



# START HERE: Installing IRIX 6.5.6

Welcome

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## Before You Install Checklist

# Before You Install

### 1. Make Sure Your System Can Run 6.5.6

See the [Minimum Requirements](#) page to confirm that 6.5.6 is supported on your system.

Because 6.5.x (meaning 6.5.1, 6.5.2, etc.) releases are cumulative, you do not need to upgrade to the previous 6.5.x release in order to upgrade to a new one.

Similarly, if you are running a pre-6.5 version of IRIX you can install the 6.5 and 6.5.x software at the same time. For example, by following the CD booklet instructions, you can upgrade directly from 6.2 to 6.5.6.

### 2. Check For Important Caveats That Affect Your Installation

Review the special [Caveats to Read Before You Upgrade](#). These caveats may include key details that significantly affect your installation process. (You want to print the entire page, because it also contains [Caveats to Read After You Upgrade](#). This way, you will not have to look them up after installation.)

Beginning with the IRIX 6.5.4 release, the *New\_IRIX\_Info* icon is included in the Desktop Toolchest. When you click on this icon, a web page opens and provides descriptions of the key new features and changes of this IRIX release.

After you install IRIX, users can access the *New\_IRIX\_Info* icon from their desktops through the following pulldown menu:

Toolchest -> Find -> Icon Catalog -> WhatsNew

The information displayed is the same Key New Features and Changes information included in this Start Here (see step 6 below).

**Note:** The IRIX Welcome product is located on the Installation Tools and Overlays CD (1 of 2) in the */dist* directory; it is installed by default. The IRIX Welcome product must be installed in order for the *New\_IRIX\_Info* icon to be included in the WhatsNew page of the Icon Catalog.

### 3. Confirm That The Applications You Rely On Are Supported

If you *rely on* any applications that are not bundled with this release, do not upgrade until you can confirm that they are supported on the 6.5 release family and/or until you have access to the 6.5-compatible version of such applications. Check the Software Knowledge Database at the *Supportfolio Online* site (<http://support.sgi.com>) to help you with 6.5 compatibility questions.

The best way to confirm application compatibility is to either check the SPK database if you received the application from SGI, or check with the third-party product vendor if you received the application from the product vendor.

A few examples are given in the Caveats section.

### 4. Create A Full System Backup

If you are upgrading from a pre-6.5 version of IRIX, then create a full system backup before upgrading to a new operating system. If, for any reason, you need to return to a previous operating system after the upgrade, you can use a full system backup tape or filesystem to do so. If you are upgrading from IRIX 6.5 or 6.5.x to IRIX 6.5.6, a full system backup is not required, but we encourage you to back up your system fully during any operating system installation or upgrade. Instructions for backing up and restoring workstations can be found in the online *Personal System Administration Guide*. For servers, use the `backup(1)` and `restore(1)` commands; refer to the online book *IRIX Admin: Backup, Security, and Accounting* for details. If you don't know where to find these books, see the General Documentation section.

5. *(Optional)* **Read About The CDs You Will Use**

Are you upgrading from IRIX 6.5 or 6.5.x to IRIX 6.5.6?

Then you only need to install the 6.5.6 CDs, unless you want to switch release streams (in which case you will also need the core 6.5 CDs).

Are you upgrading a system running a pre-6.5 version of IRIX, or installing onto a clean disk?

If so, you need to install both the 6.5 and 6.5.6 CDs (except for the 6.5 Installation Tools CD).

See CD Descriptions.

See the Software/CD Index for an alphabetical list of the 6.5 software products, including sizes, and the CDs on which they are located for the 6.5 base operating system release.

See the CD Contents page for a list of contents for the 6.5.6 and 6.5 CDs.

6. *(Optional)* **Check For Key Changes In This Upgrade**

To find out about key changes in this upgrade, check the Key New Features and Changes list. For specific details about changes in each individual software product, see the product release notes.

7. *(Optional)* **Request A License Password**

If you need a license password for EnlightenDSM or any of the optional applications that require a license password, you can refer to the License Information Guide site ([http://www.sgi.com/Support/Licensing/license\\_info\\_guide.html](http://www.sgi.com/Support/Licensing/license_info_guide.html)) for details.

