX PCIe switch is accessible again. The chassis needs to be reloaded manually if it does not reload on its own in a few minutes.

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

POWER MODULE OUTPUT DISABLED Alarm

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

Logical Object: PEM

The POWER MODULE OUTPUT DISABLED alarm is raised on the NCS 1004 when the power supply is disabled on the active PEM.

Clear the POWER MODULE OUTPUT DISABLED Alarm

Procedure

Enable the power supply.

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

POWER-MODULE-REDUNDANCY-LOST Alarm

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

Logical Object: PEM

The POWER-MODULE-REDUNDANY-LOST alarm is raised on the NCS 1004 under one of the following conditions.

- When power supply to PSU is removed.
- When PEM is removed from NCS 1004.

Clear the POWER-MODULE-REDUNDANCY-LOST Alarm

Procedure

This alarm clears when the user re-inserts the power supply or when the user connects the power cable again.

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

PPM FAIL Alarm

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

Logical Object: PPM

The PPM FAIL alarm is raised on the pluggable when a fault is detected in the PPM and the pluggable cannot be accessed.

Clear the PPM FAIL Alarm

Procedure

Replace the pluggable.

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

Provisioning Failed Alarm

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

Logical Object: LC

The Provisioning Failed alarm is raised when invalid configuration is configured on the controller; For example, configuring an invalid CD-min value on the optics controller.

Clear the Provisioning Failed Alarm

Procedure

Step 1 Verify whether the provisioning configurations are supported for the line card.

Step 2 Change it to supported configurations for the line card.

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

PROVISIONING-INCOMPAT Alarm

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

Logical Object: LC

The PROVISIONING-INCOMPAT alarm is raised when you configure incompatible submarine parameters on 1.2T line card.

Clear the PROVISIONING-INCOMPAT Alarm

Procedure

The alarm is cleared only when valid submarine parameters are provided.

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

Provisioning in Progress Alarm

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

Logical Object: LC

The Provisioning in Progress alarm is raised when the provisioning request is in progress on the line card or controller.

Clear the Provisioning in Progress Alarm

Procedure

Step 1 Verify the status of the alarm using the following debug command:

```
RP/0/RP0/CPU0:ios#show hw-module location '<0/n>' mxponder
```

Step 2 Wait till the status changes to **Provisioned**.

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

RACK-OBFL-ERROR

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

Logical Object: SC

The RACK-OBFL-ERROR alarm is raised when there is an OBFL read or write failure for the RACK scope.

Clear the RACK-OBFL-ERROR Alarm

Procedure

This alarm is cleared when the OBFL flash access is restored.

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

RDI Alarm

Default Severity: Critical

Logical Object: Trunk

The RDI is inserted by the remote trunk and indicates that the remote trunk detects a fault in the incoming signal.

Clear the RDI Alarm

Procedure

The RDI alarm is cleared when you identify and clear the fault on the remote trunk.

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

RDI-L/MS-RDI

Default Severity: Major

Logical Object: CLIENT

RDI alarms are always reported upstream from the detecting device. The local interface has received an RDI-L/MS-RDI alarm (in case of OC-192 or STM-64 payload respectively) from the NE at the far end of the fiber, indicating that no SONET/SDH signal is being transmitted downstream of the local NE.

Clear the RDI-L Alarm

Procedure

RDI Line problems arise from the remote interface. Check the remote site for alarm conditions.

If the alarm does not clear, log in to the Technical Support Website at http://www.cisco.com/c/en/us/support/index.html for more information or call Cisco TAC (1 800 553-2447).

REMOTE-FAULT Alarm

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

Logical Object: CLIENT

The REMOTE-FAULT alarm is raised on the NCS 1004 when a remote fault character sequence is received in the incoming MAC stream.

Clear the REMOTE-FAULT Alarm

Procedure

Step 1 Verify and resolve the client port fault and remote fault errors on the remote or upstream node.

Step 2 Verify and resolve loss of signal synchronization error on the remote or upstream node.

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

REMOTE-DEG-SER Alarm

Default Severity: Major

Logical Object: Client

The remote FEC DEG-SER (Degraded SER) alarm is received from the remote Router when it sees Local Degraded SER on the receiver side.

Clear the REMOTE-DEG-SER Alarm

Procedure

This alarm is cleared when you clear the errors at the remote end..

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

RUNNING FANS AT MAX SPEED Alarm

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

Logical Object: environ

The RUNNING FANS AT MAX SPEED alarm is raised when one or more line cards are missing or when one or more fans fail or are removed or when the temperature exceeds threshold values.

