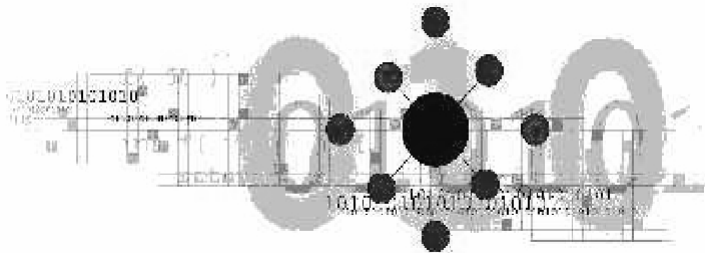




IRIX® 6.5.24 Update Guide





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Dear Valued Customer,

SGI® is pleased to present the new IRIX® 6.5.24 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 6.5.24 update. This booklet contains:

- A list of key features in IRIX 6.5.24
- A list of CDs contained in the IRIX 6.5.24 update kit
- A guide to SGI websites

IRIX 6.5.24 Key New Features

The following changes have been incorporated into the core IRIX 6.5.24 overlay CDs and the Applications CDs.

Packaging and Support Changes for IRIX 6.5.24

- **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.X for IRIX 6.5.X*. This changes the installation procedure. For information on CXFS installation, see *CXFS Administration Guide for SGI InfiniteStorage*.

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 were transitioned to retired support mode for the IRIX 6.5.23 release. IRIX 6.5.24 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 was 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 were updated for the IRIX 6.5.23 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 and Acrobat is a registered trademark of Adobe Systems Incorporated.

New Hardware Platforms or Features

- **LSI Dual Port Ultra 4 SCSI PCIX**

The IRIX 6.5.24 release supports LSI Dual Port Ultra 4 SCSI PCIX on Tezro Visual Workstations, Origin 350, Onyx 350 IR, Onyx 350 IP. and Origin 3000 PX/IX Bricks.

New Software Enhancements - Maintenance and Feature Stream

Filesystems

- **GRIO version 2**

The IRIX 6.5.24 release supports GRIO version 2, the next-generation guaranteed-rate I/O product from SGI. GRIO version 2 now supports CXFS filesystems shared among nodes in a cluster as well as locally attached XFS filesystems.

Although you can have both the GRIO version 1 and GRIO version 2 subsystems installed on the same machine, only one of them can be active. For more information, see the *Guaranteed-Rate I/O Version 2 Guide*.

- **XVM multi-host failover**

The IRIX 6.5.24 release supports XVM multi-host failover, initially supporting the SGI TP9100 and 3rd-party RAID storage. New NVSRAM will be made available on Supportfolio Online that will permit XVM multi-host failover to work with the SGI TP9300 RAID, SGI TP9400 RAID with 4884 controllers, and SGI TP9500 RAID.

When using XVM multi-host failover, you can manually specify the attributes associated with a storage path by using the `failover2.conf` file.

In support of XVM multi-host failover, XVM now supports the `xvm foconfig` and the `xvm foswitch` commands. The `xvm foconfig` command parses a `failover2.conf` file on a running system. The `xvm foswitch` command switches the path used to access an XVM `physvol`.

For information on XVM multi-host failover, the `failover2.conf` file, and the `foconfig` and `foswitch` commands, see the *XVM Volume Manager Administrator's Guide* and the XVM help screens.

- **CXFS**

CXFS 3.2 for IRIX 6.5.24 is released on a separate CD and includes some of the following new features:

- Support for CXFS multiOS Client I/O path failover
- CXFS private network failover
- CXFS token obtain optimization
- Configuration tools support for the CXFS Mac OS X multiOS client

For information on these features, see *CXFS Administration Guide for SGI InfiniteStorage* and the CXFS release notes included with the CXFS 3.2 release.

cpusets

- **New cpuset features**

IRIX 6.5.24 provides the following new features for cpusets:

- system cpuset

Administrators can now create a special cpuset for kernel daemons to run in called the “system” cpuset. This will help keep the daemons responsive even under high load. For information, see the *boot_cpuset(4)* man page.

