IRISconsole™
Administrator's Guide

# What's New in This Document

## New Features Documented

This revision of the *IRIXconsole Administrator's Guide* documents an updated user interface for IRISconsole.

## Major Documentation Changes

Changes to this document for the IRISconsole 2.0 release include the following:

- Moves IRISconsole Preferences functionality description to the IRISconsole GUI main window Edit menu documentation.

- Adds descriptions of the *Power On* and *Power Off* buttons to the Site window documentation.

- Adds descriptions of the Console Logs Directory and Alarm Logs Directory fields to the Change IRISconsole Config dialog box documentation.

- Moves partitioned system functionality description to the Change Site Config dialog box documentation.

- Adds FailSafe Controls System Control Port functionality description to the Change Site Config dialog box documentation.

- Adds descriptions of improved system logging functionality.

- Adds information about how Console and Remote System Controller connections affect the operation buttons described in the performing operations on attached systems documentation.

# Contents

# List of Figures

# List of Tables

# About This Guide

This guide documents the IRISconsole software graphical user interface for a Silicon Graphics OCTANE, O2, or Indy workstation that allows it to control Origin, CHALLENGE, Onyx2, and Onyx systems. The IRISconsole software is included in the base IRISconsole option, which includes any one of the following IRISconsole multiplexers: ST-1600, ST-1616, ST-1620, ST-1032, EL-8, EL-16, or EL-32. Serial cables, which are specific to the type of system controlled, are provided by additional IRISconsole options and complete the IRISconsole package.

The OCTANE, O2, or Indy workstation communicates with the servers through the multiplexer, to which each Origin, CHALLENGE, or Onyx system is connected via a pair of serial cables. Each multiplexer has ports for eight or more Origin, CHALLENGE, and Onyx systems; additional sets of serial cables are available from Silicon Graphics. Optionally, an additional multiplexer can be connected to the workstation to monitor additional servers.

This guide was prepared for release 2.0 of IRISconsole.

## Audience

This guide is written for system administrators and service personnel who are responsible for the configurations of two or more Origin, CHALLENGE, or Onyx systems that the IRISconsole controls and monitors. These persons can use the IRISconsole software to monitor the attached systems.

## Structure of This Document

This guide contains the following chapters and appendixes:

- Chapter 1, "IRISconsole Features and Capabilities," introduces IRISconsole features and describes how IRISconsole works with Origin, CHALLENGE, and Onyx systems. This chapter explains how to use the IRISconsole security feature.

- Chapter 2, "Configuring IRISconsole," describes how to set up IRISconsole software in preparation for configuring and administering groups of systems.

- Chapter 3, "Configuring Sites," explains how to use the IRISconsole graphical user interface to set up groups of systems for administration purposes.

- Chapter 4, "Administering Sites," explains how to use the IRISconsole graphical user interface for administration tasks such as determining hardware status (voltage, operating temperature, and blower speeds), and controlling, shutting down, or restarting systems in a site.

- Appendix A, "Error Messages and Warning Messages," lists and explains IRISconsole error and warning messages.

An index completes this guide.

## Font Conventions Used in This Guide

These font conventions are used in this guide:

*Italics*             Executable names, filenames, IRIX commands, manual or book titles, new terms, program variables, tools, utilities, variable command line arguments, variable coordinates, and variables to be supplied by the user in examples, code, and syntax statements

`Fixed-width type`
                     Error messages, prompts, and onscreen text

**`Bold fixed-width type`**
                     User input, including keyboard keys (printing and nonprinting); literals supplied by the user in examples, code, and syntax statements

# IRISconsole Features and Capabilities

This chapter introduces the operational features and capabilities of the IRISconsole software. The major sections in this chapter are as follows:

- "IRISconsole Hardware Configuration" on page 1
- "IRISconsole Graphical User Interface" on page 4
- "IRISconsole Security" on page 5
- "Overview of IRISconsole Operation" on page 6

## IRISconsole Hardware Configuration

The IRISconsole software allows an OCTANE, O2, or Indy workstation to control Origin200, Origin2000, CHALLENGE, Onyx2, and Onyx systems through one to six SCSI-based multiplexers and up to ten Ethernet-based multiplexers. The multiplexers can be any of the following Silicon Graphics multiplexers: ST-1600, ST-1616, ST-1620, ST-1032, EL-8, EL-16, or EL-32. Serial cables that are ordered as separate the IRISconsole option products connect the Remote System Control port and the System Console port on each server to the multiplexer.

IRISconsole includes a security feature that lets you specify administrators and users who will have access to the functions of IRISconsole. Also, certain features of IRISconsole can be accessed remotely using *ictelnet*, a version of *telnet* that works with IRISconsole.

IRISconsole is a local system; the IRISconsole software applies only to systems that are physically attached to the multiplexer connected to the OCTANE, O2, or Indy workstation on which the IRISconsole software is running. The IRISconsole software cannot communicate with another system running IRISconsole to share access to attached systems.

Cabling the multiplexer and Origin, CHALLENGE, Onyx2, and Onyx systems is explained in the *IRISconsole Multiplexer Installation Guide* (007-2839-*nnn*), and online man pages. Figure 1-1 shows an example IRISconsole site installation.
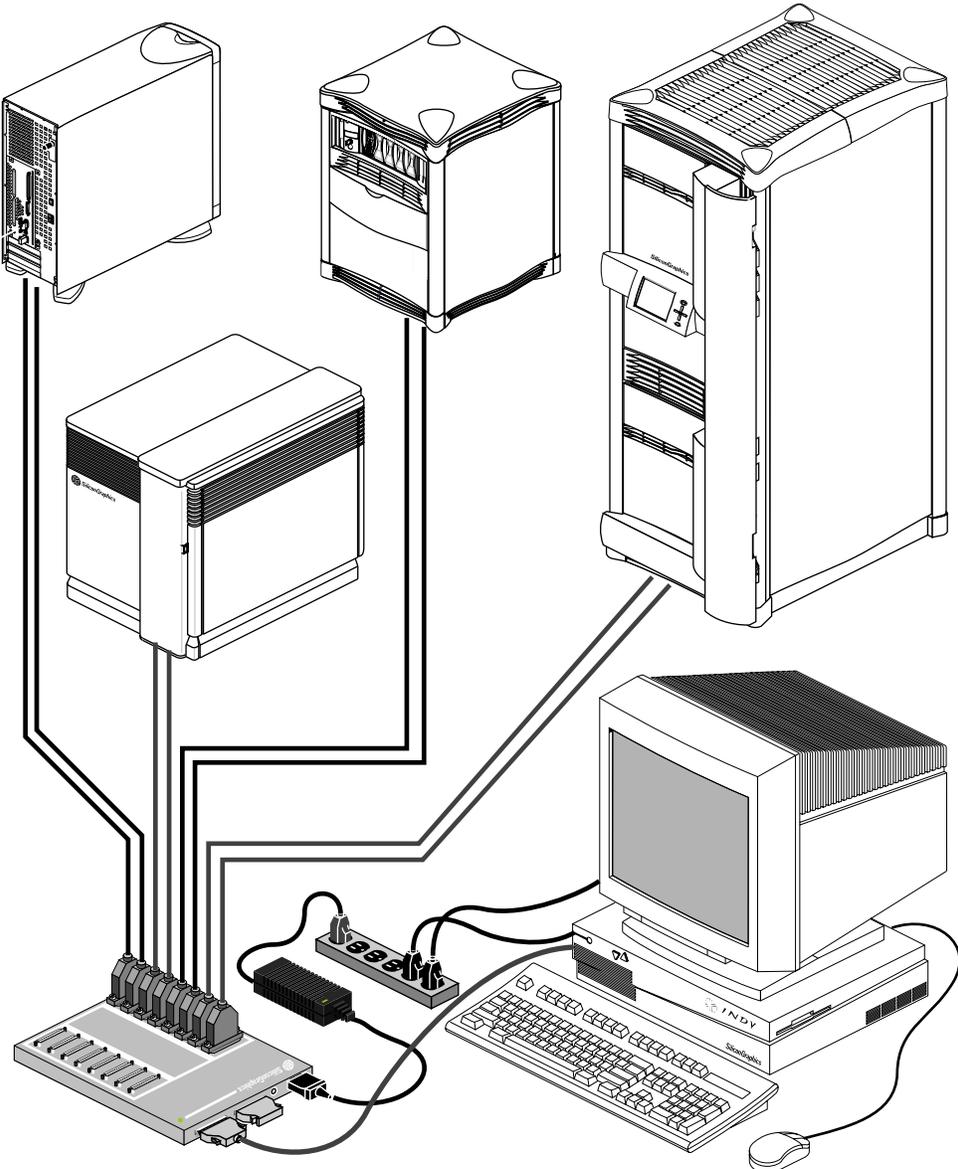
**Figure 1-1**      IRISconsole Site Example

Hardware requirements for the IRISconsole software are as follows:

- The 24-bit O2 or Indy workstation or OCTANE workstation must have a minimum of 32 MB of memory and must be running IRIX 6.2, 6.3, 6.4, or 6.5. The 20-inch display is strongly recommended for IRISconsole operation, as are XFS file systems, for their decreased recovery time and typically better performance.

- If one of the attached servers is a CHALLENGE S, or if an attached CHALLENGE or Onyx system does not have a Remote System Control port, not all features of the IRISconsole software are available. An upgrade consisting of an RS-232 plate assembly is available to equip CHALLENGE L servers that lack this port; contact your service representative.

- Only cables ordered as IRISconsole options are supported for connecting the Origin, CHALLENGE, Onyx2, and Onyx systems to the multiplexer. The *IRISconsole Multiplexer Installation Guide* describes these cables.

## IRISconsole Commands

The IRISconsole software includes the following shell commands: *ic*, *icpass*, *ictelnet*, and *icdbcnvrt*.

*ic*          The *ic* command brings up the IRISconsole graphical user interface. It is described in the next section, "IRISconsole Graphical User Interface."

*icpass*       The *icpass* command is used for setting up and maintaining administrator and user logins, each with a password. These logins and passwords are specific to IRISconsole and are independent of system logins and passwords. Using *icpass*, you can

- determine whether IRISconsole security is off or on

- add an IRISconsole administrator

- add an IRISconsole user

- change the administrator's or user's password

- delete an administrator or user

- set IRISconsole security off or on

- view a list of IRISconsole users

- allow or deny system access based on the *cron* command's allow and deny files.

**3**

| | |
|---|---|
| | Using *icpass* is described in Chapter 2, "Configuring IRISconsole," and Chapter 4, "Administering Sites." |
| *ictelnet* | You can use the command *ictelnet*, which is a version of *telnet* adapted for IRISconsole, to access the IRISconsole text-based menu from another system. |
| | Preparing the IRISconsole OCTANE, O2, or Indy system for using *ictelnet* is described in the section "Setting Up IRISconsole for Remote Access" in Chapter 2. Using *ictelnet* is described in the section "Connecting to a Remote IRISconsole Workstation" in Chapter 4. |
| *icdbcnvrt* | The IRISconsole 2.0 release uses a database introduced in the IRISconsole 1.3 release to store site and system information. The *icdbcnvrt* command is run by installation software to convert site and system information from the IRISconsole 1.2 or 1.3 release to the IRISconsole 2.0 release. |

## IRISconsole Graphical User Interface

The IRISconsole graphical user interface (GUI) enables you to set up and administer *sites*. A site is a group of workstations, servers, or other systems that are administered through IRISconsole.

