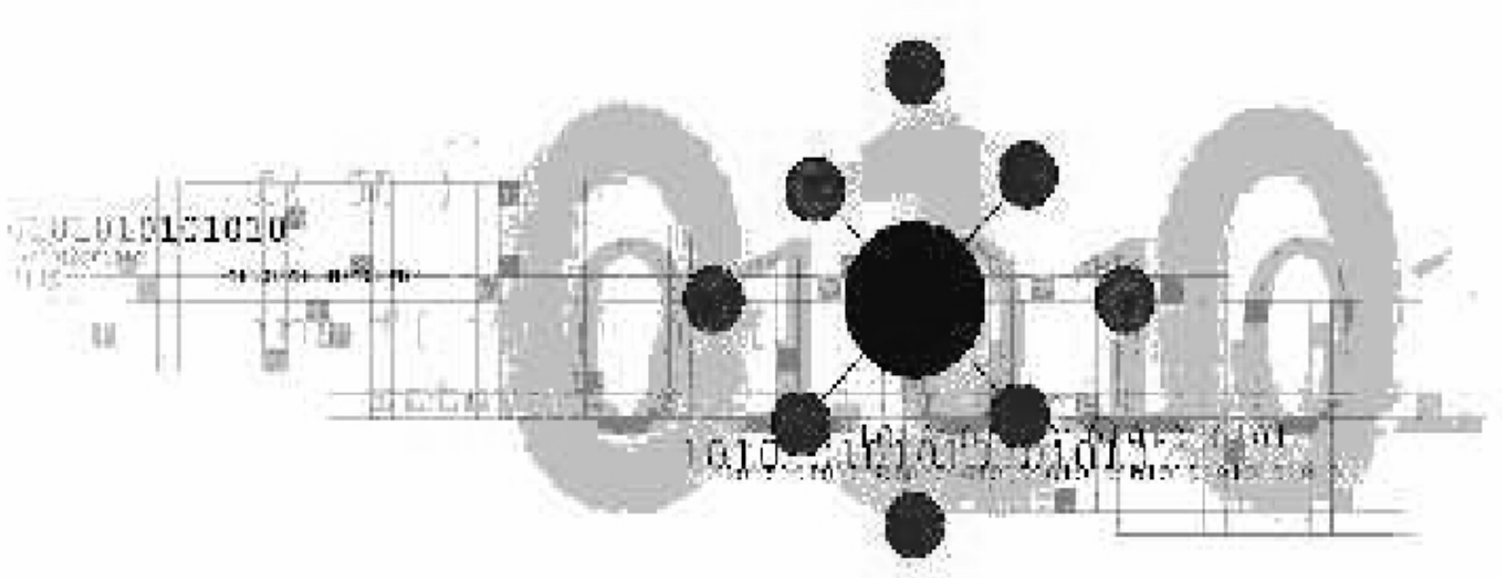
IRIX® 6.5.23 Update Guide



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February 2004

Dear Valued Customer,

SGI® is pleased to present the new IRIX® 6.5.23 release. Each release is available to customers with a service contract that includes an IRIX support component. This upgrade is part of a family of releases that periodically enhances IRIX 6.5.

There are several benefits to this release strategy: it provides periodic fixes to IRIX, it assists in managing upgrades, and it supports all platforms. Additional information on this strategy and how it affects you is included in the updated *Installation Instructions* manual contained in this package. If you need assistance, please visit the Supportfolio™ online website at http://support.sgi.com/ or contact your local support provider.

We offer eight modes of service for software supported by SGI: Active, Maintenance, Limited, Legacy, Courtesy, Divested, Retired, and Expired.

Active Mode is our highest level of service. It applies to products that are being actively developed and maintained and are orderable through

general distribution. Software fixes for all levels of problems can be expected.

Maintenance Mode software is maintained and is still an important part of our product mix. No new functionality is added to products in this support mode. Functional fixes for severe problems are generally available. Products in this support mode category are still orderable through general distribution. Software usually stays in this category for approximately 18 months before being moved to a mode of lesser support.

Limited Mode is a restricted level of service developed mainly for products developed and maintained by open source organizations and distributed by SGI.

Legacy Mode software generally runs on out-of-production operating system versions or system platforms that are no longer in active development or maintained. These products are usually distributed with limited availability. New support contracts may be offered and renewed. Services provided with Legacy Mode are limited to providing existing fixes and "workarounds" for reported problems. IRIX® 6.2 is an example of a major operating system release that was supported in this category until January 2000. IRIX® 6.3 and IRIX® 6.4 operating system revisions are examples of major operating system releases that were supported in this category until January 2001.

