CISCO ™

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Operations Alert Bulletin
Configuring the Auto Negotiate Setting on the GQAM

Background

The gigabit Ethernet port on a GQAM is designed to use interface modules. The interface modules allow the GQAMs to operate with copper or fiber connections. There are two types of interface modules for the GQAM:

■ Gigabit Interface Converter (GBIC) module

■ Dual Small Form-Factor Pluggable (SFP) module

The GQAMs use the interface modules to communicate with devices in the network. The interface module uses the auto negotiate setting to automatically determine the optimal link rate and duplex mode for the port to operate correctly. The auto negotiate setting must be configured on both the GQAM and the device it is connected to in the network. If only one device is configured for the auto negotiate setting, then there is no link between the devices and the port does not operate correctly. The operator can manually configure the auto negotiate setting on the GQAM or the connected device by using one of the following settings:

■ 0 — Off

■ 1 — On

■ 2 — Query

GQAMs are currently being shipped from the factory with the auto negotiate setting configured at 2 for all ports. This setting is commonly used for most interface modules. However, there are module manufacturers that require the auto negotiate setting to be either 0 or 1 to operate correctly. The **Recommendation** section provides instructions to manually configure the auto negotiate setting and to contact Cisco Services to verify the interface module is approved by Cisco.

Recommendation

Cisco recommends that you complete the following procedure to change the auto negotiate setting. As you begin this procedure, a computer or terminal server is required to be connected to the craft port of the GQAM.

Important: This procedure assumes that the GQAM is powered on. If you do not see a command prompt, press the **Enter** key until the prompt displays on the screen.

GBIC Module

1 At the command prompt, type **gigaautoneg** and press **Enter**. This command provides the current mode of the interface module.

2 Type **gigaautoneg** <number> and press **Enter**. This command changes the auto negotiate setting.

    Important: Type either **1** or **0** for the <number> in the command.

3 Type **gigaautoneg** and press **Enter**.

4 Is the GQAM now operating in the correct mode, and does the interface module connect to an input device?

    ■ If **yes**, you have completed this procedure.

    ■ If **no**, contact Cisco Services to verify the interface module is approved by Cisco.

Dual SFP Module

1 At the command prompt, type **gigaautoneg_b** and press **Enter**. This command provides the current mode of the interface module.

2 Type **gigaautoneg_b** <number> and press **Enter**. This command changes the auto negotiate setting.

    Important: Type either **1** or **0** for the <number> in the command.

3 Type **gigaautoneg_b** and press **Enter**.

4 Is the GQAM now operating in the correct mode, and does the interface module connect to an input device?

    ■ If **yes**, you have completed this procedure.

    ■ If **no**, contact Cisco Services to verify the interface module is approved by Cisco.

About This Bulletin

Audience

This document is written for system operators who use Cisco's DNCS. Cisco engineers may also find this document to be useful.

Scope

This document provides a procedure to configure the auto negotiate setting on the GQAM.

Document Version

This is the second formal release of this document.

For More Information

If you have technical questions, call Cisco Services for assistance. Follow the menu options to speak with a service engineer.