The command that invokes the IRISconsole GUI is called *ic*. You can use the IRISconsole GUI to

- set up a site or add or delete the systems in a site, get the SYSLOG files for all systems, shut down all systems in a site, and edit alarm scripts for all systems

- display, view, or take control of the console of a system

- generate a nonmaskable interrupt (NMI), perform a hardware reset, or power cycle a system, power on or power off a system

  **Note:** System controllers on Origin and Onyx2 systems have passwords, which are different from IRIX login passwords. In this release of IRISconsole, generating an NMI, performing a hardware reset, power cycling a system, and powering on and powering off require that system controller passwords have their default values.

- view activity logs and other system reports

- connect to the system controller on an Origin or Onyx2 system and issue system controller commands

- set alarms and view system performance tools throughout the site

- view real-time graphs of hardware operating statistics of a system in a site, such as voltage, operating temperature, and blower speeds; save the graphs as files and display them (this feature is not available on Origin, Onyx2, or other systems not from Silicon Graphics)

- set a threshold for operating statistics so that an alarm is activated and various activities are triggered when the threshold is exceeded (this feature is not available on Origin and Onyx2 systems)

Chapter 3, "Configuring Sites," and Chapter 4, "Administering Sites," in this guide explain how use the IRISconsole GUI to set up sites and administer sites, respectively.

## IRISconsole Security

IRISconsole includes security features that use local password protection to assist administrators in securing IRISconsole and its managed systems from unauthorized access. When IRISconsole security is turned on (the default), access to certain operations is controlled. Some of these operations are represented by buttons in the site window of the IRISconsole GUI. The operations that are controlled when security is turned on are as follows:

- adding or deleting sites and systems in the sites (Edit pulldown menu)

- getting the console (*Get Console*), viewing the console window of a system controlled by another user (*Spy Console*), and taking control of a system console that another user is currently using (*Steal Console*)

- generating a nonmaskable interrupt (*Generate NMI*)

- performing hardware reset (*HW Reset*), power cycle (*Power Cycle*), power on (*Power On*), and power off (*Power Off*)

- viewing console activity logs (*Show Console Logs*)

- optionally creating allow or deny files by a system administrator with root permission to further restrict a user's access to particular sites or systems

**Note:** *Generate NMI*, *HW Reset*, and *Power Cycle* on Origin and Onyx2 systems require that the system controllers on those systems have default passwords.

Checking the current security setting and changing it are described in the sections "Determining Whether IRISconsole Security Is On or Off" and "Setting IRISconsole Security On or Off" in Chapter 2.

## Overview of IRISconsole Operation

The installation and operation of IRISconsole consists of these major steps:

1.  Install the multiplexer hardware and cable it to the OCTANE, O2 , or Indy workstation and the systems you plan to control. See the *IRISconsole Multiplexer Installation Guide* for instructions. Additional information is also available in online man pages.

2.  Install the IRISconsole software and configure it: specify administrators and users, choose the security setting, identify multiplexer port numbers, and prepare for remote access. See Chapter 2, "Configuring IRISconsole," for instructions.

3.  Specify *sites*, groups of workstations, servers, or other systems that are to be administered through IRISconsole. See Chapter 3, "Configuring Sites," for instructions.

4.  Use the features of the IRISconsole graphical user interface to administer the sites. See Chapter 4, "Administering Sites," for details.

# Configuring IRISconsole

This chapter describes various tasks that you must perform to install and perform the initial configuration of IRISconsole software. The major sections in this chapter are as follows:

- "Installing IRISconsole Software" on page 8
- "Adding an IRISconsole Administrator" on page 9
- "Adding an IRISconsole User" on page 10
- "Determining Whether IRISconsole Security Is On or Off" on page 11
- "Setting IRISconsole Security On or Off" on page 11
- "Setting Up Additional Access Control" on page 12
- "Obtaining the Multiplexer SCSI ID Number and Serial Port Connections" on page 12
- "Determining the Multiplexer Device Name" on page 14
- "Setting Up IRISconsole for Remote Access" on page 15

## Installing IRISconsole Software

To install IRISconsole software, install these subsystems:

*eoe.sw.uucp*
> UUCP software required by IRISconsole software

*sgitcl_eoe.sw.base*
> Tcl toolkit software required by IRISconsole software

*sgitcl_eoe.sw.tm*
> Tcl toolkit software required by IRISconsole software

**Note:** You must choose the *sts.xx.xx* subsystems or the *el_serial.xx.xx* subsystems, or both, depending upon which multiplexer(s) your site is using.

*sts.sw.base*
> Multiplexer software

*sts.man.man*
> Reference pages for multiplexer software

*sts.man.relnotes*
> Release notes for multiplexer software

*IRISconsole.sw.base*
> IRISconsole base software

*IRISconsole.sw.remoteaccess*
> IRISconsole software for remote access

*IRISconsole.sw.tcllink*
> IRISconsole Tcl software

*IRISconsole.man.man*
> Reference pages for IRISconsole software

*IRISconsole.man.relnotes*
> IRISconsole release notes

*IRISconsole.books.IRISconsole_AG*
> This guide

*IRISconsole.books.MUX_IG*
> The *IRISconsole Multiplexer Installation Guide*

## Adding an IRISconsole Administrator

To add an IRISconsole administrator, type as root

```
icpass -add icadmin
```

The window shown in Figure 2-1 appears.



**Figure 2-1**      Adding an IRISconsole Administrator

Enter the new user's login and password. Note that they are independent of that user's system login and password. Click the *Apply* button.

## Adding an IRISconsole User

To add an IRISconsole user, you must be an IRISconsole administrator. Type

```
icpass -add icuser
```

The window shown in Figure 2-2 appears.



**Figure 2-2**     Using the IRISconsole Security Window

After you enter your IRISconsole login and password and click the *Apply* button, the window shown in Figure 2-3 appears.



**Figure 2-3**     Adding an IRISconsole User

Enter the new user's login and password. Note that they are independent of that user's system login and password. Click the *Apply* button.

## Determining Whether IRISconsole Security Is On or Off

As described in the section "IRISconsole Security" in Chapter 1, IRISconsole can be used to limit access to the capabilities of IRISconsole. To determine whether IRISconsole security is on, type

**icpass -security get**

The software returns off or on.

## Setting IRISconsole Security On or Off

To set IRISconsole security on or off, you must be an IRISconsole administrator. To set IRISconsole security on, type

**icpass -security set on**

To set IRISconsole security off, type

**icpass -security set off**

In either case, the security window shown in Figure 2-2 appears. After you enter correct information, a confirmation window appears with the message

```
Access Control status changed to 'ON'
```

or

```
Access Control status changed to 'OFF'
```

## Setting Up Additional Access Control

IRISconsole uses files to either allow or deny access to particular systems within a site. These files are *icallow* and *icdeny*. They are located in the */usr/IRISconsole/adm* directory. Each entry in these file has the following format:

```
user_id : site_name : system_name [, system_name ]
```

The *icallow* and *icdeny* files work like the allow and deny functionality of the *cron* command. If the entry is in the *icallow* file, user `user_id` is allowed access to the system `site_name : system_name`. If the entry is in the *icdeny* file, that user is denied access to that system. If both the *icallow* and *icdeny* files contain entries, then only the entry in the *icallow* file is used.

## Obtaining the Multiplexer SCSI ID Number and Serial Port Connections

In preparation for installing systems for IRISconsole, you need to obtain a SCSI ID and port connections numbers by looking at the multiplexer and its cable connections. Follow these steps:

1.  Get the number of the SCSI ID used by the multiplexer. This number was set when the IRISconsole system was installed and is displayed on the back of the multiplexer, as shown in Figure 2-4.

    **Note:** If you are installing an EtherLite multiplexer, you do not need to determine the SCSI ID.

SCSI ID
select switch
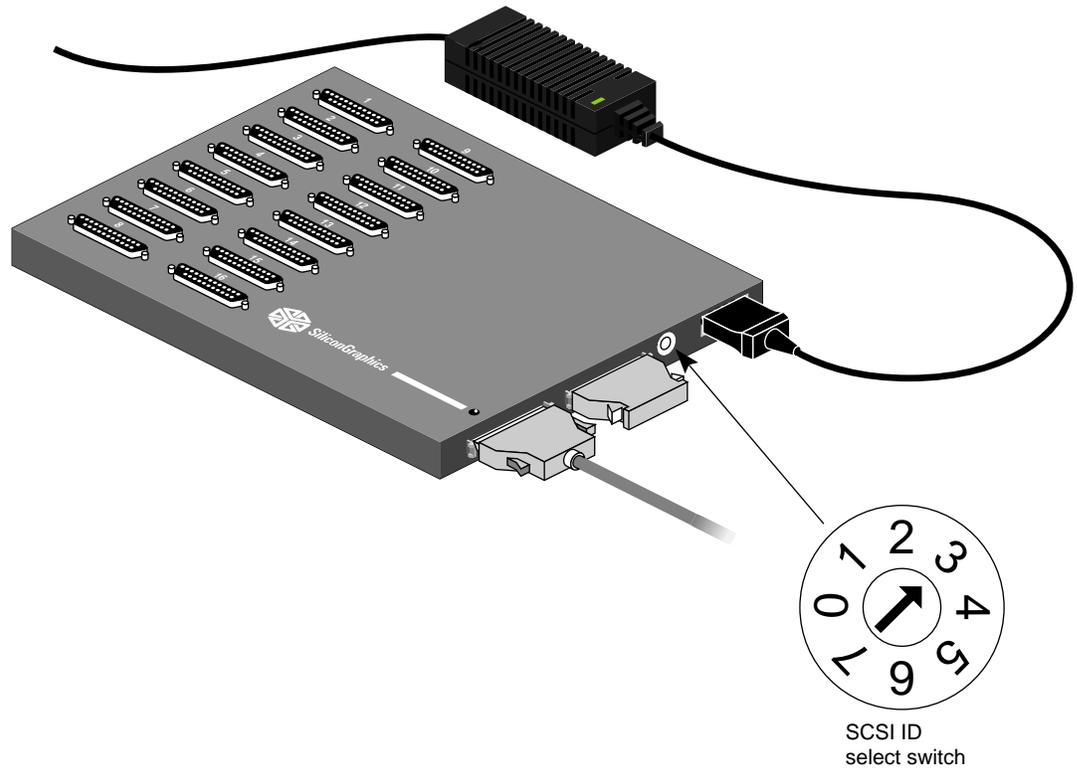
**Figure 2-4**    Checking the Multiplexer SCSI ID Number

2.  Check the cabling for each system connected to the multiplexer to determine the multiplexer port to which each system's Console Connection and Remote System Control Connection ports are connected.

