**digital**™

**DIGITAL GIGAswitch/Ethernet System**
**Version 1.0.7**
**Release Notes**
**February 1998**

These release notes identify hardware requirements, and list known conditions and restrictions that apply to the operation of the GIGAswitch/Ethernet system.

As warranted, DIGITAL changes firmware to make functional enhancements or to correct reported problems.  To determine whether your system has the latest firmware, check the DIGITAL Network Products Home Page on the World Wide Web for information about upgrades.  See Accessing Online Information in these release notes for home page locations.

# Hardware Requirements

## Power Supply

Power supplies that are factory set to 120 V (U.S.)  or 240 V (Europe) and universal power supplies, which sense and automatically switch to your region's voltage requirements, cannot be installed together in the same system.  For multiple power suppy installations in a chassis, each supply must be as shown below:

**Types of Power Supplies Required for Redundant Installation**

| Region | GIGAswitch/Ethernet System Chassis* | | |
|---|---|---|---|
| | **Bay 3** | **Bay 2** | **Bay 1** |
| Europe and U.S. | Universal autoswitching 120/240 V, 400 W | Universal autoswitching 120/240 V, 400 W | Universal autoswitching 120/240 V, 400 W |
| Europe only | Factory set 240 V, 400 W | Factory set 240 V, 400 W | Factory set 240 V, 400 W |
| U.S. only | Factory set 120 V, 400 W | Factory set 120 V, 400 W | Factory set 120 V, 400 W |

*Shown with maximum power supply configuration.  For configurations using two power supplies, the second supply may be installed in either bay 2 or bay 3.

Factory-set power supplies and universal power supplies are interchangeable and may be swapped as long as all supplies in the system are of the same type.  If you wish to swap power supplies, contact your DIGITAL representative or distributor.

# Known Conditions and Restrictions

## Gigabit Ethernet standard

- The fiber-optic cable distances for the GIGAswitch/Ethernet system are based on version 4.1 of the IEEE 802.3z Draft Standard. These distances are subject to change due to further examination by the Gigabit Ethernet committee. Until the standard is final, DIGITAL recommends that you use the distances shown in the following table. For details on this topic, refer to the Technical Information link on the DIGITAL Network Products Home Page. See Accessing Online Information in these release notes for home page locations.

| | Pre-Standard Link Distances | |
| --- | --- | --- |
| Description | Direct Launch | Conditioned Launch |
| 1000BASE-SX 62.5/125 Fiber | 2 – 200 meters | Not available[1] |
| 1000BASE-SX 50/125 Fiber | 2 – 200 meters | Not available[1] |
| 1000BASE-LX 62.5/125 Fiber | 2 – 150 meters | 2 to 550[2] |
| 1000BASE-LX 50/125 Fiber | 2 – 150 meters | 2 to 550[2] |
| 1000BASE-LX 9/125 Fiber | 2 – 3000 meters | Not required[3] |

Note:

**1)** Conditioned launch requirements have not been determined for 1000BASE-X.

**2)** One effective method to obtain a conditioned launch for 1000BASE-LX is defined in IEEE Draft P802.3z/D4.1 as an "SMF with offset ferrule launch into the MMF cable."

**3)** Conditioned launch is not required for singlemode fiber.

## 10/100BASE-TX module (DGBGT-AA)

- You may experience difficulties with autonegotiation between some versions of the 10/100BASE-TX module and adapter cards using physical interfaces manufactured by National Semiconductor. The symptom is loss of connectivity. You can address this problem by either disabling autonegotiation, or using a patch cable longer than 5 meters. The following command line interface command also corrects the problem:

```
GIGAswitch/Ethernet> port set NationalPhyMode <slot> <port> enable
```

The problem will be addressed in an upcoming firmware release.

## VLANs

Configuring VLANs with the GIGAswitch/Ethernet system may produce unexpected results. This problem will be addressed in an upcoming firmware release. Be aware of the following additional issues when configuring VLANs:

- The switch's web agent interface is best used for making quick and simple VLAN configuration settings. For advanced configuration tasks, use the DIGITAL GIGAswitch/Ethernet Manager, a clearVISN network management application. Contact your DIGITAL representative or distributor for availability.

- The default setting for Initial Hash Table Size (a number used to determine how much space is initially reserved for new address tables) supports 58 simultaneous VLANs (out of a possible 1024). To increase the number of VLANs you can implement, simply decrease the initial hash table size for each address table instance.

- The switch powers up very slowly when large numbers of VLANs (more than 500) are configured. This problem will be addressed in an upcoming firmware release.

- If you set a port's VLAN trunking mode to **Clear**, make sure not to change the VLAN Binding Type from the default value: **Static**.

- If you are using both the VLAN autolearning feature and the Binding Type **Bind to Received**, make sure that you set the binding type before you set Autolearn to **Enable**.

## Gigabit ports

- DIGITAL gigabit ports operate at 1 Gb/s, full duplex, and currently do not support autonegotiation. If you connect a DIGITAL gigabit port to a device that supports autonegotiation, the DIGITAL port will not come up unless you disable autonegotiation on the non-DIGITAL device.

- Gigabit ports can come up showing nonzero counters. Use the clear counters feature to correct the problem.

