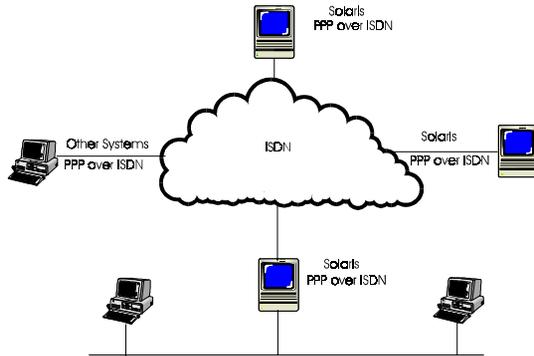## Product Description

The Digi BRI AT-ISDN Solaris driver provides Sun Solaris systems running Solstice PPP 3.0.1 or the standard Solaris PPP with basic rate interface (BRI) connections to ISDN networks, enabling communications with other systems connected to ISDN and running the point-to-point protocol (PPP).

Key Features

Key features include the following:

- Support for Solstice PPP 3.0.1 and standard Solaris PPP traffic over both BRI B channels
- Modem and TTY emulation, providing seamless operations with current PPP software
- User-friendly configuration interface
- UNIX man pages and online help
- D-channel tracing and logging
- Status information on the ISDN line, calls, B-channels, and configurable parameters

Requirements

The BRI AT-ISDN driver requires the following:

- An Intel x86-based or SPARC system running Solaris 2.5 or newer operating system, X-Windows or similar software, and Solstice PPP 3.0.1 or the standard Solaris PPP.
- A DataFire BRI PCI S/T or DataFire BRI PCI U adapter

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BRI AT-ISDN Solaris Driver

Installation Card

Where to Find Information

On This Card

On this card you will find the following:

- An installation and configuration overview
- Information on how to install and configure the product
- Information on configuring Solstice PPP and the standard Solaris PPP for use with the Solaris BRI driver
- A product description and a listing of key features of the product
- Information on the system requirements that must be met to use this product

Related Documentation

The following are also sources of information:

- Online help and man pages for `briconfig`, `ppp`, `pppd`, and `aspppd`
- DataFire BRI PCI 1U Installation Card
- DataFire BRI PCI 1S (Domestic) Installation Card
- DataFire BRI PCI 1S (Euro) Installation Card
- Configuring and Using Solstice PPP 3.0.1 Servers and Routers, Revision A, March 1996. SunSoft. (802-5354-10)
- Configuring and Using Solstice PPP 3.0.1 Clients, Revision A, March 1996. SunSoft. (802-5353-10)

Installation and Configuration Overview

1. Install the adapter (s). See the *DataFire BRI PCI 1S Installation Card or the DataFire BRI PCI 1U Installation Card* for more information.
2. Install the driver.
3. Configure each adapter.
4. Configure PPP.
5. Run the Digi `bricheck` utility to verify that the PPP configuration works with the AT-ISDN driver.
6. Set up a client or server using the SunSoft documentation listed on the front of this card.

Installation and Configuration

Before You Begin

You must log on as root and kill the `vold` process if it is using the floppy device.

Procedure

1. Install the driver from the diskette by typing the following and then pressing `Enter`:
   `pkgadd -d /dev/diskette0 digibri`
2. Carefully follow the installation prompts until you see the following message:
   `Installation of <digibri> was successful.`
3. Run the configuration program by typing the following and then pressing `Enter`:
   `/opt/digibri/bin/briconfig`
4. Configure all adapters. (For information on configuration fields use the online help.)
5. After configuring all adapters, click the `Apply` button.
6. Configure Solstice PPP as a client or server with the `pppinit` tool or standard PPP by editing the `/etc/asppp.cf` file. For information on configuring PPP, see the following:
   - The Sun documentation listed on the front of this card
   - *Information on Configuring PPP*, which follows.
7. Run the `bricheck` utility to verify your PPP configuration by typing the following and then pressing `Enter`: `/opt/digibri/bin/bricheck`

Information on Configuring PPP

You may have to modify the PPP configuration slightly to ensure that it works with the driver. This section provides some tips:

Both Solstice PPP and Standard Solaris PPP Tips

If you use the PPP inactivity timeout feature over your ISDN connections, traffic from the `in.routed` and `in.rdisc` processes may prevent the connection from going idle. To ensure that your connections close properly, you should disable these processes if you are not using them. You can do this by editing the `/etc/rc2.d/S69inet` file.

Solstice PPP Tips

- In order to dial out, you must edit the `.scr` script file, which is created with the `pppinit` tool, to send the appropriate login sequence.
- If the `bricheck` utility indicates a problem, ensure that your configuration conforms to the following:
  - Always choose `asynchronous` when defining clients or servers.
  - Choose `Standard hayes` when you are asked to select a modem.
  - Note that the TTY devices used with this driver are named `tty1a`, `tty1b`, `tty2a`, `tty2b` and so on. The numbers identify adapters and the letters (a and b) identify B channels.
  - Answer `no` when the system asks if you want to configure your modems using the information in the modem database.
  - Use the default (38,400 bps) when you configure modem speed.

Solaris Standard PPP Tips

- Ensure that the following PPP packages have been installed: SUNWapppr, SUNWapppu, SUNWpppk. Do the same for the UUCP packages: SUNWbnur, SUNWbnuu.
- To PPP, the ISDN driver appears as a modem/TTY combination. So configure PPP as you would an asynchronous serial port, using a UUCP configuration for dial-outs.
- System files, including `/etc/asppp.cf`, `/etc/passwd`, and the `/etc/uucp` `Systems`, `Dialers`, and `Devices` files should be edited as if you are configuring a standard Hayes modem for PPP. See the Solaris man pages on `aspppd` and `ppp` for more details. Here are some examples:
  - The file `/etc/passwd` on a PPP server should have an entry similar to the following: `ppplogin:x:1001:10::/:/usr/sbin/asppls`
  - The file `/etc/uucp/Systems` on a client should have an entry similar to the following: `pppserver1 Any pppdev0 38400 5551234 in:--in: ppplogin word: PASSWORD`
  - The file `/etc/uucp/Devices` on a client should have an entry similar to the following: `pppdev0 cua/1a - Any hayes`
  - The file `/etc/uucp/Dialers` on a client should have an entry similar to the following: `hayes =,-, ""ATDT\T\r CONNECT`

Performance Note

Sun has released TCP and IP performance patches for the kernel that you may want to take advantage of if PPP communications seem slow. Check the following FTP address for the most recent updates: `ftp://sunsolve.Sun.COM/pub/patches`.