    If you want, create a table such as the example in Table 2-1 as an aid in determining which serial ports are used for which servers.

**Table 2-1**    Example Table for Server Multiplexer Port Numbers

| Server Hostname | Multiplexer Port Number for Console Connection | Multiplexer Port Number for Remote System Control Connection |
|---|---|---|
| jupiter | 01 | 02 |
| zeus | 03 | 04 |

## Determining the Multiplexer Device Name

Beginning with the IRISconsole 1.3 release, the way special tty devices such as the SCSI multiplexers (ST-1600, ST-1616, and so on) or EtherLite multiplexers (EL-8 and EL-16) are created and used has changed. This section describes how to determine the device name for your multiplexer(s).

### SCSI Multiplexers

To determine the name of a SCSI multiplexer, use:

*/dev/ttyd{bus}{scsi_id}{port}*

where:

- *bus* is 0, 1, or 2 corresponding to the first, second, or third SCSI multiplexer found.
- *scsi_id* is the ID of the ST-xxxx number on the SCSI multiplexer.
- *port* is 0 - 9 or a - v, which corresponds to the port on the SCSI multiplexer numbered 1 through 32 (for example, port 1 = 0, port 11 = a).

**Note:** On the ST-1616 multiplexer, the ports are numbered 1 through 16, which correspond to ports 0 - 9 and a - f on the tty device. On the ST-1032 multiplexer, the ports are numbered 1 through 32, which correspond to ports 0 - 9 and a - v on the tty device.

### EtherLite Multiplexers

To calculate the name of an EtherLite multiplexer, use:

*/dev/ttydn{elps}{port}*

where:

- *elps* is the EtherLite number from the */etc/els.conf* file associated with an IP address.
- *port* is also 0 - 9 or a - f, which corresponds to port numbers 1 - 16 (for example, port 1 = 0, port 16 = f).

## Setting Up IRISconsole for Remote Access

You can use the command *ictelnet*, which is a version of *telnet* adapted for IRISconsole, to access the IRISconsole text-based menu from another system. Follow these steps to prepare the IRISconsole system for remote access using *ictelnet*:

1. To configure a port on the IRISconsole system so that *ictelnet* communicates directly to the IRISconsole application, edit the file */etc/services* on that system to include the following line, which specifies the port on which the service is available:

   ```
   ictelnet 5000/tcp # IRISconsole Remote Access service
   ```

   For the port number, use any number between 5000 and 5063; the number 5000 is recommended for the status port.

2. Edit the file */etc/inetd.conf* on the IRISconsole system to include this line:

```
ictelnet stream tcp    nowait   root  /usr/IRISconsole/bin/ictelnetd  ictelnetd
```

**15**

# Configuring Sites

This chapter explains how to use the IRISconsole graphical user interface (GUI) to set up a site, configure a site, edit a site configuration, add a system to a site, or delete a site configuration. The major sections in this chapter are as follows:

- "Starting the IRISconsole Graphical User Interface" on page 17
- "Setting User Preferences" on page 18
- "Adding a Site" on page 20
- "Adding a System to a Site" on page 22
- "Performing Site Operations" on page 26

## Starting the IRISconsole Graphical User Interface

The IRISconsole GUI main window enables you to set up a site, configure a site, edit a site configuration, add a system to a site, or delete a site configuration.

To start the IRISconsole GUI, follow these steps:

Make sure the OCTANE, O2, or Indy workstation, multiplexer, and the Origin, CHALLENGE, Onyx2, and Onyx systems to be administered are cabled as described in the *IRISconsole Multiplexer Installation Guide* and online man pages.

3.  Make sure all systems are powered on.

4.  The IRISconsole security feature is on by default; to check it or toggle it on or off, follow instructions in the sections "Determining Whether IRISconsole Security Is On or Off" "Setting IRISconsole Security On or Off" in Chapter 2.

5.  To start the IRISconsole graphical user interface in an IRIX window, enter

    **ic**

The IRISconsole GUI main window appears, as shown in Figure 3-1.
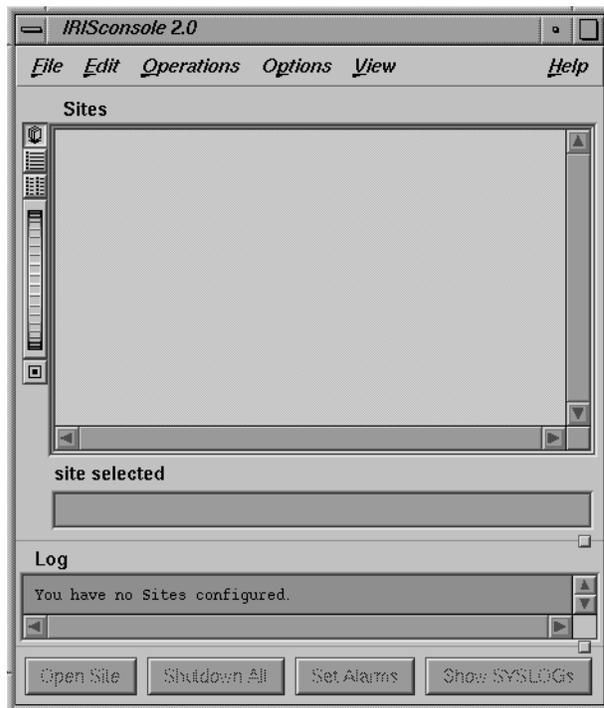


**Figure 3-1**     IRISconsole Graphical User Interface Main Window

To exit the IRISconsole GUI, choose Quit from the File menu or press **Ctrl+Q**.

## Setting User Preferences

The Edit menu in the IRISconsole GUI main window lets you turn on or turn off dialog boxes that ask you to confirm closing IRISconsole, closing a site, deleting a site, deleting a system, discarding site changes, overwriting a configuration, saving a site configuration, and saving a system configuration.

To set IRISconsole user preferences, follow these steps:

1. From the Edit menu, choose User Preferences.... The Change IRISconsole Preferences dialog menu appears, as shown in Figure 3-2.
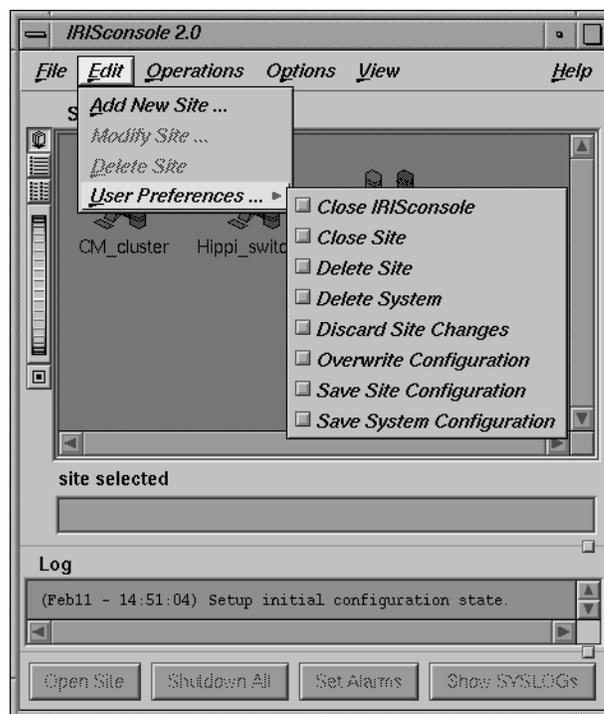


**Figure 3-2**     Change IRISconsole Preferences Dialog Menu

2. Click the box to the left of each action to turn on (inserts a check mark) or turn off (deletes the check mark) the dialog box that asks you to confirm the assoicated actions that appear when you choose User Preferences ... from the Edit menu.

Each menu selection toggles between on or off.

## Adding a Site

To set up an IRISconsole site and to specify the directories that receive console and alarm messages, follow these steps:

1. From the Edit menu, choose Add New Site.... The Change IRISconsole Config dialog box appears, as shown in Figure 3-3.
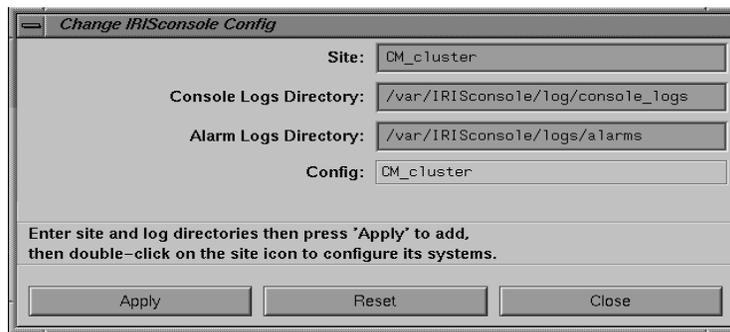


**Figure 3-3**    Change IRISconsole Config Dialog Box

2. In the Site field, type a name for the site.

3. In the Console Logs Directory field, type the pathname of the directory that will receive console messages.

4. In the Alarm Logs Directory field, type the pathname of the directory that will receive alarm messages.

5. Click the *Apply* button.

   The name of the configuration file as defined in the */var/IRISconsole/2.0/.IC/<**site_name**>/<**system_names**>* directory appears in the Config field. The *system_names* are the configuration files which contain the configuration information for all the systems in a particular site defined by *site_name*.

