

Installation Guide

FUJITSU PCI GigabitEthernet 2.4

for Solaris™ Operating System

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1 Program Components

This software is comprised of the following packages.

Solaris™ Operating System is written Solaris OS in this manual.

No.	Directory	Package Name	Version	Function	Contents
1	2.6_7	FJSVgid.us	2.0	GigabitEthernet card (PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2) Driver	Only for Solaris 2.6 OS, Solaris 7 OS
		FJSVgidx.us		GigabitEthernet card (PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2) 64bit Driver	
2	8	FJSVgid.us	2.0	GigabitEthernet card (PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2/PW008QG1), PRIMEPOWER250/450 secondary LAN port Driver	Only for Solaris 8 OS
		FJSVgidx.us		GigabitEthernet card (PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2/PW008QG1), PRIMEPOWER250/450 secondary LAN port 64bit Driver	
		FJSVgidr.us		GigabitEthernet card (PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2/PW008QG1), PRIMEPOWER250/450 secondary LAN port etc files	

No.	Directory	Package Name	Version	Function	Contents
		FJSVgidad.us		GigabitEthernet card (PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2/PW008QG1), PRIMEPOWER250/450 secondary LAN port addon files	
3	9	FJSVgid.us	2.1	GigabitEthernet card (PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2/PW008QG1) Driver	Only for Solaris 9 OS
		FJSVgidx.us		GigabitEthernet card (PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2/PW008QG1) 64bit Driver	
		FJSVgidr.us		GigabitEthernet card (PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2/PW008QG1) etc files	
		FJSVgidad.us		GigabitEthernet card (PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2/PW008QG1) addon files	
4	10	FJSVgid.us	2.2	GigabitEthernet card (PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2/PW008QG1) Driver	Only for Solaris 10 OS
		FJSVgidad.us		GigabitEthernet card (PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2/PW008QG1) addon files	
5	PRIMEPOWER 1_100	FJSVgid.u	2.0	GigabitEthernet card (PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2) Driver	For PRIMEPOWER 1/100

2 Applicable Manuals

2.1 Online Manuals

The following online manual, in HTML format, is stored on the CD-ROM with the packages.

This online manual can be referred to either directly from the CD-ROM or copied to your hard disk.

No.	Manual title
1	FUJITSU PCI GigabitEthernet 2.4 User's Guide

You can refer to the above listed online manuals on a servers or a PC by using a Web browser that supports HTML3.2.

E.g. Microsoft ® Internet Explorer V3.0 or later, Netscape Navigator ® V3.0 or later, or Netscape ® Communicator V4.0 or later.

The PDF manual can be available from below URL.

<http://www.fujitsu.com/global/support/computing/server/unix/driver/>

2.1.1 On a PC

1. Insert CD-ROM into the CD-ROM drive unit.
2. Open the following file using the Web browser.

<code>CD-ROM_Drive_Name : /manual/english/index.htm</code>
--

2.1.2 On a server

1. Insert CD-ROM into the CD-ROM drive unit on the server.
2. If the CD-ROM has not been mounted, mount it.
3. Open the following file using the Web browser.

<code>/Mount_Point/manual/english/index.htm</code>
--

2.2 Printed Documentation (Appended Papers)

Not supplied.

3 Operating Environment

To use this software, the following software and hardware requirements must be met.

3.1 Software Environment

1) Basic software prerequisites

Before you can use this software, one of the following Basic Software products must have been installed on the system.

No.	Name of Basic Software	Remarks
1	Solaris 2.6 OS	-
2	Solaris 7 OS	-
3	Solaris 8 OS	-
4	Solaris 9 OS	-
5	Solaris 10 OS	-

2) Software requirements

When you use the error notification function (addon function), please be sure to install Enhanced Support Facility before installing this package.

3) Exclusive software

None.

4) Patch requirements

By the application of this patch, the new function of FUJITSU PCI GigabitEthernet 2.4 is validated.

No.	Patch ID	Remarks
1	912784-03	For Solaris 2.6 OS or Solaris 7 OS . This patch is applied by automatic install at " 6.2 Installing Software ".
2	114536-12	For Solaris 8 OS . This patch is applied by automatic install at " 6.2 Installing Software ".
3	114994-12	For Solaris 9 OS . This patch is applied by automatic install at " 6.2 Installing Software ".
4	120462-05	For Solaris 10 OS . This patch is applied by automatic install at " 6.2 Installing Software ".
5	913306-03	It must be required only this patch when the using machine is PRIMEPOWER 1 or PRIMEPOWER 100 . Also, above 1, 2, 3, 4 patches are not required. This patch is applied by automatic install at " 6.2 Installing Software ".

When executing the DR(Dynamic Reconfiguration) function or PCI Hot Plug function with Quad GigabitEthernet(PW008QG1), the following patches are needed.

