Troubleshooting the Cisco Remote-PHY Solution

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Troubleshooting: Cisco cBR-CCAP-LC-40G Line Card Link LED Does Not Illuminate

Problem After inserting the network cable into the SFP module of the Cisco cBR-CCAP-LC-40G line card, the LINK LED of the line card does not illuminate.

Possible Cause Dirt or skin oil is accumulated on the network cable plug faceplate generating significant attenuation and reducing the optical power levels below threshold levels. This could result in link failure.

Solution Clean the plug faceplate with a lint-free tissue soaked in 99 percent pure isopropyl alcohol and then with a dry lint-free tissue. Remove any residual dust from the faceplate with compressed air before installing the network cable.

Troubleshooting: Cisco GS7000 Node Resets After DHCP Timeout

Problem The Cisco GS7000 node is reset after DHCP timeout.

Possible Cause The DHCP server address is not specified in the Gigabit Ethernet interface of the Cisco cBR-CCAP-LC-40G line card.

Solution Verify the Gigabit Ethernet Interface configuration on the Cisco cBR-CCAP-LC-40G line card. To specify the DCHP server address, use the **ip helper-address** command.

Troubleshooting: Cisco GS7000 Node is Not Working

Problem The Cisco GS7000 node is online but the cable modem fails to come online.

Possible Cause The Cisco cBR-CCAP-LC-40G line card is not properly configured.

Solution Verify the configuration on the Cisco cBR-CCAP-LC-40G line card.

Possible Cause The Cisco GS7000 node is not properly connected to the line card.

Solution Verify the connection between Cisco cBR-CCAP-LC-40G line card and Cisco GS7000 node.

Troubleshooting: The Cisco cBR-CCAP-LC-40G Line Card is Not Working

Problem The Cisco cBR-CCAP-LC-40G line card is not working.

Possible Cause The Cisco cBR-CCAP-LC-40G line card is not connected to the power supply.

Solution Verify if the power LED is illuminated and the power supply is connected to the Cisco cBR-CCAP-LC-40G line card. Connect to the power supply, if not connected.

Possible Cause The Cisco cBR-CCAP-LC-40G line card is not configured on the Cisco CMTS.

Solution Configure the Cisco cBR-CCAP-LC-40G line card.

Possible Cause The captive screws are not secured on the faceplate and the ejector levers are not properly closed.

Solution Close the ejector levers and tighten the captive screws with your fingers. Then, use either a T-10 Torx or a common flathead screwdriver to tighten the captive screws from 5 to 7 in-lbs.

Possible Cause The Cisco cBR-CCAP-LC-40G line card is not firmly seated in the chassis.

Solution Unscrew the top and bottom captive screws on the line card using a T-10 Torx driver tool or flathead screwdriver. Simultaneously pivot both ejector levers away from the line card to disengage the line card. Slide the line card partially out of the slot in the chassis and slide it back in until it is firmly seated in the chassis. Close the ejector levers and tighten the captive screws with your fingers. Then, use either a T-10 Torx or a common flathead screwdriver to tighten the captive screws from 5 to 7 in-lbs.

Possible Cause The network cable connectors are not properly seated in the ports on the Cisco cBR-CCAP-LC-40G line card and cables are broken.

Solution Verify if the cables are broken. Replace the cables, if broken and insert the network cable connector into the SFP module port until it clicks and locks into place to ensure proper seating..

Possible Cause Incorrect or inappropriate software license is configured on the Cisco cBR-CCAP-LC-40G line card.

Solution Reinstall or rehost the appropriate license on the Cisco cBR-CCAP-LC-40G line card.

Possible Cause Power on Self Test (POST) fails when the line card is installed in the chassis.

Solution Verify the power supply connection and if the problem persists, contact the Technical Assistance Center (TAC) for further assistance.

Troubleshooting: The DTI Timer is Not Working

Problem The DOCSIS Timing Interface (DTI) timer is not working correctly and the cable modems are not in init() state.

Possible Cause DTI-based timing is disabled on the active card.

Solution Use the **show cable clock** command to identify the active card and enable the DTI-based timing using the **cable clock dti** command.