6. To save the new site configuration, choose Save IRISconsole Config from the File menu in the main IRISconsole window.

   **Note:**  If you do not save the site configuration at this time, you can not save system configurations later.

7. To add another site, edit the entry in the Site field or click the *Reset* button to clear the field. After you click the *Apply* button, the name of the new configuration file appears automatically in the Config field. Figure 3-4 shows a site named CM_cluster. Save the new site configuration as in step 6.
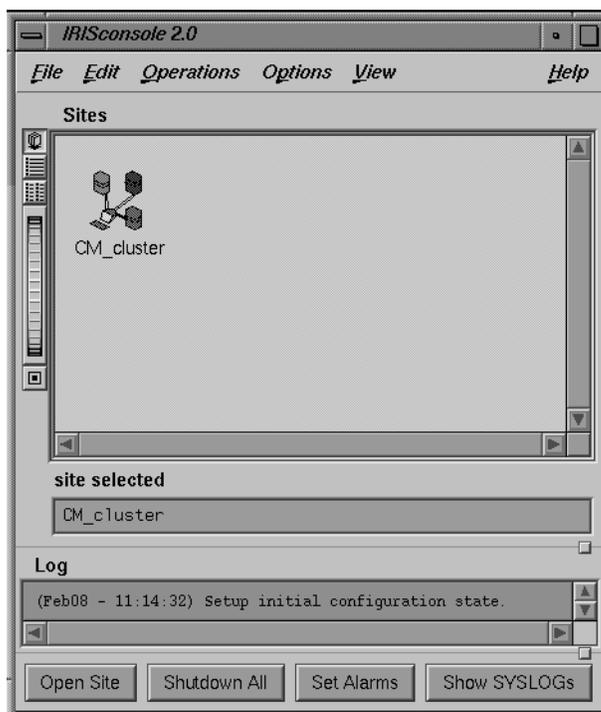


**Figure 3-4**    IRISconsole Graphical User Interface Main Window with Cluster Icon

8. When you are finished adding systems to the site, close the site window by clicking the *Close* button.

9. To save the configuration, choose Save IRISconsole Config from the File menu. The *site_name* directories and *system_name* configuration files are saved to the IRISconsole directory */var/IRISconsole/2.0/.IC*. Click the *Close* button to exit the Change IRISconsole Config dialog box**.**

**21**

## Adding a System to a Site

To add a system to a site, follow these steps:

1. In the IRISconsole main window, double-click the site to which you want to add a system or select the system and choose Open Site... from the Operations menu. The site window opens, as shown in Figure 3-5.
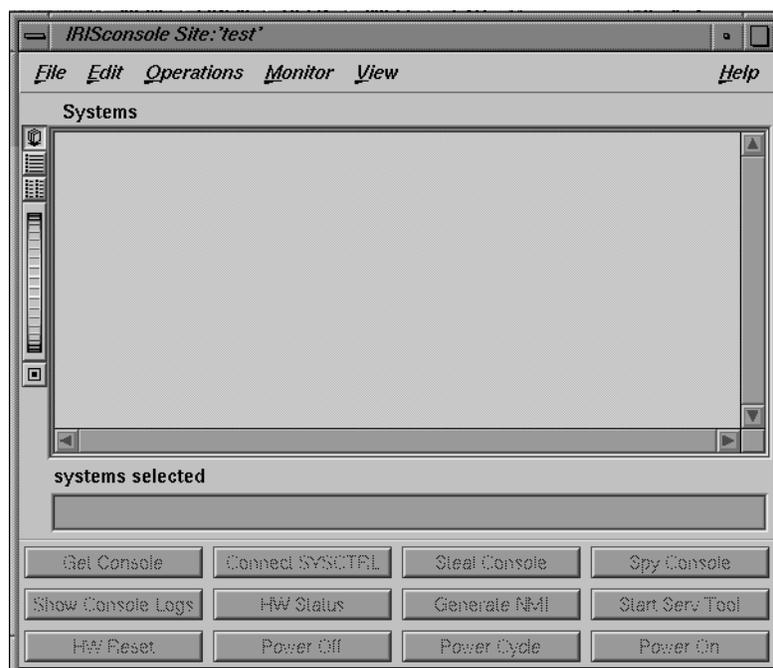
**Figure 3-5**     Site Window

2.  In the site window, choose Add New System... from the Edit menu. If IRISconsole security is on, you are prompted for your password.

    After you enter your password, the Change Site Config dialog box appears, as shown in Figure 3-6.



**Figure 3-6**    Change Site Config Dialog Box

3.  In the System Name field, type the hostname of the system you want to add to this site.

4.  From the System Type option menu, choose the type of system you want to add to this site. The choices are Origin200, Origin2000, CHALLENGE, Onyx2, and Onyx systems.

**23**

5. From the Console Connection option menu, choose the type of multiplexer for this system and the Console port number. A number of multiplexers may be listed, such as ST-1600, ST-1616, ST-1620, ST-1032, EL-8, or EL-16. Use the Console Port# and Remote System Control Port# entries you made in the table similar to Table 2-1 to choose the appropriate multiplexer port numbers for each respective cable connection. You can have different multiplexers for each port; one for the console and another, if present and desired, for the remote system controller.

6. From the Remote SystCtrl Connectionoption menu, choose the type of multiplexer for this system and the Remote System Control Connection port number.

7. In the Login field, enter the login under which all operations requiring access to the system via the network can be performed. This login is the one used in the command

   ```
   rsh login@system /usr/etc/sysctlrd -r
   ```

   **Note:**  The IRISconsole security login is separate from this system login; IRISconsole security is explained in "IRISconsole Security" in Chapter 1.

8. From the Baud Rate option menu, choose the baud rate at which this system sends data to IRISconsole; the default is 9600. If you enter a different baud rate, be sure that the system has been configured for that rate.

9. Click the box at Log Console Activity to File if you want console activity logged to a file in the */var/IRISconsole/logs/console_logs* directory that has the format *systemname.<timestamp>.log*. The format of this filename cannot be changed.

   **Note:**  To view a log of a system's console activity (*Spy Console* button or command) or to view console activity logs (*View Console Logs* button or command), this box must be checked when the system is added to a site.

   The console logs and alarm log directories may be changed in the Site Configuration dialog box.

10. Click the box at Default System Controller Password if the system controller password has the default value. This box applies only to Origin and Onyx2 systems. If the system controller doesn't have the default password, the operations *Generate NMI*, *HW Reset*, and *Power Cycle* are not available; *Connect SYSCTLR* must be used instead (see the section "Viewing Site Characteristics" in Chapter 4).

11. Click the box at FailSafe Controls SysCtrl Port if this system control port is to be controlled by Silicon Graphics IRIS FailSafe 1.2 or FailSafe 2.0 high-availability software.

**Note:** To use this feature you must be familiar with IRIS FailSafe software. For information about IRIS FailSafe 1.2 or FailSafe 2.0, see the *IRIS FailSafe Administrator's Guide*, 007-3109-003, or *IRIS FailSafe 2.0 Administrator's Guide*, 007-3901-001, respectively.

When a system control port is being controlled by FailSafe software and you try to reset the system after changing the system configuration, you see a warning dialog box instructing you to use the appropriate FailSafe command as shown in Figure 3-7.
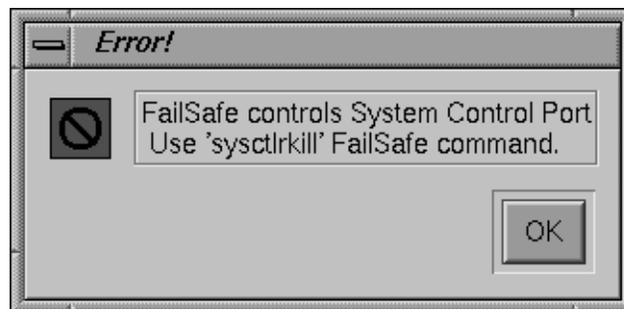


**Figure 3-7**     FailSafe Warning Dialog Box

12. Click the box at Partitioned System if the system you are adding to the site is a partitioned system. A system partition is represented by a unique icon as shown in Figure 3-8.

13. When you are satisfied with the settings for this system, click the *Apply* button to add this system to the site.

14. To save the configuration, choose Save Site Config from the site window File menu.

15. To add another system to the site, edit the entries in the fields of the Change Site Config dialog box, or click the *Reset* button to clear all entries and begin entering again. Follow instructions in steps 3 through 14 for the new system. An IRISconsole site with four systems is shown in Figure 3-8.
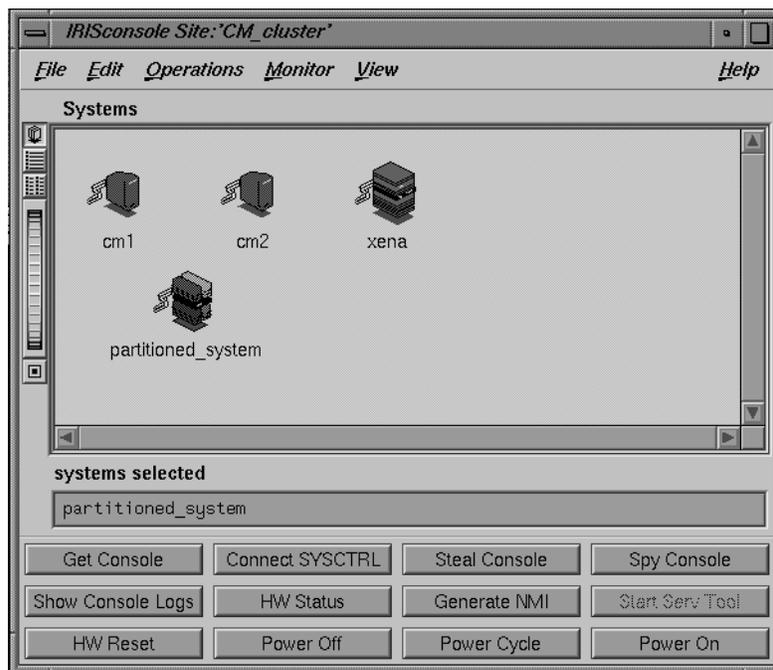
**Figure 3-8**     IRISconsole Site With Four Systems

16. When you are finished adding systems to the site, close the Change Site Config dialog box by clicking the *Close* button.

## Performing Site Operations

The bottom of the IRISconsole main window, as shown in Figure 3-9, has four buttons that allow you to perform the following operations:

- open a site
- shut down all systems in a site
- set system alarms
- show the system logs for all systems in a site

**26**

Alternatively, you can choose these operations in the Operations menu on the IRISconsole main window, as shows in Figure 3-9.
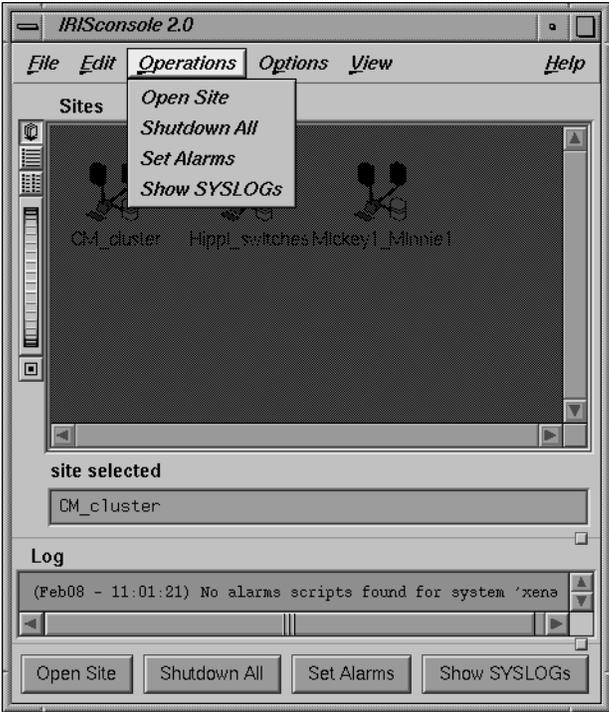


**Figure 3-9**      IRISconsole Main Window Operations Menu

These operations are described in greater detail in chapter 4, "Administering Sites."

