Troubleshooting the Cisco cBR

Troubleshooting the Fan Module in the Cisco cBR

Problem	Possible Cause	Solution
The STATUS LED of a fan is not illuminated when the Cisco cBR-8 chassis is powered on. Less than 10 seconds have elapsed since the chassis has been powered ON.	Fan module starts up 10 seconds after the chassis is powered on.	The corresponding LED illuminates 10 seconds after the chassis is started up.
The STATUS LED of a fan is not illuminated when the Cisco cBR-8 chassis is powered on. More than 10 seconds have elapsed since the chassis has been powered ON.	There could be a failure of a Fan Module component.	Check the status of the LED labeled RPLC. If it is also illuminated then replace the fan module.
The STATUS LED of a fan is illuminated with Amber light and the Fan Module shows no acoustic indication of failure. Alternatively all fans are acoustically elevated with Amber illumination of one LED on a fan.	There could be a failure of a Fan Module hardware component. It could also be a minor alarm.	Replace the Fan Module.
The RPLC LED of a fan is illuminated with Amber light and the all the Fan Module are acoustically elevated with Amber illumination of one LED on a fan.	There could be a failure of a Fan Module hardware component. It could also be a minor alarm.	Replace the Fan Module.

Problem	Possible Cause	Solution
The RPLC LED of a fan is illuminated with White light. Any minor fan failure occurs. Any sensor or any controller or PCB fails.	The RPM of any fan is outside the set RPM limit setpoints by less than 300RPM or greater than 1000RPM. Temperature or barometric sensor failure is sensed by the Supervisor. The Supervisor could also set the RPLC LED to White due to the failure of a Fan Module hardware component. It could also be a minor alarm.	Replace the Fan Module.
The chip level thermal shutdown alarms could be tripped. The cards are powered off for thermal protection shut down.	This scenario, considered a double fault condition, occurs when there is a fan failure during elevated temperature conditions without all the fans functioning properly. The cards do not remain cool under such conditions.	Replace the faulty Fan Module.
Cisco cBR's Supervisor Cards are prevented from powering up.	One or more of the Fan Modules have a serious failure such that the error prevents both fans from operating. This could prevent the Cisco cBR's Supervisor Cards from powering up.	Replace the faulty Fan Module.
	The chassis does not have one or more Fan Modules.	
The sliding door of the fan bay does not close when the Fan Module is removed.	The sliding door is stuck.	Push front flap open and manually slide the door back and forth to ensure free movement of the door. If that doesn't work, pull the door closed to stop air bypass until a fan module is installed.
The output of the **show platform** command shows the Fan Module (P10 to P14) in failed state.	The Fan Module is not inserted.	Insert the Fan Module.
The output of the **show platform** command shows the Fan Module (P10 to P14) in failed state.	The Fan Module has entered an abnormal state.	Replace the Fan Module.

Troubleshooting the Power System in the Cisco cBR

Problem	Possible Cause	Solution
The output of the **show platform** command shows the Power Module (P0 to P5) in failed state.	The Power Module is not inserted in the chassis.	Insert the Power Module, if necessary.
The output of the **show platform** command shows the Power Module (P0 to P5) in failed state.	The Power Module is not receiving power.	Connect power to the corresponding FPEM for the Power Module, if necessary.
The output of the **show platform** command shows the Power Module (P0 to P5) in failed state.	The Power Module has entered an abnormal state.	Replace the Power Module.

Troubleshooting the Interface Cards in Cisco cBR Chassis

Table 1: Downstream PHY Module Troubleshooting

Problem	Possible Cause	Solution
The PowerGood value 0 in the output of the **show cable card** *slot/subslot* **ds-phy display	include PowerGood** command shows that the downstream PHY module in the line card is not powered up.	The downstream PHY module is not seated properly.	The downstream PHY module should be re-installed to ensure that it is properly seated.
	The downstream PHY module is damaged.	Refer to the RMA procedure for more information on service.
	The cLGA connector is damaged.	Contact the Cisco Technical Assistance Center (TAC) through the Cisco Support web site http://www.cisco.com/c/en/us/support/index.html.
	The line card is not providing power to the module.	
The STATUS LED is not illuminated.	The interface card is not booted.	Reboot the interface card. If the STATUS LED does not illuminate, replace the line card.
The REPLACE LED is illuminated in white color.	The interface card needs to be replaced.	Replace the interface card.