Do you have questions that remain unanswered? See the Resources section.

## To Install

After you have gone through the checklist above, return to the relevant **installation instructions in the CD Booklet** that came with your CDs.

PDF file of installation CD booklet.

**Special Upgrade Instructions for SGI Origin 2000 Systems with**

### **65+ Processors (formerly known as Cray Origin2000 systems)**

There are special upgrade instructions for SGI Origin 2000 systems that have 65 or more processors. To receive a copy of these instructions, please send a request to [techpubs@sgi.com](mailto:techpubs@sgi.com), specifying the kind of system you have and whether you are going to be upgrading to 6.5.6 or installing 6.5.6 onto a clean disk.

**Should you ever need to return to the IRIX 6.5 release**, follow the "Installing an Intermediate Release on IRIX 6.5 or Later" instructions given in the CD booklet, but use the selection commands given for switching to the *maintenance* release. Also, use the core 6.5 CDs in addition to any other relevant CDs for the release to which you are downgrading.

## Resources

- [Supported 3rd-Party Software and Peripherals](#)
- [Release Notes](#)
- [Using Software Manager or Inst](#)
- [Patches](#)
- [Supportfolio Online](#)
- [General Documentation](#)
- [Customer](#)

Support

Inst is the program used to install the IRIX operating system. Software Manager is a graphical version of Inst. Instructions for installing/upgrading software with these programs are in the Installation Instructions CD Booklet, but here is how to obtain more details:

- Y2K  
Compliance  
Status

- For more information on **using Inst**, you have a few options:
  - See the online book, *IRIX Admin: Software Installation and Licensing* (choose Help > Online Books from the Toolchest, or use the Base Documentation CD).
  - Use the help provided in Inst by entering **help help** at the Inst prompt.
  - See the inst(1M) man page.
  
- For more details on **using Software Manager**, use the Software Manager Help menu.

**Patches**

Information about acquiring software patches can be found at the SGI Services and Support Patches page ([http://www.sgi.com/support/patch\\_intro.html](http://www.sgi.com/support/patch_intro.html)).

**Supportfolio Online**

Supportfolio Online (<http://support.sgi.com>) offers you the ability to access and download the latest patches, find technical information and open support cases all with an easy-to-use Web interface. You can also sign up for our email notification service to automatically receive updates on new support information and features. Anyone is welcome to become a Supportfolio Online member. To take full advantage of all the features, you must have a support contract with a software component.

**General Documentation**

[Installed](#) | [Printed](#) | [On the Web](#)

**Installed**

SGI documentation is installed by default. Most applications have a Help menu or Help button. You can also use the Help menu on the Toolchest.

Some things you will find under Toolchest > Help:

- **InfoSearch:** "One-stop shopping" and searching for virtually all installed documentation, including online books, Man pages and Release Notes. (To launch InfoSearch from the command line, enter `infosearch` in a shell.)
- **Quick Answers:** Quick answers to common questions related to the tasks and tools that are a part of your system's end user software environment, including personal system administration tasks. Includes search capability.
- **Hints and Shortcuts:** A visual overview of hints and shortcuts for the IRIX Interactive Desktop.
- **Online Books:** A searchable library of online books.

**Note:** You can also access online documentation before (and after) installation, by using the Base Documentation CD.

## Printed

Each system comes with an Owner's Guide. Hardware boards and peripherals also come with printed documentation. In addition, some hardware documentation is shipped online, and most hardware documentation can also be found on the Technical Publications Library Web site (listed below).

## On the Web

Another place to find general documentation is on the Web:

- <http://techpubs.sgi.com>

The IRIX 6.5 bookshelf on the Technical Publications Library Web site allows you to access all IRIX 6.5 books on the Web. It includes hardware books as well. You can search for a manual by entering its title or document number in the keyword search. You can download PDF files by clicking on the book's download link.

- <http://www.sgi.com/tech>

Tech Focus provides easy access to FAQs (Frequently Asked Questions), Newsgroups and much more.