# Administering Sites

This chapter explains how to use the IRISconsole graphical user interface (GUI) and IRISconsole commands to administer IRISconsole and the servers and other devices in sites that it controls. The major sections in this chapter are as follows:

- "Administering IRISconsole Users and Administrators" on page 30
- "Connecting to a Remote IRISconsole Workstation" on page 32
- "Viewing Site Characteristics" on page 35
- "Performing Operations on Attached Systems" on page 38
- "Using the Availability Monitor Report" on page 40
- "Displaying the System Log" on page 41
- "Displaying the System Logs for All Systems in a Site" on page 41
- "Storing System Log Information" on page 42
- "Displaying the Hardware Inventory of a System" on page 43
- "Displaying Hardware Status Information" on page 43
- "Using Alarms" on page 48
- "Using Graph Files" on page 50
- "Renaming or Deleting a Site" on page 52
- "Modifying or Deleting a System" on page 53

## Administering IRISconsole Users and Administrators

The *icpass* command is used to list administrators and users, change their passwords, and delete them. Performing these tasks is described in the following subsections. (Adding administrators and users is described in the sections "Adding an IRISconsole Administrator" and "Adding an IRISconsole User" in Chapter 2.)

### Displaying a List of IRISconsole Administrators or Users

To display a list of IRISconsole administrators, type

```
icpass -list icadmin
```

To display a list of IRISconsole users, type

```
icpass -list icuser
```

In each case, IRISconsole prints the path of the password file.

### Changing the Administrator's or User's Password

To change an IRISconsole administrator's or user's password, type

```
icpass -change icuser
```

or

```
icpass -change icadmin
```

The window shown in Figure 4-1 appears.

**Figure 4-1**     Changing an IRISconsole Password

Enter the login for the user whose password you want to change. Enter the user's old password and new password, and click the *Apply* button.

## Deleting an Administrator or User

To delete an IRISconsole administrator or user, you must be an IRISconsole administrator. Type

**icpass -delete icadmin** *icadminlogin*

or

**icpass -delete icuser** *icuserlogin*

The security window shown in Figure 2-2 appears. After you enter correct information, a confirmation window appears with the message

```
Entry deleted from password database
```

## Connecting to a Remote IRISconsole Workstation

You can use the command *ictelnet* to access the IRISconsole text-based menu from another system. Follow these steps:

1. If you haven't already done so, configure the IRISconsole system for remote access. Follow the instructions in the section "Setting Up IRISconsole for Remote Access" in Chapter 2.

2. To use *ictelnet* from any system, type

   **ictelnet** *consolehostname port*

   The *port* number should be the port number value for *ictelnet* services in the */etc/services* file determined in step 1 of "Setting Up IRISconsole for Remote Access" in Chapter 2 of this manual.

   **Note:** The recommended port number is 5000.

   The software prompts for your IRISconsole login and password.

3. Enter your IRISconsole login and password as they were entered with *icpass -add icuser* or *icpass -add icadmin*; see "Adding an IRISconsole Administrator" in Chapter 2 for details.

   After a few lines of response, the available IRISconsole sites are listed, for example:

   ```
   Main Menu:
   Available Sites
   ---------------
   1. eng1a
   2. eng1b
   3. eng1c

   Enter choice (1 - 3) or 'q' to Quit:
   ```

   If a network connection from the remote host you are using to the IRISconsole system is not available, you have two choices:

   • log in to the IRISconsole system via modem and use *ictelnet* from there

   • if you have a (modem) SLIP or PPP connection, you can run the IRISconsole GUI remotely

4. Enter the number for the site to which you want to connect.

   Text like the following appears:

   ```
   Site 'eng1a':
   Available Systems
   -----------------
   1. eng1a
   2. eng1b
   3. eng1c

   Enter choice (1 – 3) or '..' for Main Menu:
   ```

   If an entry beneath the Available Systems heading is a partitioned array, "(Partitioned System)" is appended to the system name. If this system is chosen, another submenu is displayed, and a list of partition names appears, for example:

   ```
   System: elements
   Available Partitions
   --------------------
   1.  mercury
   2.  argonne

   Enter choice (1 – 2) or ' ..' for Main Menu:
   ```

5. Enter the number for the system to which you want to connect.

   The Available Operations menu appears, for example:

   ```
   System 'eng1a':
   Available Operations
   --------------------
   1. Connect to Console
   2. Hardware Reset
   3. Generate NMI
   4. Power Cycle
   5. Power On
   6. Power Off
   7. Steal Occupied Console Line
   8. Connect to System Controller
   9. Start Service Tool

   Enter choice (1 – 5) or '..' for Systems Menu:
   ```

   **Note:** HW Reset, Generate NMI, and Power Cycle on an Origin or Onyx2 system require that the system controller have the default password.

6. Enter the number for the operation you want to perform.

   The following message appears:

   ```
   This operation is protected.
   Please enter your IRISconsole login and password.

   IRISconsole Login:
   ```

7. Enter your IRISconsole login and password at the prompt.

   Status and other information like the following appears:

   ```
   ------Connected Port=/dev/ttyd043 ------

     9600 BAUD 8 NONE 1 SWFC=ON  HWFC=OFF
   CAR=ON  DTR=ON  RTS=ON  CTS=ON  DSR=ON
   Type ~? for Help, ~X to Exit.
   Connection Ready.
   ```

8. Use the tilde commands (`(+-)Baud Csize Dtr Framing Hwfc Info breaK Modem Oflush Parity Rts Swfc eXit`) to change settings; you need not press **<Enter>**.

   For example, ~S (note that this letter is uppercase) toggles software flow control and displays a message similar to:

   ```
     9600 BAUD 8 NONE 1 SWFC=OFF HWFC=OFF
                         ^^^^^^^^
   ```

9. To exit *ictelnet*, type **~x**.

   This command returns you to the Available Operations menu for the system that was described in step 5 of this procedure.

10. From the Available Operations menu, type **..** to exit to the Systems Menu, type **..** to exit to the Main Menu, then type **q** to exit to the IRIX prompt.

## Viewing Site Characteristics

To see characteristics for a site, double-click its name in the scrolling list of sites in the IRISconsole main window. Figure 4-2 shows an example main window.
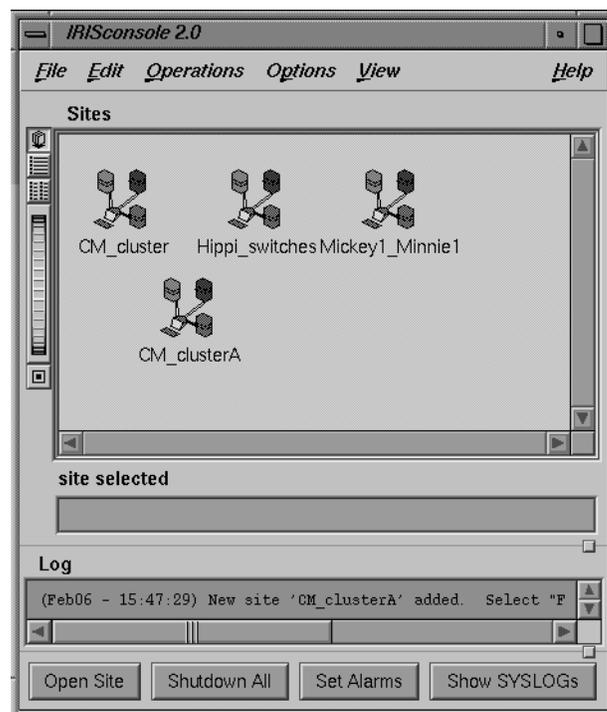


**Figure 4-2**       Example IRISconsole Main Window

Alternatively, you can select a site and then choose Open Site from the IRISconsole main window Operations menu. Figure 4-3 shows an example site window.
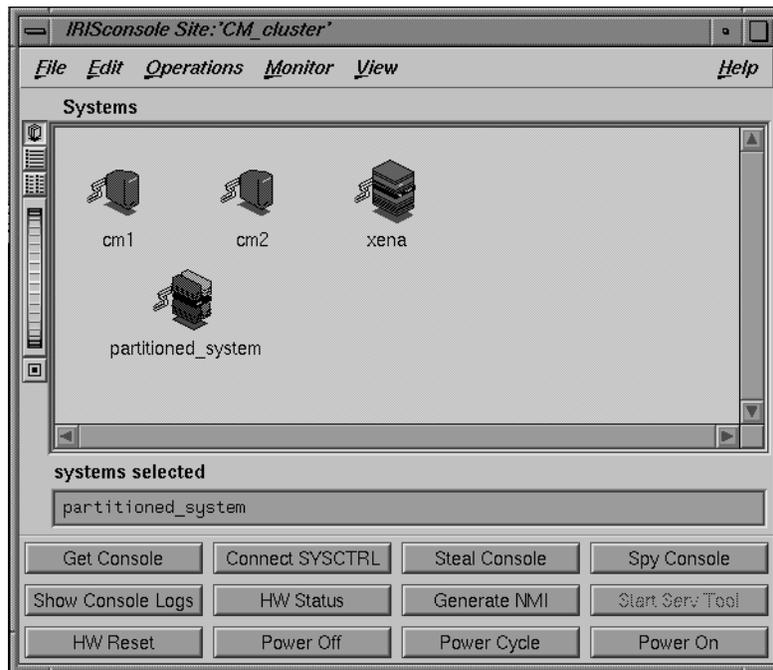
**Figure 4-3**      Example IRISconsole Site Window

To get a console for a system that is part of a partitioned system, you must choose a partition from the list that appears when you choose Select System Partition... from the Edit menu as shown in Figure 4-4. If you attempt to choose a system by double-clicking on the partitioned system icon, you see the error message shown in Figure 4-5.
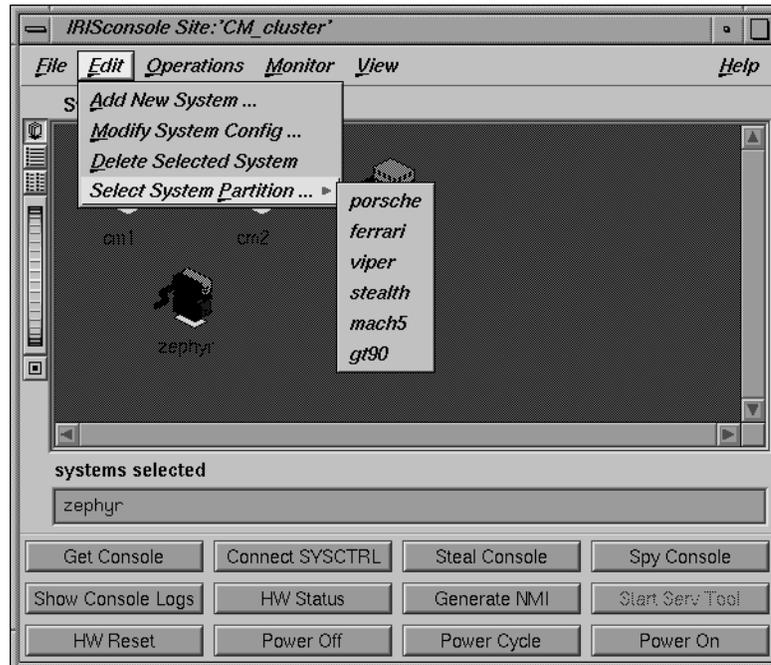
**Figure 4-4**    Selecting a Partitioned System
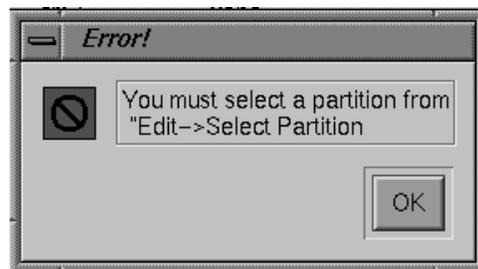


**Figure 4-5**    Select Partition Warning Dialog Box

## Performing Operations on Attached Systems

You can use the buttons in the site window (see Figure 4-3) for system administration tasks. All but the *HW Status* button display a window in which you type your IRISconsole login and password as it was entered in the IRISconsole security facility; see "IRISconsole Security" in Chapter 1. The buttons are as follows:

*Get Console*        To access and display a system's console window, select the system and click the *Get Console* button. The console window appears on the workstation screen.