Clear the RUNNING FANS AT MAX SPEED Alarm

Procedure

Step 1 Insert line card or filler card in all the slots.

Step 2 Insert all the fan trays and ensure all are working.

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

SD

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

Logical Object: CLIENT

SD applies to the line/section layer B1/B2 overhead byte of the SONET signal overhead byte or RS/MS layer B1/B2 overhead byte of the SDH. If the alarm is reported on a card that has also undergone a protection switch, the SD BER count continues to accumulate. The condition is superseded by higher-priority alarms such as the LOF and LOS alarms.

Clear the SD Alarm

Procedure

Step 1 Use an optical test set to measure the power level of the line to ensure the level is within guidelines. For specific procedures to use the test set equipment, consult the manufacturer.

Step 2 If the optical power level is correct, verify that optical receive levels are within the acceptable range.

Step 3 If receive levels are correct, clean the fibers at both ends.

Step 4 If the alarm does not clear, verify that single-mode fiber is used.

Step 5 If the fiber is of the correct type, verify that a single-mode laser is used at the far-end node.

Step 6 If the problem does not clear, the transmitter at the other end of the optical line might be failing and require replacement.

If the alarm does not clear, log in to the Technical Support Website at http://www.cisco.com/c/en/us/support/index.html for more information or call Cisco TAC (1 800 553-2447).

SF

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

Logical Object: CLIENT

SF applies to the line/section layer B1/B2 overhead byte of the SONET signal overhead byte or RS/MS layer B1/B2 overhead byte of the SDH. It can trigger a protection switch. The SF condition clears when the BER level falls to one-tenth of the threshold level that triggered the condition. A BER increase is sometimes caused by a physical fiber problem, including a poor fiber connection, a bend in the fiber that exceeds the permitted bend radius, or a bad fiber splice.

Clear the SF Alarm

Procedure

Step 1 Use an optical test set to measure the power level of the line to ensure the level is within guidelines. For specific procedures to use the test set equipment, consult the manufacturer.

Step 2 If the optical power level is correct, verify that optical receive levels are within the acceptable range.

Step 3 If receive levels are correct, clean the fibers at both ends.

Step 4 If the alarm does not clear, verify that single-mode fiber is used.

Step 5 If the fiber is of the correct type, verify that a single-mode laser is used at the far-end node.

Step 6 If the problem does not clear, the transmitter at the other end of the optical line might be failing and require replacement.

If the alarm does not clear, log in to the Technical Support Website at http://www.cisco.com/c/en/us/support/index.html for more information or call Cisco TAC (1 800 553-2447).

SIGLOSS Alarm

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

Logical Object: CLIENT

The Signal Loss on Data Interface (SIGLOSS) alarm is raised on the client-side QSFP when there is a loss of ethernet signal.

Clear the SIGLOSS Alarm

Procedure

Step 1 Ensure that the port connection at the near end of the client peer router is operational.

Step 2 Verify fiber continuity to the port.

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

SQUELCHED Alarm

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

Logical Object: CLIENT

Laser-squelch is configured under the client controller. Laser-squelching occurs on a QSFP pluggable when all the four lanes operating in the 10GE client mode are turned off after the upstream receive facility has experienced a loss of signal such as LOS or LOF.

Clear the SQUELCHED Alarm

Procedure

This alarm will be cleared when optical alarms clear.

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

SYNCLOSS Alarm

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

Logical Object: CLIENT

The Loss of Synchronization on Data Interface (SYNCLOSS) alarm is raised on the client and trunk ports when there is a loss of signal synchronization on the port. This alarm is demoted by the SIGLOSS alarm.

Clear the SYNCLOSS Alarm

Procedure

Step 1 Ensure that the data port connection at the near end of the ethernet link is operational.

Step 2 Verify the fiber continuity to the port. To do this, follow site practices.

Step 3 For 100 GE, verify that the FEC settings match between the router.

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

TIM

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

Logical Object: CLIENT

The received trace identifier is different from the expected trace identifier. The optical fiber link is from the wrong source (misconnected). If the fiber connection is correct and as expected, then either the expected trace identifier that is configured on the local interface is incorrect, or the trace identifier that is configured on the remote interface is incorrect.

Clear the TIM Alarm

Procedure

Step 1 Check that the optical fiber link is coming from the correct source.

Step 2 Check and reconfigure the expected trace identifier.

Step 3 Check and reconfigure the trace identifier on the remote interface.

If the alarm does not clear, log in to the Technical Support Website at http://www.cisco.com/c/en/us/support/index.html for more information or call Cisco TAC (1 800 553-2447).