## Statistics

- The port statistics page does not clear all counters when requested.

- When viewing statistics for a full-duplex port, panic messages display and the utilization calculation is inaccurate.

## Module power-up time

Modules typically take about 17 seconds to power up.

## Hunt groups

- Hunt groups are proprietary to the GIGAswitch/Ethernet system, and support Ethernet hunt groups only.

- The switch currently lacks support for hunt group load sharing. This problem will be addressed in an upcoming firmware release.

- You can implement only 13 hunt groups per switch in this release.

- All ports in a hunt group must be the same speed. Currently, the firmware does not enforce this rule. For example, you may have a situation where ports in a hunt group intended to consist only of 100 Mb/s ports autonegotiate to run at 10 Mb/s, causing the hunt group not to function as expected.

- If you configure a base port for a hunt group, and the base port is having link problems during configuration, both the configured base port and the port that takes over for the failed base port display as VLAN Switch Port entries. Normally, only the port that is currently serving as the base port should display.

## Ping function

- The GIGAswitch/Ethernet system cannot ping its own IP address.

- The GIGAswitch/Ethernet system's ping function does not support frames larger than the maximum Ethernet frame size (that is, it does not support fragmented ping frames).

## Switch events

- The system does not currently send SNMP traps.

- Some fan trays generate spurious up/down events, consuming log space.

- All events of type **Status** are currently being displayed as a single event type. In the future, there will be more differentiation between status events.

- Switch port event log entries are identified by internal fabric port and subport identifiers. In the future, they will be identified by physical slot and port.

- The Event Configuration screen in the web agent does not work properly when more than one event is selected at a time.

## Firmware download

- TFTP downloads require that you specify the location of the firmware file using the UNIX subdirectory structure, that is, with a foward slash (/) — even on a Windows system.

- If you use a DOS TFTP server for firmware downloads, file names must be in the 8.3 format. To meet this requirement, change the name of the firmware file.

- It takes a few seconds before the Status button on the TFTP Download screen returns accurate information.

## Network management

- The NetScout RMON manager does not automatically support the GIGAswitch/Ethernet system. If you wish to use this manager to monitor the switch, access the DIGITAL Network Products Home Page for a TechTip on how to correct the problem. See Accessing Online Information in these release notes for home page locations.

- Under certain scaling conditions, MIB browsers may manifest an error condition while reading the Address Summary Table. As a result, SNMP walks of the Gigabit Ethernet MIB could result in errors.

### Fault tolerance

- Redundant switch control processor, switch matrix, and switch controller modules are not available for this release. These options will be available in an upcoming firmware release. The hot-swap feature, however, is supported in the current release.

### Information library

- The Information Library's Setup program may copy the image file for the Adobe Acrobat Reader (ar32e30.exe) to the destination drive when the Reader installation option is disabled. This file can be deleted from the destination drive if you do not need to install the Reader.

- To ensure that the online help is avaible to the web agent, be sure to specify the location of the server in the Http server configuration screen as described below, and check that the server is running.

  — Because the entry field for the server location accepts names of 31 characters or less only, you can use IP addresses and short node names only in these formats:

    ```
    http://xx.xx.xx.xx:2010    <for ip address entry>

    http://node_name:2010    <for shorter node-name entry>
    ```

  — Eliminating the "http://" from your entry makes it invalid.

## Accessing Online Information

For a rich set of up-to-date information on DIGITAL products, technologies, and programs, visit the DIGITAL home page on the World Wide Web at http://www.digital.com. Further information about the GIGAswitch/Ethernet system is available on the DIGITAL Network Products Home Page at the following locations:

| | |
|---|---|
| **North America** | http://www.networks.digital.com |
| **Europe** | http://www.networks.europe.digital.com |
| **Asia Pacific** | http://www.networks.digital.com.au |

Follow the Technical Information link to firmware, TechTips, manuals, and more for the GIGAswitch/Ethernet system.

## Using Electronic Mail

The Network Information Center (NIC) of SRI International provides automated access to NIC documents and information through electronic mail. This is especially useful for users who do not have access to the NIC from a direct Internet link, such as BITNET, CSNET, or UUCP sites.

To use the mail service, follow these instructions:

**1** Send a mail message to **SERVICE@NIC.DDN.MIL**.

**2** In the SUBJECT field, request the type of service that you want followed by any needed arguments.

Usually, the message body is ignored, but if the SUBJECT field is empty, the first line of the message body is taken as the request.

The following example shows the SUBJECT lines you use to obtain NIC documents:

> HELP
> RFC 822
> RFC INDEX
> RFC 1119.PS
> FYI 1
> IETF 1IETF-DESCRIPTION.TXT
> INTERNET-DRAFTS 1ID-ABSTRACTS.TXT
> NETINFO DOMAIN-TEMPLATE.TXT
> SEND RFC: RFC-BY-AUTHOR.TXT
> SEND IETF/1WG-SUMMARY.TXT
> SEND INTERNET-DRAFTS/DRAFT-IETF-NETDATA-NETDATA-00.TXT
> HOST DIIS

Requests are processed automatically once a day. Large files are broken into separate messages.