*Connect SYSCTRL*

To access and display a system's system controller port window, select the system and click the *Connect SYSCTRL* button. The system controller window appears on the workstation screen. This is used primarily on Origin and Onyx2 systems.

*Steal Console*     To take control of a system console that another user is currently using, select the system and click the *Steal Console* button. The console window appears on the workstation screen. The original user sees the message `IRISconsole DINC closing...`; that user's session is killed.

*Spy Console*      To display a window showing console activity of a system in progress, select the system and click the *Spy Console* button. In order to view this activity, the Log Console Activity to File option must have been checked when the system is added to a site, as explained in step 9 in "Adding a System to a Site" in Chapter 3.

*Show Console Logs*

To view console logs (stored in */var/IRISconsole/logs/console_logs/*), select the system and click the *Show Console Logs* button. In order for these logs to be written, an IRISconsole user must be connected via the Get Console command and the system must have been configured with the Log Console Activity to File option checked, as explained in step 9 in "Adding a System to a Site" in Chapter 3.

*HW Status*       To display graphs of system activity, click the *HW Status* button. The Hardware Status Monitor appears; this feature is explained in detail in the section "Displaying Hardware Status Information" later in this chapter. This feature requires a network connection between the OCTANE, O2, or Indy host and the target system.

*Generate NMI*

To generate a non-maskable interrupt (forcing a panic in the operating system), click the *Generate NMI* button.

**Note:** *Generate NMI* on an Origin or Onyx2 system requires that system's system controller have the default password.

*Start Serv Tool*

To start the Service Tool, a tool intended for use by Silicon Graphics field personnel, select a system and click the *Start Serv Tool* button. A shell window appears.

*HW Reset*     To reset a system in a site (hardware reset), select the system and click the *HW Reset* button. A confirmation message appears.

**Note:** *HW Reset* on an Origin or Onyx2 system requires that system's system controller have the default password.

*Power Off*     To power off a system, select the system and click the *Power Off* button.

*Power Cycle*     To power-cycle a system, or to power on a system that has been turned off, select the system and click the *Power Cycle* button.

In the case of a power cycle, the system controller removes the power enable control signals, waits five seconds, and restores power. Boot arbitration is started after power is reapplied.

**Note:** All power functions (*Power Cycle*, *Power On,* and *Power Off)* on an Origin or Onyx2 system requirebdog5ten

that system's system controller have the default password.

*Power On*     To power on a system, select the system and click the *Power On* button.

For each of these tasks, you can also choose the corresponding command from the Operations menu.

When you configure a system within a site, you have the option of specifying one or both port connections, the console and/or the remote system control port, described in "Adding a System to a Site" on page 22. Once a system is configured and you select it by double-clicking the appropriate icon on the IRISconsole site window, only those operation buttons and corresponding pulldown menu selections that can be used are activated.

For example, if only the console port is configured, then only the *Get Console*, *Steal Console*, *Spy Console*, *Show Console Logs*, and *HW Status* buttons are activated for use.

The following operation buttons require a Console connection:

- *Get Console*
- *Steal Console*

The following operation buttons require a Remote System Controller connection:

- *Connect SYSCTRL*
- *Generate NMI*
- *Start Serv Tool*
- *HW Reset*
- *Power Off*
- *Power Cycle*
- *Power On*

The following operation button requires a network connection for *rsh*:

- *HW Status*

The following operation buttons do not require any connection:

- *Spy Console*
- *Show Console Logs*

## Using the Availability Monitor Report

The IRISconsole Availmon report gives a snapshot of availability information on a system. It is a condensation of the information in */var/adm/avail/availlog*, displayed in a format similar to that of */var/adm/avail/amreport*.

To display the Availmon report, follow these steps:

1. Make sure that *availmon* is installed and active on the Origin, CHALLENGE, Onyx2, and Onyx systems you wish to access (use */etc/chkconfig*).

2. In the site window, select the system for which you want a report.

3. Choose Availmon Report... from the Monitor menu. A window like the one in Figure 4-6 appears.
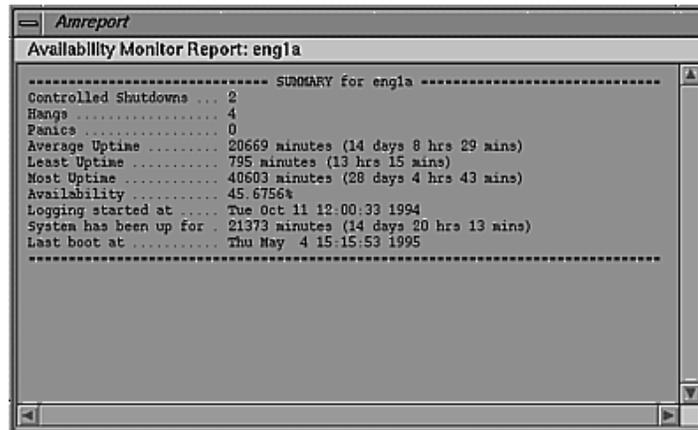
**Figure 4-6**    Example Availability Monitor Report

## Displaying the System Log

To display the SYSLOG for a system, select the system in the site window. Choose Show Syslog... from the Monitor menu.

To update the SYSLOG display, close the syslog window and choose Show Syslog... again.

To display the SYSLOG for all of the systems in a site, choose All Systems

## Displaying the System Logs for All Systems in a Site

You can use the *Show SYSLOGs* button on the IRISconsole GUI main window to view the system log messages for all systems in a site using the System Log Viewer window as shown in Figure 4-7.
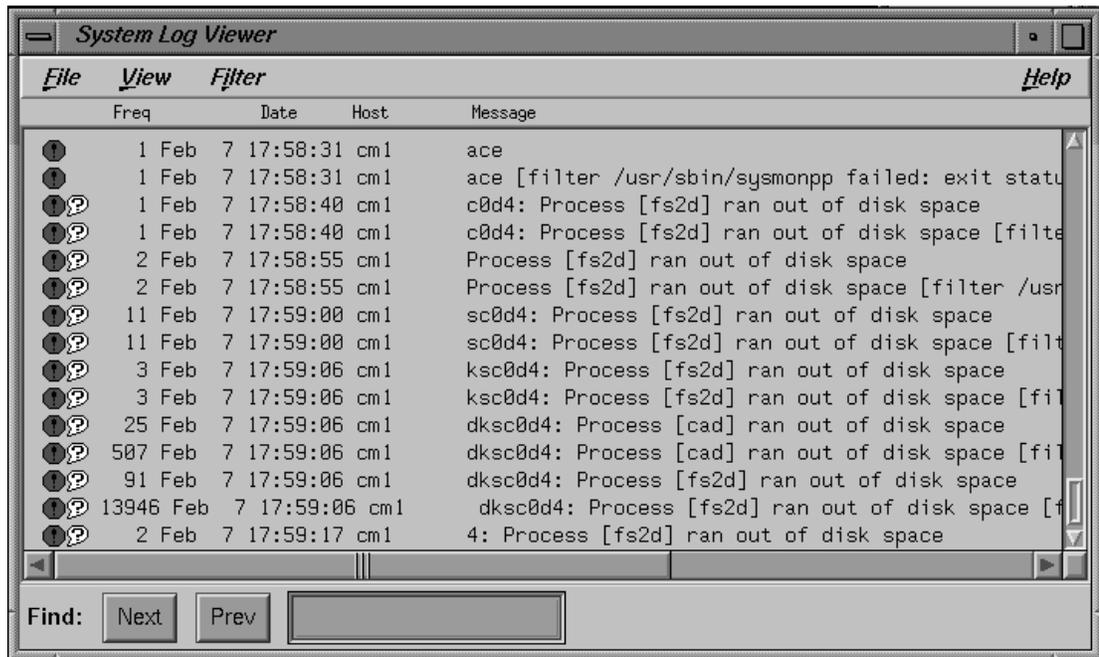
**Figure 4-7**    System Long Viewer Window

## Storing System Log Information

You can store the SYSLOG entries for all systems in a site in the same log file on the system running IRISconsole 2.0. To do this, add a line similar to the following example in each */etc/syslogd.conf* file for each system:

```
*.crit;*.notice;*.info;*.debug  @cmindy.cray.com
```

where @*cmindy.cray.com* is the name of the system running IRISconsole 2.0. This line instructs the *syslogd* daemon to send all critical, notice, information, and debug messages to @*cmindy.cray.com.*

## Displaying the Hardware Inventory of a System

To display a hardware inventory of an attached system, select the system in the site window and click Hardware Inventory... from the Monitor menu. The output of *hinv* for that system appears in a window.

## Displaying Hardware Status Information

**Note:** Hardware status information is not available for Origin or Onyx2 systems. This section and its subsections do not apply to Origin or Onyx2 systems.

To display hardware operating information on a CHALLENGE or Onyx system in a site, follow these steps:

1.  In the IRISconsole main window, double-click on the site containing the system whose hardware operating information you want to check. The site window appears.

2.  In the Systems scrolling list of the site window, select the system for which you want information.

3.  Click the *HW Status* button. The IRISconsole Hardware Status Monitor appears, as shown in Figure 4-8.
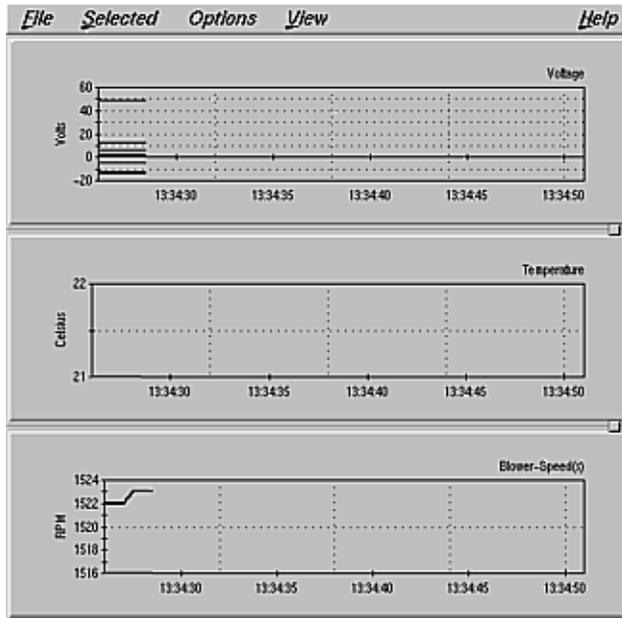
**Figure 4-8**      Example IRISconsole Hardware Status Monitor

The subsections below explain how to customize the Hardware Status Monitor display, change the point and line styles for graphs, and use graph control panels for specific graphs.