No.	Patch ID	Remarks
1	912680-04	On Solaris 9 OS installed with ESF2.3 system, when DR(Dynamic Reconfiguration) function is executed to the system board installing Quad GigabitEthernet card (PW008QG1), this patch is needed.
2	913371-03	On Solaris 9 OS installed with ESF2.4 or ESF2.4.1 system, when DR(Dynamic Reconfiguration) function is executed to the system board installing Quad GigabitEthernet card (PW008QG1), this patch is needed.
3	913732-02	On Solaris 9 OS installed with ESF2.5 or ESF2.5.1 system, when DR(Dynamic Reconfiguration) function is executed to the system

		board installing the Quad GigabitEthernet card (PW008QG1), this patch is needed.
4	110900-12	On Solaris 8 OS, when PCI Hot Plug function is executed to the Quad GigabitEthernet card (PW008QG1), this patch is needed.
5	112838-11	On Solaris 9 OS, when PCI Hot Plug function is executed to the Quad GigabitEthernet card (PW008QG1), this patch is needed.
6	118822-11	On Solaris 10 OS, when PCI Hot Plug function is executed to the Quad GigabitEthernet card (PW008QG1), this patch is needed.

5) Unified Installer

* Related Files

Below files are included. The file path is from CD-ROM root.

- ./FJSVclis/Disk1/cdsetup : The script for information about Product CD.
- ./FJSVclis/Product1/prodsetup : The script to install Product CD.
- ./FJSVclis/Product1/admin : The file for package adding.
- ./FJSVclis/Config1/I08FJSVgid.sh : The script to set the operating mode.
- ./FJSVclis/Config1/FJSVgid_config_readme.txt : Readme file of the script to set the operating mode.
- ./FJSVclis/Config1/config/fjgi.sh : The script for auto setting used by I08FJSVgid.sh.

* Precondition

The files cdsetup and prodsetup are created in order to be called from the Unified installer.

* Required Product

- Enhanced Support Facility

When you install this CD-ROM by Unified Installer, please carry out to the host in whom required product has simultaneously or already been installed.

3.2 Hardware Environment

The following hardware environments are required to use this software.

1) Main memory

Main memory of 64M bytes or more is required.

2) Hardware requirements

The following table shows the I/O devices that can use this software.

No.	Device Name	Model	Remarks
1	GigabitEthernet Card	PW008GE4/PW0G8GE1/PW008GE5/ PW0G8GE2/PW008QG1	-
2	GigabitEthernet Port	PRIMEPOWER250/450 secondary LAN port	-

Make sure that the above-mentioned GigabitEthernet card is set up before installing this software and complete card recognition by "boot -r" command.

3.3 Static Disk Resources

The disk space requirements for this software are shown below.

3.3.1 Disk space requirements

The following table lists the disk space requirements for installing this software. If necessary, expand the size of the appropriate file systems.

No.	Directory	Disk Space Requirement (in megabytes)	Remarks
1	/	0.4	-
2	/usr	0	-
3	/var	0.1	-

4	/opt	0.1	-
---	------	-----	---

3.3.2 Work area requirements

None.

3.4 Dynamic Disk Resources

None.

3.5 Memory Requirements

The following table shows the memory required when you use this software for the following operations.

No.	Memory required (unit:megabytes)	Operation
1	9	GigabitEthernet based communication

*This value shows required memory per a port. In Quad GigabitEthernet card(PW008QG1), about 36 megabytes memory size is required for a card.

3.6 Swap Space

Swap space is not used.

4 Restrictions and Notes

4.1 Restrictions

- A JumboFrame function or VLAN interface cannot be used for the private LAN of "SynfinityCluster" and the cluster interconnect of "PRIMECLUSTER".
- VLAN interface cannot be used with "SynfinityLINK" and "PRIMECLUSTER GLS" (But, PRIMECLUSTER GLS 4.1A30 or later only Fast switching mode or NIC switching mode can use VLAN interface.).

4.2 Notes

4.2.1 About packages

In case of using on PRIMEPOWER1 or PRIMEPOWER100, please be sure to install the package for PRIMEPOWER1/100 (a procedure is referring to "6. Installation Procedures"). And on other machines, please be sure to install the package for each Solaris OS of use (a procedure is referring to "6.2 Installing Software"). In addition, the packages for Solaris 8 OS are not able to be installed in Solaris 7 OS.

4.2.2 Using PRIMECLUSTER GLS 4.0 (Multipath Function)

When using PRIMECLUSTER GLS 4.0 (Multipath Function), it is needed 911872-03 or later patch.

4.2.3 Using PRIMECLUSTER GLS 4.1 (Multipath Function)

When using PRIMECLUSTER GLS 4.1 (Multipath Function), it is needed 912419-02 or later patch.

4.2.4 Static electricity (PW008GE5/PW0G8GE2 and PW008QG1)

Twisted-pair cables may be charged with static electricity due to environment. If the electrified cables are continuously used, system and/or LAN interface of system may be damaged, or may malfunction. When you newly install or move the cables, it is necessary to remove static electricity from the cables. In Japan, you can order tool(TS2002-001) in order to remove static electricity. In other countries, please consult with your local service.