Table 2: Upstream PHY Module Troubleshooting

Problem	Possible Cause	Solution
The PowerGood value 0 in the output of the **show cable card** *slot/subslot* **us-phy display | include PowerGood** command shows that the upstream PHY module in the line card is not powered up.	The upstream PHY module is not seated properly.	The upstream PHY module should be re-installed to ensure that it is properly seated.
	The upstream PHY module is damaged.	Refer to the RMA procedure for more information on service.
The STATUS LED is not illuminated.	The interface card is not booted.	Reboot the interface card. If the STATUS LED does not illuminate, replace the line card.
The REPLACE LED is illuminated in white color.	The interface card needs to be replaced.	Replace the interface card.

General Troubleshooting

Problem	Possible Cause	Solution
Unable to configure the Cisco cBR-8 router unless password enablement and password entry steps are performed.	Cisco cBR-8 routers shipped to customers from June 29, 2016 to August 5, 2016 have default startup configuration password **c**.	

Problem	Possible Cause	Solution
		Clean up Cisco cBR-8 NVRAM configuration. See the steps below.
		1. Power up Cisco cBR-8 router. Wait for about 15 minutes for the system to boot up and get ready.
		``` cisco cBR1013 (CBR) processor (revision CBR) with 3628094K/6147K bytes of memory. Processor board ID FXS2022Q1KY 32768K bytes of non-volatile configuration memory. 50331648K bytes of physical memory. 7739391K bytes of eUSB flash at bootflash:. 97620247K bytes of SATA hard disk at harddisk:. Press RETURN to get started! ```
		2. When "Press RETURN to get started!" message appears, press the **Enter** key.
		3. Type **enable** command after the **Router>** prompt, press the **Enter** key. Type **c** after the **Password:** prompt.
		``` Router>enable Password: Router# ```
		4. Type **erase startup-config** command, press the **Enter** key. Press the **Enter** key again when **Continue? [confirm]** appears.
		``` Router#erase startup-config *** Erasing Nvram will not clear license registration. License De-Registration has to be done seperately *** Erasing the nvram filesystem will remove all configuration files! Continue? [confirm] ```

Problem	Possible Cause	Solution
| | | ```
[OK]
Erase of nvram: complete
Router#
``` |

5. Type **erase nvram:** command, press the **Enter** key. Press the **Enter** key again when **Continue? [confirm]** appears.

```
Router#erase nvram:
*******************************************************
Erasing Nvram will not
clear license registration.
License De-Registration has
 to be done seperately
*******************************************************
Erasing the nvram
filesystem will remove all
 configuration files!
Continue? [confirm]
[OK]
Erase of nvram: complete
Router#
```

> **Note** If there are 2 SUPs, type **erase stby-nvram:** command after this step to erase the NVRAM on the stand-by SUP.

6. Verify whether the startup configuration is empty using **show configuration** command. The desired output is **startup-config is not present**.

```
Router#show configuration
startup-config is not
present
Router#
```

7. Power down the system then power up to reboot the system.

Problem	Possible Cause	Solution
SNMP-3-RESPONSE_DELAYED error message in **show logging** output.	SNMP process is consumed by 5 seconds to get an OID.	1. Check the CPU usage using **show process cpu history** 2. Execute **test snmp cpu-stats start**, wait for SNMP-3-RESPONSE_DELAYED error message to appear again, then check the output of **show snmp cpu-stats** to see if the OID in SNMP-3-RESPONSE_DELAYED displays a big value. If so, contact cBR support, otherwise, it is a CPU issue, please check the reason why the CPU usage is high.