## Customizing the Hardware Status Monitor Display

To change the height of a graph in the IRISconsole Hardware Status Monitor, put the mouse cursor on one of the two sashes (small square at the extreme right between the graphs) and drag it down or up; the relative heights of the graphs above and below it change.

To zoom an area of the display, select the graph you want to zoom; holding down the **Ctrl** key and pressing the middle mouse button, move the mouse. Press **r** to reset the display.

You can further customize the display using options from the Hardware Status Monitor View menu. Figure 4-9 shows the View menu.

Display a log showing alarm thresholds that were exceeded → □ *Alarms Log*

Turn specific graph displays off and on

☑ *Voltage Graph*　　　*Ctrl+V*

☑ *Temperature Graph*　*Ctrl+T*

☑ *Blower Graph*　　　　*Ctrl+B*

Display legends that label the line types in the graph → □ *Legends*
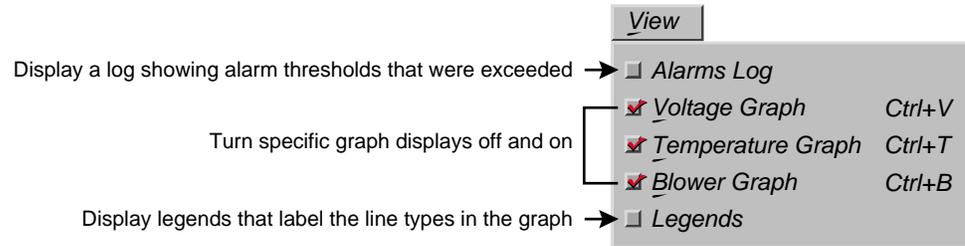
**Figure 4-9**　　View Menu

Finally, you can use the Global Controls dialog box to customize the graph data. Choose Global Controls...from the Options menu; Figure 4-10 shows this dialog box.

For all graphs:

Set sampling rate for data → **Update Rate:**　▯▯▯▯▯▯▯ □ 25　　□ Fastest ← Set to fastest rate

Set percentage of graph to scroll back when limit is reached → **Scrollback %:**　▯▯▯▯▯▯ □ 10　　□ Optimize ← Optimize scrollback

Set number of points displayed onscreen → **Data Density of All Graphs:**　◈ 50 pts　◇ 100 pts　◇ 500 pts

**Alarm Actions:**

Run notify script when threshold is exceeded → □ Run Notify Script

Sound beep or tone when threshold is exceeded → ☑ Sound Audible Alarm

Enter message in log file when threshold is exceeded → ☑ Log to File:　　alarms.log

**Figure 4-10**　　Global Controls Dialog Box

## Changing Point or Line Styles for Graphs

To change the point or line style in a graph display, follow these steps:

**Note:** Style changes apply onscreen and for printing only; point and font style changes are not saved when the graph is saved to a file.

1.  From the Selected menu, choose Styles... or click the *Styles* button in the Graph Control dialog box. Figure 4-11 shows the Graph Style dialog box.
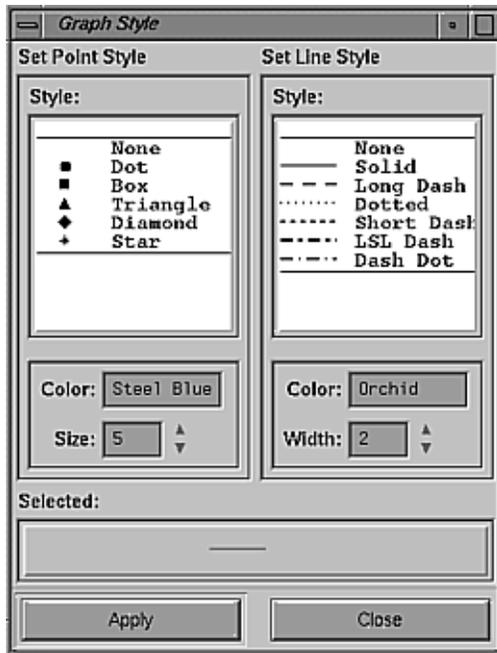


**Figure 4-11**    Graph Style Dialog Box

2.  In the Hardware Status Monitor, click the left mouse button on the graph whose style you want to change. The graph background turns yellow.

**46**

3.  Put the mouse cursor on the line whose style you want to change and click the right mouse button.

    **Note:** To facilitate selecting a line, zoom the display by holding down the `Ctrl` key, pressing the middle mouse button, and moving the mouse. To reset the display, type `r`.

4.  In the Graph Style dialog box, select the point or line style you want and click the *Apply* button to save the setting.

5.  When you are satisfied with the settings, click the *Close* button to exit the Graph Style dialog box.

## Using Graph Control Panels for Specific Graphs

A graph control panel is associated with each graph. To display the control panel for a graph, follow these steps:

1.  In the Hardware Status Monitor, select the graph for which you want to display a control panel. The graph background turns yellow.

2.  From the Selected menu, choose Graph Controls.... Figure 4-12 shows the graph control panel for blower speed(s).
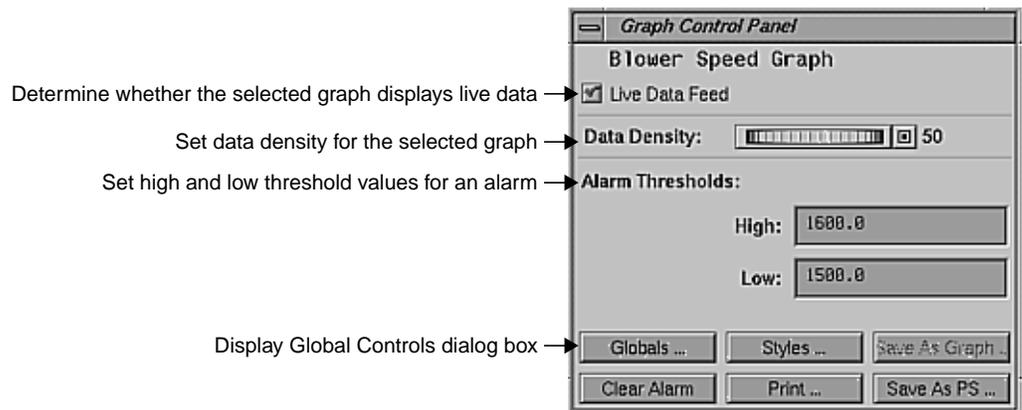


**Figure 4-12**    Graph Control Panel for Blower Speed

Use features of this panel to

- set an alarm threshold, as described in "Using Alarms," later in this chapter

- set actions to be performed if the threshold is exceeded, as described in "Using Alarms," later in this chapter

- clear an alarm

- change the point and line style of the graphs, as described in "Changing Point or Line Styles for Graphs," earlier in this chapter

- print the graphs, as described in "Saving Graph Data to a File," later in this chapter

- save the graphs as graphs or PostScript files, as described in "Printing a Graph," later in this chapter

## Using Alarms

**Note:** Alarms are not available for Origin or Onyx2 systems. This section and its subsections do not apply to Origin or Onyx2 systems.

You can set a threshold value for a hardware operating parameter, such as blower speed. When the value is exceeded, the graph that maps it changes color to alert you that the threshold has been exceeded and its contents are saved to a file. You can also set IRISconsole to perform any of the following actions when the threshold is exceeded:

- cause a beep or tone to be sounded

- enter a message in an alarms log file in the directory */var/IRISconsole/logs*; the default filename is *alarms.log*

- start a notify script

For example, you can set the operating temperature threshold for a CHALLENGE XL in a site to 37, so that when the system internal temperature exceeds 37 degrees C, the alarm is triggered.

This section explains

- setting a threshold for an alarm

- clearing an alarm

- viewing an alarm graph file

- using a notify script

## Setting a Threshold for an Alarm

To set a threshold, follow these steps:

1. Select the graph for which you want to set an alarm threshold. The graph background turns yellow.

2. From the Selected menu, choose Graph Controls.... The Graph Control Panel appears; Figure 4-13 shows the panel for the Temperature graph.
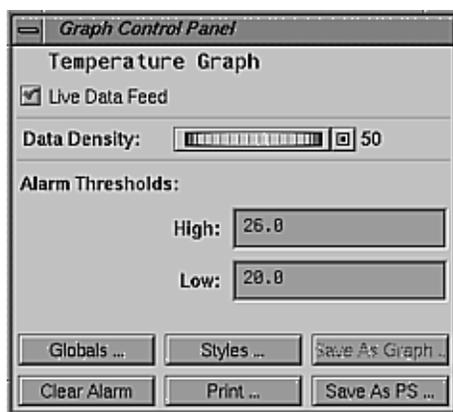


**Figure 4-13**    Graph Control Panel for Temperature

3. If desired, change the data density (number of points) of the data being sampled.

4. Select the high and low alarm threshold values you want from the choices in the High and Low fields.

5. If desired, select one or more alarm actions in the Global Controls window.

When the threshold value is reached or exceeded, the graph display turns hot pink when unselected (bright red when selected).

## Clearing an Alarm

To clear an alarm, select the graph whose alarm you want to clear and click the *Clear Alarm* button in the Graph Control panel, or choose Clear Alarm from the Selected menu. To clear all alarms, choose Clear All Alarms from the Options menu.

### Viewing an Alarm Graph File

When a threshold is exceeded, the graph for which the alarm is set is automatically saved to a file in the directory */var/IRISconsole/logs/alarms*. The filename has the format *graphname.<timestamp>.xrt*; for example, *voltage.951231.1144.0.xrt*.

You can view alarm graph files by choosing Display Saved Graph... from the IRISconsole Hardware Status Monitor File menu; see "Displaying a Graph File," later in this chapter.

### Using a Notify Script

An option in the Global Controls window enables IRISconsole to run a script—*/var/IRISconsole/adm/scripts/icnotify*.tclX—when an alarm threshold is exceeded. This script, which was written in tclX (extended tcl), is self-documenting.

To edit this script, choose Edit Operator Notify Script from the main window Options window. You must be root to edit this script.

For example, to cause an alarm threshold to send an e-mail message to a specified user, enter e-mail address(es) in the curly braces in the line

```
set OPERATORS { }
```

You can edit *icnotify.tclX* to include other scripts.

## Using Graph Files

**Note:** Graph files are not available for Origin or Onyx2 systems. This section and its subsections do not apply to Origin or Onyx2 systems.

You can save, display, and print graph data for CHALLENGE and Onyx systems in files in either PostScript or image form. The subsections below describe how to perform these operations.

