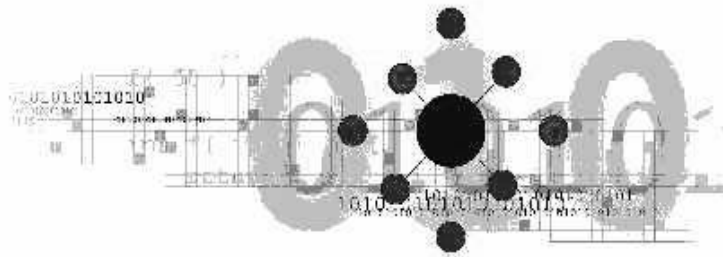




IRIX® 6.5.5 Update Guide



Welcome to your SGI IRIX 6.5.5 update. This booklet contains:

- A list of key new features in IRIX 6.5.5
- A list of CDs contained in the IRIX 6.5.5 update
- A guide to SGI Web sites



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Dear Valued Customer,

SGI is pleased to present the new IRIX 6.5.5 maintenance and feature release. Starting with IRIX 6.5, SGI created a new software upgrade release strategy, which delivers both the maintenance (6.5.5m) and feature (6.5.5f) streams. This upgrade is part of a family of releases that enhance IRIX 6.5.

There are several benefits to this 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 Web site at: <http://support.sgi.com> or contact your local support provider.

We thank you for your continued commitment to SGI.

Sincerely,

A handwritten signature in black ink, reading "Jorge Helmer". The signature is written in a cursive style with a large, stylized initial "J".

Jorge Helmer
Vice President & General Manager
Customer Support Division
SGI

IRIX 6.5.5 Key New Features

The following features are in the core IRIX 6.5.5 overlays.

New Hardware Supported

Included, but introduced in 6.5.4

- 270 MHz processor for Silicon Graphics O2 and Silicon Graphics Octane
- HDTV XIO Board for Silicon Graphics Onyx2 and SGI Origin 2000 systems (this now includes the former Cray Origin2000 system)

Included, but introduced in 6.5.3

- Systems using the MIPS R12000 processor
- Digital Video Multiplexer option board (DPLEX) for Silicon Graphics Onyx
- Redundant Power Supply (RPS)
- 21" Monitor Support for O2 and Octane

Included, but introduced in 6.5.2

- Flat Panel Monitor for O2 systems
- 16-pipe InfiniteReality2E systems
- GSN network adapter

Included, but introduced in 6.5.1

- Gigabit Ethernet for Octane and SGI Origin systems
- 128p Metarouter for Origin 2000 systems (formerly known as Cray Origin2000 systems)
- Dual Channel Display option for O2 systems
- XR hardware for InfiniteReality2E
- 225QC for SGI Origin 200

Software

Feature Stream Only

Included, but introduced in 6.5.2:

- Motif 2.1/IRIS ViewKit 2.1
- IRIX Oplock support
- Support for non EUC encoding and locales (sjis/big5/gbk/utf8)

Maintenance and Feature Streams

- Embedded Support Partner, which is an integral part of the IRIX operating system, provides system administrators with a way to monitor various events (such as system events, changes in system hardware and software configuration, and system performance) on their systems. Embedded Support Partner consists of a set of daemons that perform the monitoring activities. These include an event monitoring daemon (*eventmond*), an event management daemon (*espepd*), and a database daemon (*espdbd*). Embedded Support Partner provides single-system monitoring capabilities as a standard part of IRIX. Optionally, Embedded Support Partner can be configured to receive event and system configuration data from all systems contained within a system group. Embedded Support Partner is controlled through a Web browser that is connected to the Configurable Web Server that is included in the Embedded Support Partner package. For more information, see the *Embedded Support Partner Overview*, the *Embedded Support Partner User Guide*, and the Embedded Support Partner man pages.
- Support for the version 2 XFS directory format; this format provides you with the capability to choose a filesystem block size to match the distribution of data file sizes without adversely affecting directory operation performance. The directory format is specified with the **-n** parameter of the *mkfs* command. For more information, see *IRIX Admin: Disks and Filesystems* and the *mkfs_xfs(1M)* man page.

- Support for the math and scientific library SCSL 1.2. SCSL 1.2 is being introduced as a replacement for *Challengecomplib* on all supported system platforms at the time of the next major IRIX Release.

SCSL provides support for the math and scientific libraries and is widely used in scientific and technical compute-intensive applications. SCSL 1.2 incorporates all the current *Challengecomplib* 3.1 features and will be distributed as a separately packaged product until the next major release.

SCSL 1.2 can be downloaded from the SGI "Download Cool Software" Web page at <http://www.sgi.com/Products/Evaluation>. If you do not have Web access and are a current support customer, you can request CD media free of charge through your local support center. Non-contract customers can contact their sales representatives to order SCSL 1.2.

New features introduced in addition to the *Challengecomplib* functionality since the release of SCSL 1.1 are:

- Added convolution/correlation and filter routines to the signal-processing functionality (formerly available only in *Challengecomplib*)
- Improved ordering techniques for the sparse linear solvers
- Performance enhancements for the MIPS R12000 processor
- Bug fixes from SCSL 1.1

Challengecomplib will be entering maintenance mode upon the release of IRIX 6.5.5. No new features or enhancements will be incorporated.