Courtesy Mode software is not officially part of the software support offerings. Courtesy mode software is not covered by software support contracts, and call center support is not available. An e-mail alias may be provided to facilitate customer communications and to address any technical questions. Response times will vary according to availability of resources. The e-mail alias may be terminated at any time without advance notice. IRIS Showcase™ and Cosmo Worlds™ are examples of products with Courtesy Mode support.

Divested Mode software has been turned over to a third party who assumes all responsibility for support. SGI no longer distributes these products. Calls received at the SGI Call Center for support on divested products will be redirected to the applicable third party. CA Unicenter® TNG and Syntax TAS™ are examples of divested products.

Retired Mode provides restricted support for older software products which are no longer generally distributed by SGI. This level of support has severe limitations on portability to new platforms. Availability of support at this level is limited to existing customers with whom we have existing contractual obligations. This is the final stage before a product is completely removed from the SGI product set. IRIX 6.2, IRIX 6.3, and IRIX 6.4 operating system versions are examples of major operating system releases that are supported in this category beginning January 2003. Software stays in this category for a minimum of 18 months before being moved to Expired Mode.

Expired Mode software products have reached the end of their useful life. These products are not supported or distributed in any form by SGI. Examples are: IRIX® 5.3, IRIXPro™, and Proconf.

Supportfolio Online (http://support.sgi.com/) contains a Power Search capability to locate further information regarding the eight software support modes. Using the Power Search section can also help locate links to the latest customer letters and lists of the various software products that have changed support modes. We thank you for your continued commitment to SGI.

Terry Oberdank

Vice President, Global Services
SGI

Welcome to your SGI IRIX 6.5.23 update. This booklet contains:

- A list of key features in IRIX 6.5.23
- A list of CDs contained in the IRIX 6.5.23 update kit
- A guide to SGI websites

IRIX 6.5.23 Key New Features

The following changes have been incorporated into the core IRIX 6.5.23 overlay CDs and the Applications CDs.

Packaging and Support Changes for IRIX 6.5.23

Packaging changes for CXFS

Starting with IRIX 6.5.22, The IRIX CXFS software is no longer bundled in the IRIX overlay CDs but instead is on a separate CD that is labeled *CXFS IRIX Server and Client 3.0 for IRIX 6.5.23*. This changes the installation procedure. For information on CXFS installation, see SGI InfiniteStorage CXFS Administration Guide.

Note: If you are upgrading from a previous IRIX release and have CXFS installed, you must upgrade both IRIX and CXFS. If you try to upgrade one without the other, conflicts will occur.

CXFS customers should make sure that their CXFS support contract contains the CD media option. This option is required for future delivery of the latest features, enhancements, and bug fixes, available only on CD. The CD media option allows you to take advantage of secure and expedited delivery using the online ordering system, through Software Updates on Supportfolio, or through your local support center by telephone.

For further information on this packaging change and CXFS support, go to the following page on Supportfolio:

http://support.sgi.com/content_request/155033/index.html

Changes to Support Mode Status

The following workstations, graphics and scalable server systems have transitioned to retired support mode for the IRIX 6.5.23 release. IRIX 6.5.23 does not support installation on these systems.

- Challenge S
- Challenge M
- Challenge DM
- Challenge L
- Challenge XL
- Indigo
- Indigo2
- Indigo2 Extreme
- Indigo2 Impact
- Indy
- Power Challenge
- Power Indigo2

- Power Onyx
- Onyx1

For information on IRIX Operating System Support Mode Changes for Legacy MIPS go to the following page on Supportfolio:

http://support.sgi.com/content_request/155034/index.html

The following product has transitioned to retired support in the IRIX 6.5.23 release:

- Distributed Computing Environment (DCE) / Distributed File System (DFS)

Contact your local sales representative to discuss options for replacement or upgrade products.

Changes to Fonts, PostScript™ Viewing, and PDF Viewing Tools

Several of the fonts have been updated in this release, and as a result, customers may notice a change in some of the filenames used in the font directories. You may also see some minor changes to the fonts' appearance on the display. Applications that use fonts through the standard mechanisms in X11 should continue to operate correctly. Applications that directly access those font files in the DPS directory, however, may find that the file has been superseded and no longer exists in that location. Developers are encouraged to use the standard X11 mechanisms for accessing fonts to avoid this problem.