## Customer Support

Complete information about Customer Support, including Worldwide

Support Sites, can be found at <http://www.sgi.com/support/>.

## **Customer Support Center (CSC)**

The CSC is for:

- Hardware and Software telephone technical assistance
- Opening a service call or checking the status of an existing call
- Requests for on-site assistance or replacement parts
- Ordering spare parts
- Registering or obtaining information about our Customer Education courses
- Referral to your local service office for information about our support programs

(Please note that service will be provided in accordance with your system's current level of support. Service varies by warranty coverage and support program)

Phone Number: 1.800.800.4SGI (4744)

## **Y2K Compliance Status**

For information about the Y2K compliance status of SGI products, see <http://www.sgi.com/tech/year2000/>.

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# **Minimum Requirements and Supported Platforms**

## **Memory and Disk Space Requirements**

- **Memory.** The minimum memory requirement for Indy, R4000 Indigo and Indigo2 is 32 megabytes (MB). However, 64MB of memory or more is highly recommended. For all other supported systems, the minimum is 64MB.
- **Disk Space.** A standard, default installation of IRIX 6.5 plus IRIX 6.5.6 occupies approximately 1.5 gigabytes (GB) of disk space.

A 2GB or larger hard drive is recommended, although it is possible to limit your installations so that you can run 6.5 on less than 1GB, as shown in the example below.

*Example of a "Minimal IRIX" Upgrade*

What follows is an example of how you could install a *very* minimal IRIX 6.5.6 on less than 1GB—by substituting these installation commands for the installation selection part of the IRIX upgrade. This "minimal IRIX" example occupies about 500MB on an Indy, and does not include any of the online books or man pages.

```
Inst> keep *
```

```
Inst> install required
```

```
Inst> install default eoe 4Dwm desktop_base x_eoe desktop_eoe netscape
```

```
Inst> keep *.books *.man
```

```
Inst> install prereqs
```

## Supported Platforms

You can upgrade from IRIX 5.3, or IRIX 6.2 through 6.5.5.

IRIX 6.5.6 supports all SGI systems with R4x00, R5x00, R8000, and R1x000 CPU types, except Crimson. This includes:

- Challenge S
- Challenge M
- Indigo—see special preinstallation caveat
- Indigo2 —see special preinstallation caveats
- Indigo2 Extreme
- Indigo2 Impact 10000
- Indy
- O2
- Octane
- Onyx
- Onyx2
- Origin 200
- Origin 2000 (now also includes the Cray Origin 2000 systems)
- Power Challenge
- Power Challenge M
- Power Indigo2
- Power Onyx

## Obsolete Peripherals and Software

The following are not supported in 6.5.6:

- Vigna VME audio board
- GIO Token Ring

- GIO Sync Serial Card
  - EISA Sync Serial Card
  - VME Sync Serial Card
  - VME Token Ring Card
  - IRIS 5080
  - SNAserver
  - SX.25
  - 4DDN
  - 4DLT
  - IRIS Channel Adapter
  - IRISxfr mainframe software
- 

On this page:

- Caveats to Read Before You Upgrade
  - All-Platform
  - Platform-Specific
- Caveats to Read After You Upgrade

# Caveats to Read Before You Upgrade

These caveats make you aware of changes or potential problems that could significantly affect your installation.

**Different caveats will be relevant for different types of users; scan the list for information that is applicable for you.**

This is not a complete list of all known bugs, workarounds, or changes, which are documented in the release notes for each individual product. In addition to reviewing this list, you may want to check "Caveat and Release Note Updates" link at <http://support.sgi.com/6.5/> for any late-breaking information.

## All-Platform Caveats to Read Before You Upgrade

## Confirm that the applications you rely on are supported

(This is also Step 3 of the Preparation Checklist.)

Here are some examples (*not a complete list*) of applications that either need to be upgraded or are not yet supported:

- REACT/Pro: Version 3.2 is incompatible with IRIX 6.5.2 or later releases. REACT/Pro users need to upgrade to version 4.0a to run frame scheduler applications on IRIX 6.5.2 or later.
  