For more information on SCSL, see
<http://www.sgi.com/software/scsl.html>

- Support for Automated Performance Monitoring. Together with Embedded Support Partner, the base performance monitoring services in the *pcp_eoe* product have been extended to include an inference engine for evaluating rules about system-level performance and raising alarms. Also provided is a parameterized set of standard rules that can be selectively enabled and tuned to meet local requirements and to choose alternative alarm notification mechanisms. These features are of most value to operations staff running production IRIX systems. For more information, see the *pmie(1)* and *pmieconf(1)* man pages, and the *Performance Co-Pilot IRIX Base Software Administrator's Guide*.
- Two new options were added to the *miser_create_cpuset* command. These options allow additional restrictions on memory assignment for processes running on a cpuset. These options are documented in the *miser_cpuset(4)* man pages.

Included, but introduced in 6.5.4

- Support for the Miser queue repack policy. When a job finishes execution prior to the end of its schedule, the system resources it was using are released. This policy attempts to reschedule the jobs using earlier start and end times in order to take advantage of these released system resources. The order of the scheduled jobs will be maintained. This feature can be used by all Miser users running IRIX 6.5.4m or f. For more information, see the miser(4) and miser(5) man pages, and *IRIX Admin: System Configuration and Operation*, Chapter 7 “Managing User Processes.”
- Distributed Computing Environment (DCE) Client for accessing shared resources in distributed computing DCE/DFS serving environments
 - Kernel libraries only
 - Requires installation of DCE/DFS 1.2.2a software for full functionality

Included, but introduced in 6.5.3

- (Octane systems only) The worst-case interrupt response time is guaranteed to be less than one millisecond on properly configured Octane systems
- Support for the X security and appgroup extensions (combined with a new Netscape plugin, these allow the embedding of X applications in Web pages)

- Extra support for European fonts, including the new Euro currency symbol
- New Software Manager and Inst commands to simplify selections for upgrades
- New Software Manager and Inst configuration variable to more easily handle cases where configuration files are upgraded. See the *smart_config_handling* preference in *inst* or *swmgr* for more information
- LDAP 3.0 now supported

Included, but introduced in 6.5.2

- AutoFS extended to use UNS for map information
- Support for DCShare application sharing extension
- Fibre channel support to Dmnet
- Three new HP printer drivers: HP4000, HP5000 and HP4500 (Color LaserJet 4500DN)

Applications CD with IRIX 6.5.5

- Upgrade to Netscape Communicator 4.61; for details, see <http://home.netscape.com/communicator/v4.5/tour/index.html>.
- CosmoPlayer 2.1.1 release

- SGImeeting Collaboration Environment, 1.2, Net-based data-conferencing, application-sharing software (SGImeeting Collaboration Environment, 1.0 was added in 6.5.2)
- SGImeeting Extensions, 1.2, offers additional whiteboard tools as “plugins” that appear on the whiteboard tool palette. These tools are ideal for group discussions in CAD and image-intensive industries. A 90-day evaluation license is included (initially added in 6.5.4).

The following extensions are available:

- A screen capture tool for dynamic or still whiteboard input
- A video capture tool for dynamic or still whiteboard input
- Customizable arrows and dimension markers for easy discussion pointing
- Symbol palette for drag and drop images
- SmartClear for clearing annotations when captured images update
- WebViewer Library Execution only Environment 3.0 release

Note: Applications take two forms: full images and overlays. The base versions of each can be found on the Applications CD. When full images are updated, new versions are placed on the Applications CD. Upgrades of overlay products, however, are located on the Overlays CD.

IRIX 6.5.5 Update Kit Contents

- CDs

CD Name	Server	Workstation
IRIX 6.5.5 (1 of 2) Installation Tools & Overlays CD August '99	✓	✓
IRIX 6.5.5 (2 of 2) Overlays CD August '99	✓	✓
IRIX Applications for 6.5 CD August '99	✓	✓

- The IRIX CD booklet *Installation Instructions: Installing an Intermediate (Overlay) Release, Installing Applications, Installing Software Licenses*

Silicon Graphics Web Sites

IRIX 6.5-Related Web Sites

- SGI product information
<http://www.sgi.com/products>
- IRIX 6.5 datasheet
<http://www.sgi.com/software/irix6.5/datasheet.pdf>
- Start Here: Installing IRIX 6.5.5
<http://support.sgi.com/6.5>
- To view all qualified applications compatible with IRIX 6.5 releases,
see <http://support.sgi.com/6.5/spk>

Online Tools

- Customer Registration
<http://www.sgi.com/Support/custreg.html>
- Software Licensing/Key-O-Matic
<http://www.sgi.com/Support/Licensing.html>

- Supportfolio Online
<http://www.support.sgi.com>
- Online documentation —Technical Publications Library
<http://techpubs.sgi.com>

Year 2000 Compliance

- Information about the Silicon Graphics Year 2000 Program
<http://www.sgi.com/tech/year2000>

Services

- Customer Education Services
<http://www.sgi.com/support/custeducation.html>
- Professional Services
<http://www.sgi.com/service>

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