- cpuset inspection

The `top` and `ps` commands can now display information about particular cpusets or what cpusets processes belong to. For information see the `top(1)` and `ps(1)` man pages.

Profiling

- **Interrupt handler inspection**

In IRIX 6.5.24, `IRIXview` and the `rtmond` tools can now report more meaningful information for kernel interrupt handlers threads.

Running `rtmond` with the new `-H` option causes the name of reported threads to be more descriptive. For information, see the `rtmond(1)` man page.

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 images have been added to the IRIX 6.5 Complementary Applications CD, May 2004:

- Easy Software ESP PrintPro with 33 printer driver packages, 4.4.1

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

- Array Services, 3.6 Ghostscript, 8.13
- GSview, 4.6 ImageVision Tools, 3.2.3
- Java2 v1.4.1_06 Execution Environment (Sun JRE v1.4.1_06)
- Java2 v1.4.1_06 Debug Binaries (Sun JDK v1.4.1_06) (dev)
- Java2 v1.4.1_06 Development Environment (Sun JDK v1.4.1_06) (dev)
- MPI 4.4 (MPT 1.9)

- MPT 1.9
- SMA 4.2 (MPT 1.9)
- XPDF viewer, 3.00

The following overlays have been revised on the IRIX 6.5.24 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, May 2004:

- Display PostScript/X, 2.0.8 based on PostScript Level
- Adobe Acrobat Reader, 4.05b
- Impressario 2.2.5 PostScript Renderer
- Impressario 2.2.5 Host RIP Printers

Starting with IRIX 6.5.24, the Impressario PostScript render engine and Host RIP printers have been removed. If you require non-PostScript printer support look on the Complementary Applications CD for the Easy Software ESP PrintPro package and the 33 printer driver packages. You can obtain a 21-day demo license for this software by going to the ESP web site at <http://www.easysw.com/license-demo.php>.

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 manual is new for the IRIX 6.5.24 release:

- *Guaranteed-Rate I/O Version 2 Guide*, 007-4244-001

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

- *CXFS Administration Guide for SGI InfiniteStorage*, 007-4016-020, includes support for CXFS 3.2 features, RAID firmware updates, and information about how hardware changes affect I/O fencing.
- *IRIX Admin: Networking and Mail*, 007-2860-011, includes information about how to configure Primary and Secondary Ethernet connections on the new dual-port Gigabit Ethernet board.

- *IRIX Impressario.5.24 Programming Guide*, 007-1633-070, includes updates reflecting changes in font support and provides a new appendix showing psrip command line options that can be used when defining an alternate RIP.
- *IRIX Impressario.5.24 User's Guide*, 007-1632-070, includes small updates reflecting current font support.
- *Topics in IRIX Programming*, 007-2478-010, includes information reflecting support for the open source tools gsvie and xpdf.
- *XVM Volume Manager Administrator's Guide*, 007-4003-017, includes information on multi-host failover and small technical updates.

Key New Features from Previous IRIX Releases

Descriptions of key new features and changes for the IRIX releases from 6.5.1 through 6.5.23 are provided in the Customer Welcome document. This document is available on the IRIX 6.5.24 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/yourssystem.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 6.5.19 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 6.5.24 Update Kit Contents

The IRIX 6.5.24 Update Kit contains the following items for both server and workstation system configurations:

- CD Name:
 1. IRIX 6.5.24 (1 of 3) Installation Tools & Overlays CD, May 2004
 2. IRIX 6.5.24 (2 of 3) Overlays CD, May 2004
 3. IRIX 6.5.24 (3 of 3) Overlays CD, May 2004
 4. IRIX 6.5 Applications CD, May 2004
 5. IRIX 6.5 Complementary Applications CD, May 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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