4.2.5 About VLAN function and LinkAggregation function and Quad GigabitEthernet support

VLAN(Virtual LAN) function can be used in **Solaris 8 OS** or later.

LinkAggregation function can be used in **Solaris 8 OS** or later 64bit mode.

The Quad GigabitEthernet card (PW008QG1) can be used only in Solaris 8 OS or later, and with PRIMEPOWER 250/450/650/850/900/1500/2500/HPC2500.

5 Procedure of Installation

- (1) If the system is powered on, ask the system administrator to shut down the OS and power off the system.
- (2) Disconnect the power supply cord or turn off the main line switch of the product that Gigabit Ethernet Card is installed to reduce the electric hazard.
- (3) Install the card according to the installation instruction of the products that the card is installed.
- (4) Connect the power supply cord of the product to the supply or turn on the main line switch of the product.
- (5) Power the system on after confirming the proper installing in accordance with the installation instruction of the products.

* When the card is installed in the PCI HOT-SWAP System product, install it in the card slot which carried out the power supply cut according to installation instruction of the product.

6 Installation Procedures

To install this software, use the procedures described below.

6.1 Preparing for Installation

6.1.1 Checking the system environment

Check there is sufficient disk space to install this software. For more detailed information on the disk space requirements, see "3.3 Static Disk Resources". If the disk space, for installing this software, is insufficient, reconfigure the disk partition.

6.1.2 Installation time

It takes about 2 minutes to install this software (rebooting time not included).

6.2 Installing Software

1. Log in to your system as superuser.

```
# su <Return>
```

2. Insert CD-ROM into the CD-ROM drive unit and type the following command.

```
# mkdir -p /cdrom/cdrom0 <Return> (*1)
# /usr/sbin/mount -F hsfs -o ro /dev/dsk/c0t4d0s2 /cdrom/cdrom0 <Return> (*2)
```

(*1) required if "/cdrom/cdrom0" does not exist.

(*2) /dev/dsk/c0t4d0s2 is the example of the name to specify. This name changes with systems.

3. Install the package and required patch.

By below automatic installation, considering a machine, a Solaris OS version and a patch level, the packages and a required patch are applied automatically.

```
# cd /cdrom/cdrom0 <Return>
# ./install <Return>
```

6.3 Environment Setting after Installation

1. When you install to the machine using system-console(SMC)"PW800/PW900/PW1000/PW2000/PW1500/PW2500..", with the command below after installation, please insert a CD-ROM in the CD-ROM equipment of SMC, and copy "fjgi_s.dat", "fjgi_t.dat" and "fjgi_q.dat" files in CD-ROM to /opt/FJSCsl/etc/scsidata/of SMC.

If using PW008GE4/PW0G8GE1/PW008GE5/PW0G8GE2 and using SCS2.3 or later, this operation is not required. And, if using PW008QG1 and using SCS2.5.1 or later, this operation is not required.

```
# cp /cdrom/cdrom0/FJsvgid_2.4/fjgi_s.dat /opt/FJsvcs1/etc/scsidata/fjgi_s.dat
# cp /cdrom/cdrom0/FJsvgid_2.4/fjgi_t.dat /opt/FJsvcs1/etc/scsidata/fjgi_t.dat
# cp /cdrom/cdrom0/FJsvgid_2.4/fjgi_q.dat /opt/FJsvcs1/etc/scsidata/fjgi_q.dat
```

2. When you use GigabitEthernet on "SynfinityCluster" or "PRIMECLUSTER", please refer to "[Appendix C.3 Note](#)" in "FUJITSU PCI GigabitEthernet 2.4 User's Guide" for detailed information about the setting and notes.
3. When the installation program is finished, the system must be rebooted.
4. After you reboot the system, environment setting is needed. Refer to "[FUJITSU PCI GigabitEthernet 2.4 User's Guide](#)" for detailed information about the setting.

6.4 Removing the Software

1. Log in to your system as superuser.

```
# su <Return>
```

2. Type pkgrm(1M) command.

(1) In case of using on PRIMEPOWER1 or PRIMEPOWER100

```
# pkgrm FJsvgid <Return>
```

(2) In case of using on other machines

***Solaris 2.6 OS :**

```
# pkgrm FJsvgid <Return>
```

***Solaris 7 OS :**

```
# pkgrm FJsvgid <Return>
```

```
# pkgrm FJsvgidx <Return>
```

***Solaris 8 OS :**

```
# pkgrm FJsvgid <Return>
```

```
# pkgrm FJsvgidx <Return>
```

```
# pkgrm FJsvgidr <Return>
```

```
# pkgrm FJsvgidad <Return>
```

***Solaris 9 OS :**

```
# pkgrm FJsvgid <Return>
```

```
# pkgrm FJsvgidx <Return>
```

```
# pkgrm FJsvgidr <Return>
```

```
# pkgrm FJsvgidad <Return>
```

***Solaris 10 OS:**

```
# pkgrm FJsvgid <Return>
```

```
# pkgrm FJsvgidad <Return>
```