The tools `acroread` (Adobe Acrobat® Reader), `xpsview`, and `showps` have been replaced with the more recent open source tools `gsview` and `xpdf`, which are built on top of the Ghostscript® package. These tools can be found on the Applications CD in this release. Customers who made use of the old tools should ensure that they install the new ones by selecting the images for `gsview`, `xpdf`, and `ghostscript` from the Applications CD. The old tools will no longer be available, and will be replaced with wrapper scripts.

The wrappers for `acroread` and `xpsview/showps` will invoke the new `xpdf` or `gsview` commands respectively, but the wrapper scripts will pass all parameters verbatim, and will not attempt any translation. Thus, if an option changes or is not available for the new tool, customers may encounter an error if they use that option with the old command name from inside a script, for instance.

Ghostscript is a registered trademark of Artifex Software, Inc. PostScript is a trademark of Adobe Systems Incorporated.

New Software Enhancements - Maintenance and Feature Stream

Filesystems

- **Changes to CXFS**

  The IRIX CXFS software is now on a separate CD; for details see “Packaging and Support Changes for IRIX 6.5.23” on page 7.

IRIX 6.5.23 provides the following new features for CXFS:

- Distributed on separate CD since IRIX 6.5.22.
- Support for both relocation and recovery to a standby (idle) server. Relocation is disabled by default.
- Support for a cluster of up to 64 nodes.
- The ability to define a reset method for a given node to one of the following:

  - Power cycle, to turn power off and on

  - Reset, to simulate the pressing of the reset button on the front of the machine

  - NMI, to perform a nonmaskable interrupt

  You can define this method using either the cmgr command or the GUI. You can manually perform a powercycle or an NMI with the `cmgr` command.

For information on these features, see *CXFS Administration Guide for SGI InfiniteStorage*.

Networking

- **SGI Infinite Network Bandwidth**
  SGI Infinite Network Bandwidth aggregates a number of physical network interfaces into a single virtual interface that is able to spread data evenly across all the physical interfaces in a stripe set. This

allows multiple packets to be sent and received in parallel. This greatly increases the available bandwidth to the virtual interface. For information on Infinite Network Bandwidth, see *IRIX Admin: Networking and Mail*.

- **Dual-port Gigabit Ethernet board support**
  The IRIX 6.5.23 release supports the dual-port Gigabit Ethernet board. It is available in two formats: the dual-port Fiber-Optic Gigabit Ethernet board and the dual-port Copper Gigabit Ethernet board. For descriptions of these boards, information on how to connect the boards to an Ethernet network, and an explanation of how to operate the boards, see the *SGI IRIS Release 2 Dual-Port Gigabit Ethernet Board User's Guide*.

pthreads

- **Support for pthread barriers and spinlocks**
  IRIX 6.5.23 provides support for POSIX 1003.1j pthread barriers and spinlocks. For information, see the `pthread_barrier_wait`(3P) and `pthread_spin_lock`(3P) man pages.

System profiling

- **IPv6 support for the rtmon command added**
  In IRIX 6.5.23, the `rtmon-client` and `rtmond` daemon support IPv6. For information, see the `rtmon-client`(1) and `rtmond`(1) man pages.

Support tools

- **Support for Embedded Support Partner 3.0**
  For the IRIX 6.5.23 release, the Embedded Support Partner (ESP) has been upgraded to version 3.0, the same version of Embedded Support Partner deployed on SGI's Altix systems. The ESP2.0 event manager component has been decoupled and generalized to allow for more flexible system group management. An ESP3.0 System Group Manager (SGM) supports both ESP2.0 and ESP3.0 clients (Linux or MIPS). All existing ESP2.0 data will automatically be converted for use by ESP3.0. In addition, all existing ESP2.0 reports are supported as is the auto-logging of calls to SGI for supported customers. For further information see the Embedded Support Partner User Guide.

SGI Software Product Life Cycle Management

- **IRIX Support Policy**
  In accordance with the SGI software product life cycle management strategy announced in December 2002, SGI will announce support mode changes for various software products on a semi-annual basis. To view customer letters containing support mode changes announced since December 2002, as well as the latest IRIX Support Policy documents, visit the IRIX Support Policy Web page on Supportfolio Online (http://support.sgi.com/).