## Saving Graph Data to a File

You can save a graph to a PostScript file or image file to send to service personnel, or to compare with other graph data saved to files.

To save a graph to a PostScript file, click the *Save As PS...* button in the Graph Control panel. Enter a filename and click the *Save* button to save the file and exit the dialog box.

To save a graph to an image file, follow these steps:

1.  Freeze the data by clicking the Live Data Feed check box off in the Graph Control panel (see Figure 4-12 or Figure 4-13). The scroll bars under the graphs are activated.

2.  Click the *Save As Graph* button in the Graph Control panel. A file selection dialog box appears, as shown in Figure 4-14.
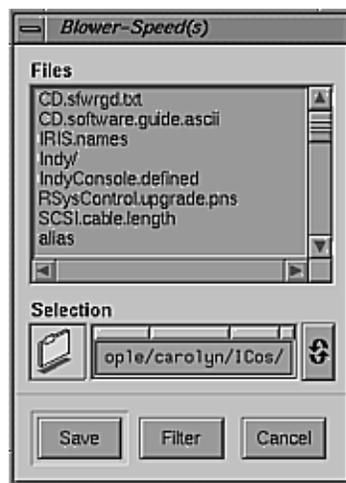


**Figure 4-14**     Saving a Graph File

If desired, click the *Filter* button to display a dialog box in which you can exclude filename patterns to restrict the filenames displayed.

3.  Enter a filename for the graph file in the Selection field.

4.  Click the *Save* button to save the file and exit the dialog box.

### Displaying a Graph File

You can display the saved graph in IRISconsole by choosing Display Saved Graph... from the IRISconsole Hardware Status Monitor File menu. A dialog box similar to that shown in Figure 4-14 appears, in which you select the file to display. Files saved as graphs appear when they are selected.

To display files saved as PostScript files, use your PostScript viewer.

### Printing a Graph

You can print a PostScript graph file just as you would print any other PostScript file.

You can also print a graph as it is displayed in the Hardware Status Monitor. Follow these steps:

1. In the Hardware Status Monitor, select the graph you want.

2. If desired, change the dimensions of the graph by moving a sash (small square at the extreme right between the graphs).

3. If desired, select an area of the display by holding down the `Ctrl` key and pressing the left mouse button; zoom the selection by moving the middle mouse button. (Press `r` to reset the display.)

4. When the screen displays the graph as you want it to be printed, click the *Print* button. In the Print dialog box, choose the print options you want.

## Renaming or Deleting a Site

You can rename or delete a site using options from the IRISconsole main window Edit menu.

## Modifying or Deleting a System

If your hardware configuration changes, choose Modify System Config... from the site window Edit menu to change the parameters for a system in a site.

To delete a system from a site, select it in the site window and choose Delete Selected System from the Edit menu.

**Note:**  The Save As... option in the site window Edit menu was removed in the IRISconsole 1.3 release.

# Error Messages and Warning Messages

This appendix lists error messages that can appear during operation of IRISconsole. It interprets each error message and suggests solutions. The messages are listed in alphabetical order.

```
<name> is a directory
```

You selected a directory to save into, when a file was expected.

```
A site edit session is in progress.
Finish that before opening.
```

It is not possible to open a site while its configuration information is being edited. Finish the editing first.

```
Cannot create directory <name>
```

Cannot create directory; permissions on */var/IRISconsole* should be writable by the user.

```
Cannot edit multiple configurations.
```

You have selected more than one site or system. Select one site or system at a time to edit.

```
Caution: Baud rate of a Challenge machine is typically 9600.
Make sure that it is configured to handle this rate.
```

A legal value other than 9600 was entered in the Baud Rate: field of the Change Site Config dialog box. Although the baud rate can range from 300 to 115,200, any rate other than the default rate of 9600 needs configuration changes in the managed server to accept that rate. Note that this messages is a warning and not an error message.

```
Couldn't find an ST-1600 attached to SCSI bus.
```

IRISconsole couldn't detect any multiplexers that should have been attached to a SCSI port on the back of the OCTANE, O2, or Indy workstation. Follow these steps:

1. Check the SCSI target ID on the back of the multiplexer; make sure that it does not conflict with any other external devices that are attached. Do not use the settings 0 or 1.

2. Check the connections of the SCSI cable between the multiplexer and the OCTANE, O2, or Indy SCSI port. Use the High Density SCSI-2.cable supplied with the multiplexer or another cable meeting specifications outlined in the Technical Specifications chapter of the *IRISconsole Multiplexer Installation Guide*.

3. After checking and, if necessary, reseating connectors, ask IRISconsole to rescan by selecting "Show SCSI Bus Attachments" in the Options menu of the main IRISconsole window. This action displays the SCSI IDs of all multiplexers that IRISconsole finds.

```
Error in getting Hardware Inventory.
Either the target system could not be reached, or
it's refusing service to the Login '<login>'
```

You tried to run *hinv* on a system in a site. Either the target system could not be reached, or it is refusing service to your login. Follow these steps:

1. Check the network connection with the target system (*ping* or another command as appropriate).

2. Check the login you have entered for that system: select the system and choose "Modify System Config" in the Edit menu of the site window.

3. Make sure that the login you entered has permission to perform a remote operation by typing

   **rsh** *login@system* **hinv**

   If necessary, correct the login (or get its permissions changed) and retry the command above.

```
Error in ST-1600 software installation
Couldn't find /sbin/cdscanbus
```

> The multiplexer software subsystem has not been installed. Install it from the distribution CD.

```
Failed to create config file
```

> You have attempted to create a new site. Check the permissions on */var/IRISconsole* to see if it is writable for your login.

```
Failed to fetch /var/adm/SYSLOG: <reason>
```

> The system has probably refused service to your login. Follow these steps:

> 1. Check the login you have entered for that system: select the system and choose "Modify System Config" in the Edit menu of the site window.

> 2. Make sure that the login you entered has permission to perform the operation by typing

>    **rsh** *login@system* **tail /var/adm/SYSLOG**

>    If necessary, correct the login (or get its permissions changed) and retry the command above.

```
Failed to write to file
```

> Your attempt to save the configuration file failed. Check permissions on */var/IRISconsole/.IC/site/systemname* to see if it is writable for your login.

```
Invalid field value <value>
```

> The value you entered in this field of the Change Site Config dialog box is invalid; try again.

```
Invalid System Console port number
Invalid Remote System Control port number
```

> Multiplexer port numbers may range only from decimal 1 to 32.

```
Must select a site.
Must select a system.
```

An attempt was made to perform an operation on a site or system without actually selecting it. Single-click on the desired site or system first and try the action again.

```
No Availability Monitor information to report.
Either <system> doesn't have an 'availmon' running, or
it's refusing service to the Login <login>
```

Either the currently selected doesn't have an *availmon* running, or it is refusing service to your login. Check the login you have entered for that system: select the system and choose "Modify System Config" in the Edit menu of the site window. If necessary, correct the login (or get its permissions changed) and retry the operation.

The System Availability Monitoring Facility (*availmon*) is included in the *eoe2.sw* subsystem and must be installed on the Origin, CHALLENGE, or Onyx server. After it is installed, activate it by typing

**/etc/chkconfig avail on**

```
No icons may be dropped into this panel.
```

This version of IRISconsole does not support drag and drop behaviors on icons. The icon(s) dropped will automatically be repositioned at their original locations.

```
No Remote System Control information to report.
Either <system> doesn't have a 'sysctlrd' running, or
it's refusing service to the Login <login>
```

Either the currently selected system doesn't have a *sysctlrd* running, or it is refusing service to your login.

If the connected system is a CHALLENGE S, you cannot perform the action you tried; this type of server has no system controller, which is required for this action.

For other connected systems, follow these steps:

1. Check the login you have entered for that system: select the system and choose "Modify System Config" in the Edit menu of the site window.

2. Make sure that the login you entered has permission to perform the operation by typing

   **rsh** *login@system* **/usr/etc/sysctlrd -p**

   If necessary, correct the login (or get its permissions changed) and retry the command above.

```
Nothing selected.
```

You have specified an action for which a site or system must be selected. Select the item and try the action again.

```
Null input values aren't allowed.
Spaces not allowed in fields.
```

Enter a valid value in the field.

```
Null site name.
Null system name.
```

An attempt was made to create a site or system with a "null" name. Names must have at least one character and may not contain spaces.

```
Please close following site(s) before deleting
```

You attempted to delete a set of sites when a subset of it was still open. Close the site(s) and try the action again.

```
Port number must be between 1 and 16.
```

>   Multiplexer port numbers may range only from decimal 1 to 16.

```
Rename not allowed when site is open.
```

>   An attempt was made to rename a site that is already open. Close the site first.

```
SCSI ID must be between 1 and 7.
```

>   Inspect the back of the multiplexer for the SCSI target ID used. To verify that the multiplexer is installed properly, select "Show SCSI Bus Attachments" in the Options menu of the main IRISconsole window and check the SCSI ID displayed in the dialog box.

```
Site is already open.
```

>   An attempt was made to open a site that is already open. The site window appears at the top of the stack of windows.

```
Site name already exists.
Select it, then "Edit" its configuration.
```

>   An attempt was made to create a site that exists already. Create a unique site with a new name. To change the configuration of an existing site, select it first.

```
Spaces not allowed in fields.
```

>   Enter a valid value in the field.

```
System name already exists.
Select it, then "Edit" its configuration.
```

>   An attempt was made to create a system that exists already. Create a unique system with a new name. To change the configuration of an existing system, select it first.

**60**

```
/usr/sbin/sysmon not installed.
```

> *sysmon.sw*, included in the base IRIX release, is a GUI-based tool for analyzing system logs. Install this system from the IRIX 6.2 (Indy) or IRIX 6.3 (O2) CD for this feature to function.

```
You must have eoe.sw.uucp installed.
```

> IRISconsole uses *uucp*-style locking on device nodes. Install this subsystem from the IRIX 6.2 (Indy) or IRIX 6.3 (O2) CD.

```
System selected is not partitioned.
```

> The system was defined to be a partitioned system but upon querying the system no partitions were found.

# Index

## Tell Us About This Manual

As a user of Silicon Graphics products, you can help us to better understand your needs and to improve the quality of our documentation.

Any information that you provide will be useful. Here is a list of suggested topics:

- General impression of the document
- Omission of material that you expected to find
- Technical errors
- Relevance of the material to the job you had to do
- Quality of the printing and binding

Please send the title and part number of the document with your comments. The part number for this document is 007-2872-004.

Thank you!

## Three Ways to Reach Us

- To send your comments by **electronic mail**, use either of these addresses:
    - On the Internet: techpubs@sgi.com
    - For UUCP mail (through any backbone site): *[your_site]*!sgi!techpubs
- To **fax** your comments (or annotated copies of manual pages), use this fax number: 650-932-0801
- To send your comments by **traditional mail**, use this address:

Technical Publications
Silicon Graphics, Inc.
2011 North Shoreline Boulevard, M/S 535
Mountain View, California  94043-1389