UNC-WORD Alarm

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

Logical Object: TRUNK

The Uncorrected FEC Word (UNC-WORD) condition is raised when the FEC is unable to correct the frame.

Clear the UNC-WORD Alarm

Procedure

Step 1 Ensure that the fiber connector for the card is completely plugged in.

Step 2 Ensure that the ports on the far end and near end nodes have the same port rates and FEC settings.

Step 3 If the BER threshold is correct and at the expected level, use an optical test set to measure the power level of the line to ensure it is within guidelines. For specific procedures to use the test set equipment, consult the manufacturer.

Step 4 If the optical power level is good, verify that the optical receive levels are within the acceptable range.

Step 5 If receive levels are good, clean the fibers at both ends.

Step 6 If the condition does not clear, verify that a single-mode fiber is used.

Step 7 Verify if the fiber is of single-mode type.

Step 8 Clean the fiber connectors at both ends for a signal degrade.

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

USB_OC_1

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

Logical Object: RP

The USB_OC_1 alarm is raised when the over current is observed on USB1.

Clear the USB_OC_1 Alarm

Procedure

This alarm is cleared when the over current is removed for the USB.

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

USB_OC_0

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

Logical Object: RP

The USB_OC_0 alarm is raised when the over current is observed on USB0.

Clear the USB_OC_0 Alarm

Procedure

This alarm is cleared when the over current is removed for the USB.

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

VOLTAGE Alarm

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

Logical Object: environ

The VOLTAGE alarm is raised on the NCS 1004 when the voltage is not within the operating range.

Clear the VOLTAGE Alarm

Procedure

This alarm clears when the voltage falls within the operating range.

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

WVL-OUT-OF-LOCK Alarm

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

Logical Object: TRUNK

The Wavelength Out of Lock (WVL-OUT-OF-LOCK) alarm is raised when the trunk port detects the optical input frequency to be out of range.

Clear the WVL-OUT-OF-LOCK Alarm

Procedure

Step 1 Verify the wavelength configuration.

Step 2 Verify whether the pluggable is inserted properly.

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

XGE-FLASH-ERROR

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

Logical Object: SC

The XGE-FPGA-ERROR alarm is raised when the XGE FPGA SPI flash is not accesible.

Clear the XGE-FLASH-ERROR Alarm

Procedure

This alarm is cleared when the XGE FPGA SPI Flash error is corrected.

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

NOT-OPERATIONAL-PRIMITIVE-SEQUENCE

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

Logical Object: FC CLIENT

The NOT-OPERATIONAL-PRIMITIVE-SEQUENCE (NOS) alarm is raised when a NOS sequence is received in the incoming FC stream.

Clear the NOT-OPERATIONAL-PRIMITIVE-SEQUENCE Alarm

Procedure

The NOT-OPERATIONAL-PRIMITIVE-SEQUENCE (NOS) alarm is raised until the sender stops sending NOS ordered set.

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

Chassis-ACT2LITE-Failure

Default Severity: Major (MJ)

Logical Object: RP

The Chassis-act2lite-Failure alarm is raised when communication with chassis ACT2LITE fails.

Clear the Chassis-ACT2LITE-Failure Alarm

Procedure

To clear the alarm, check with Technical Support.

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

CPU- FPGA- Image-Corruption

Default Severity: Major (MJ)

Logical Object: RP

The CPU-FPGA-IMAGE-CORRUPTION alarm is raised when the system detects the CPU corruption and boots with the golden image.

Clear the CPU-FPGA- Image-Corruption Alarm

Procedure

This alarm is cleared after the CPU corruption is corrected and reloaded.

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

DP-Device-SEU-Error

Default Severity: Critical (CR)

Logical Object: RP

The DP-Device-SEU-Error alarm is raised when the DP detects error in the Unit.

Clear the DP-Device-SEU-Error Alarm

Procedure

To clear the alarm, check with Technical Support.

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

MB-SSD-Temperature-High

Default Severity: Major (MJ)

Logical Object: RP

The MB-SSD-TEMPERATURE-High alarm is raised when the Chassis SSD Temperature exceeds the threshold.

Clear the MB-SSD-Temperature-High Alarm

Procedure

This alarm gets cleared when the temperature falls within the operating range.

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

Line Loopback Configured

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

Logical Object: LC

The Line Loopback Configured alarm is raised when the user configures the line or internal loopback.

Note The loopback configuration can only be done when the controller is under maintenance mode.

Clear the Line Loopback Configured Alarm

Procedure

This alarm is cleared when the user removes the line or internal loopback configuration or deletes the datapath at the remote end.

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