SunSAI/P Release Notes

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Part No. 805-6948-10
November 1998, Revision A

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SunSAI/P Release Notes

This document contains important information about the SunSAI/P adapter and software.

Note – For access to the Sun bug report database, and for information on how to get the latest patches and patch revisions, please visit the SunSolve[sm] website at `http://sunsolve.sun.com`.

Suggested Maximum Number of SunSAI/P Adapters Per System

The table below lists the suggested maximum number of SunSAI/P adapters per Sun™ system. These numbers are current at the time of the printing of this document.

TABLE 1 Suggested Maximum Number of SunSAI/P Adapters Per System

Sun System	Number of SunSAI/P Adapters
Ultra™ 5	3
Sun Enterprise 5S	3
Ultra 10	4
Sun Enterprise 10S	4
Ultra 30	4
Ultra 60	4

TABLE 1 Suggested Maximum Number of SunSAI/P Adapters Per System *(Continued)*

Sun System	Number of SunSAI/P Adapters
Sun Enterprise™ 250	4
Sun Enterprise 450	4
Sun Enterprise 3000/4000/5000/6000	4
Sun Enterprise 3500/4500/5500/6500	4

Note – The SunSAI/P software has been tested on the following Solaris operating environments: Solaris 2.5.1 Hardware: 4/97, 8/97, 11/97, Solaris 2.6, and Solaris 7.

Sun Port Manager

The Sun™ Port Manager (`spm`) utility is provided to display port settings and to run diagnostics on the SunSAI/P adapter. The correct way to exit from the `spm` utility is to press the q key. If you attempt to use the Escape key to quit the utility, the `spm` utility may terminate with an error and create a core file.

Also, the `spm` utility will display the port settings of no more than eight SunSAI/P adapters. Refer to Sun bug report number 4176486 for more information.

Dial In Modems May Not Hang Up

If you use modems for dial in purposes, you may experience a problem where a modem will not hang up the phone line connection after all of the processes running on the port exit. As a workaround, configure the modem to be a bi-directional modem.

Please refer to the Sun bug report number 4178202 for more information.

Using Hardware Flow Control

To use clear to send (CTS)/request to send (RTS) hardware flow control with devices such as modems, we recommend using the options provided by the `/opt/SUNWconn/bin/sitty` utility. Use the `sitty rtspace` and `ctspace` options instead of the following Solaris `stty` command options: `crtscts`, `crtsxoff`, `rtsxoff` and/or `ctsxon`. Refer to the `sitty(1m)` man page and Chapter 7 of the *SunSAI/P User's Guide* for more information about the `sitty` utility.

SunVTS `saiptest`

At the time of the printing of this document, the SunVTS™ `saiptest` diagnostic may fail when testing a SunSAI/P adapter using the external 25 port loopback mode option. As a workaround, you may verify the SunSAI/P adapter using the `saiptest` internal loopback test mode. For more information, refer to Sun bug report number 4171288.

`saipconfig` Utility Changes

Caution – Only run the `saipconfig` utility on systems with at least one SunSAI/P adapter installed. Running the `saipconfig` utility on a system without a SunSAI/P adapter will cause the driver not to load if the adapter is installed later.

Configure Up to 16 SunSAI/P Adapters

The `saipconfig` utility, which is included with the SunSAI/P software, has changed since the printing of the *SunSAI/P User's Guide* (805-6947-10). The utility can now be used to configure up to 16 adapters. However, you should not install more adapters into your system than are suggested in TABLE 1.

Manual Configuration Procedure Changed

Note – Since the printing of the *SunSAI/P User's Guide*, the `saipconfig` procedure for manually configuring the driver software has changed. Please see the section below for the correct procedure.

Use the `saipconfig` utility to configure the SunSAI/P adapters on your system manually. The utility will ask you a series of questions about how you want to customize the adapters. After you have answered these questions, the utility will reconfigure the driver software.

1. **Become superuser, or log onto to your system console as root.**
2. **Start the** `saipconfig` **utility by typing:**

```
# /etc/opt/SUNWconn/bin/saipconfig
```

3. **To configure the adapters manually, answer no (**`n`**) to this question:**

```
The installation has detected 1 SunSAI/P serial adapter.

Would you like to automatically install the default configuration? n
```

4. **Decide whether you want to select your own instance number:**

```
Would you like to select your own instance numbers? (y/n)? y
```

In this example, we have answered `y`, so `saipconfig` will prompt us for instance numbers later in the procedure. If we answered `n`, then the utility would not prompt us for instance numbers.

The `saipconfig` utility will ask you questions about how you want to configure the SunSAI/P interfaces.

```
This script installs the Sun PCI Serial Asynchronous Interface
driver :


This script also installs the information needed by Solaris to use
the additional ports available through this driver.  Depending upon
your system, this driver may support up to 16 Host Adapters and
(0-51) instances.


Press <CR> to proceed or "Q" to quit:
```

5. **Press the Return key to configure your driver software.**

6. **Type the number of SunSAI/P adapters you want to configure on your system**:

```
NOTE: Although (0-51) instances are allowed, this driver
only supports 16 actual adapters at one time.
How many adapters do you wish to install (1-16)?
```

For each adapter that you specified in Step 6, you will be asked the questions shown in Step 7 through Step 9.

7. **Decide if you want to enable interrupts on the SunSAI/P adapter.**

Type "`y`" to disable interrupts (the default value), or type "`n`" to enable interrupts, on the adapter.

Note – We recommend that you use the default setting of disabled interrupts.

```
Configuring adapter 0.

Adapter type is 8-port PCI Async Intelligent Adapter.

8-port adapter:

In order to reduce response time to small packets (latency), it
may be helpful to enable interrupts on the adapter.  However,
doing this will significantly increase driver CPU usage on your
Solaris system.  By default, interrupts are disabled.
To enable interrupts, answer no.

Do you want to keep interrupts disabled on the adapter? (y/n)? y
```

8. **If you answered** y **to Step 4, you will be prompted for the instance number of the adapter:**

```
What instance number would you like for this adapter? 1
```

The saipconfig utility will then display the selected configuration of the adapter.

```
You have selected the following configuration for adapter 0:

Adapter Type: 8-port PCI Async Intelligent Adapter.

Module  Port Names
--------------------------
1       term/a000 - term/a007 -- also /dev/cua/axxx
Interrupts disabled.

Is this configuration acceptable (y or n)? y
```

9. **Type "**y**" if you are satisfied with this adapter's configuration.**

Type "n" if you are not satisfied with the configuration.

```
Is this configuration acceptable (y or n)? n
Hit <CR> to re-configure adapter #0:
```

Press the Return key to return to Step 7.

After answering these questions for all of the SunSAI/P adapters on your system, saipconfig will configure the interfaces automatically. When saipconfig has finished configuring the interfaces, you will see this message:

```
Configuration Completed.
```