Applications CD

The following full images have been added to the IRIX 6.5 Applications CD, February 2004:

- Ghostscript, 8.11
- GSview, 4.5
- XPDF viewer, 2.03
- Motif Accessibility Module, 1.7.3

The following full image has been revised for the IRIX 6.5 Complementary Applications CD, February 2004:

- Common Desktop Environment, 5.3.3

The following full images have been revised for the IRIX 6.5 Applications CD, February 2004:

- Java2 v1.4.1_03 Execution Environment (Sun JRE v1.4.1_02)
- Java2 v1.4.1_03 Debug Binaries (Sun JDK v1.4.1_02) (dev)
- Java2 v1.4.1_03 Development Environment (Sun JDK v1.4.1_02) (dev)
- Mozilla 1.4.1

The following overlays have been revised on the IRIX 6.5.23 Overlay CD:

- IRIX Interactive Desktop
- IRIX Interactive Desktop Tools

- IRIX Interactive Desktop Administration
- Impressario™ Printing & Scanning Tools

The following images have transitioned to Expired support mode and have been removed from the IRIX 6.5 Applications CD, February 2004:

- Display PostScript/X, 2.0.8 based on PostScript Level
- Cosmo Create Authoring Environment, 1.0.3a
- Insight Professional Publisher, 5.3
- Insight Glossary, 3.0.2 (now distributed with each product release that includes electronic book documentation)
- Showcase, 3.4.3a

IRIX OS Bundled Software

For information about the bundled software that is included with this release, see the Bundled software and licenses webpage that you can access from the Welcome webpage.

Freeware CDs

For information about the freeware that is supported for this release, including a complete list of the freeware packages, see http://freeware.sgi.com/. As of the IRIX 6.5.22 release, IRIX Freeware CDs are no longer included with the IRIX Update kit.

Documentation

The following manuals have been revised for the new features incorporated into this release.

CXFS Administration Guide for SGI InfiniteStorage, 007-4016-019, has been included on the separate CXFS CD since the release of IRIX 6.5.22. It includes information about the TP9300 RAID and the `cxfs-config` command. It also includes information on migrating from an IRIX cluster to a Linux 64-bit cluster.

Embedded Support Partner User Guide, 007-4065-008, documents Embedded Support Partner 3.0 functionality.

IRIX Admin: Networking and Mail, 007-2860-010, includes information about Infinite Network Bandwidth.

Topics in IRIX Programming, 007-2478-009, includes some minor technical updates regarding fonts.

Key New Features from Previous IRIX Releases

Descriptions of key new features and changes for the IRIX releases from 6.5.1 through 6.5.22 are provided in the Customer Welcome document. This document is available on the IRIX 6.5.23 Overlay CDs and can be accessed in any of the following ways:

- Insert Installation Tools and Overlays into the CD-ROM drive and point a web browser at file:///CDROM/WhatsNew/yoursystem.html. Note that you enter the literal yourSystem.html; do not type your actual system name.
- After completing an install, click on the Guide button of the web browser. Holding the button down yields a menu with `Welcome` as the first item.
- After completing an install, double click the “Welcome to SGI” icon on the desktop.

Descriptions of new features for IRIX 6.5.18 and later are available on Supportfolio Online from the following webpage: http://support.sgi.com/search_request/publications. After logging in to Supportfolio, enter “Start Here” as the keyword and select “IRIX OS Docs ” as the Publication type. Select a Start Here document and follow the “Key New Features and Changes” link for information on the new features for the release selected.

IRIX 6.5.23 Update Kit Contents

The IRIX 6.5.23 Update Kit contains the following items for both server and workstation system configurations:

- CD Name:
    1. IRIX 6.5.23 (1 of 3) Installation Tools & Overlays CD, February 2004
    2. IRIX 6.5.23 (2 of 3) Overlays CD, February 2004
    3. IRIX 6.5.23 (3 of 3) Overlays CD, February 2004
    4. IRIX 6.5 Applications CD, February 2004
    5. IRIX 6.5 Complementary Applications CD, February 2004
- The IRIX CD booklet *Installation Instructions: Installing an Intermediate (Overlay) Release, Installing Applications, Installing Software Licenses*

SGI Websites

IRIX 6.5-Related Websites

- SGI product information

  http://www.sgi.com/products/
- IRIX 6.5 datasheet

  http://www.sgi.com/software/irix6.5/datasheet.pdf
- Supportfolio Online, IRIX 6.5 content

  http://support.sgi.com/irix/6.5

Services

- Customer Education Services

  http://www.sgi.com/support/custeducation/
- Professional Services

  http://www.sgi.com/services/

Online Tools

- Customer Registration

  http://www.sgi.com/support/custreg.html
- Software Licensing/Key-O-Matic

  http://www.sgi.com/support/licensing/
- Online documentation - Technical Publications Library

  http://docs.sgi.com/
- Supportfolio Online

  http://support.sgi.com/

Other Sites

- Download Cool Software

  http://www.sgi.com/products/evaluation/
- Free Software

  http://freeware.sgi.com/

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