- HIPPI: Version 3.2 or later is needed to run on IRIX 6.5.x releases. To find out how to upgrade, see [www.sgi.com/software](http://www.sgi.com/software) (under Software Solutions Areas, click Networking, then click HIPPI 3.2).
  
- IRIS ATM: Version 2.3.5 or later is needed to run on IRIX 6.5.6. The ATM overlay 2.3.5 is available from the /CDROM/dist/unbundled directory of IRIX 6.5.6 (2 of 2) Overlays CD, November 1999. This overlay requires that the base ATM 2.3.1 image be installed already, or with the overlay during the same install session. The ATM overlay 2.3.5 can be installed on IRIX 6.5.2, 6.5.3, 6.5.4, 6.5.5, and 6.5.6.

If you are upgrading from IRIX 6.5.4 or have IRIS ATM 2.3.3 installed through some other mechanism, you will get a conflict when you attempt to install this release. If you get this conflict, you can resolve it by using the following set of commands. You will need your IRIS ATM 2.3.1 installation CDROM or a network distribution for it as part of the process. From within your installation session, enter the following commands:

```
open <IRIS ATM 2.3.5+ from /CDROM/dist/unbundled/atm_656+>
open <IRIS ATM 2.3.1 CD>
install atm
set neweroverride on
```

Ensure that you have not selected any other downgrades before proceeding or an incorrect installation may occur. You can check for other downgrades by using the following command:

```
list i D
```

If any subsystems other than `atm` are listed, you must deselect them before you continue.

- Intranet Junction: Version 1.0.2 or later is needed to run on IRIX 6.5.x releases.
  
- ClearCase: See the RATIONAL Software site for information on purchasing a version of ClearCase that runs on IRIX 6.5.

– Sybase: Contact Sybase, Inc. for information on purchasing a version of Sybase that runs on IRIX 6.5.

**Note:** An application supported on any release in the IRIX 6.5 family will run on all subsequent IRIX 6.5 family releases. Additionally, the application will be compatible with all prior releases of the IRIX 6.5 family, as long as the application does not utilize a new feature from a later 6.5.x release.

**If you have edited configuration files, check for changed versions at end of installation**

Ideally, configuration file differences should be merged prior to restarting the system *at the end* of an installation. Before restarting the system at the end of your installation, use the Inst command "admin config changed" to find out which system configuration files were modified since installation. You can find out more about this command by entering "help config" at the Inst prompt. To avoid compatibility problems, merge configuration files if new versions were created. The "Updating Configuration Files" section of the versions(1M) man page describes configuration file updating, as does the online *IRIX Admin: Software Installation and Licensing* guide.

One example of a file that may need to be merged is the */etc/group* file. If you have edited your */etc/group* file, see the Default group file now reinstalled caveat under Caveats to Read After Upgrading.

**Users who have installed *ftn\_eoe.sw.lib* from the MIPSpro 7.3 product before installing the IRIX 6.5.x images may see a downgrade conflict with distribution subsystem *ftn\_eoe.sw.lib* when they install with the "install maint" command if they also have the original 6.5 Foundation–1 CD open when they do the installation.**

If this downgrade conflict occurs, you must specify the "keep *ftn\_eoe.sw.lib*" command. The conflict occurs because *ftn\_eoe.sw.lib* was replaced by the 7.3 *ftn\_eoe.sw.lib*, and the install program logic with "install maint" now automatically selects downgrades.

Customers who have the MIPSpro 7.3 compilers installed or who will install MIPSpro 7.3 on R4000 or R4400 platforms running IRIX 6.5.5 should install the new 7.3.1m runtime libraries that are available from Supportfolio at <http://support.sgi.com>.

Customers enrolled under a valid support contract who do not have web access can obtain these libraries on CD media free of charge upon request from their local support organization.

**New for 6.5.6:**

- **CXFS and IRIS FailSafe 2.0 cannot both be installed on an IRIX operating system**

You can install either CXFS or IRIS FailSafe 2.0 on an IRIX operating system with applicable licensing. Both products cannot reside on the same system. If you first install IRIS FailSafe, you must deinstall it before you can install CXFS (and vice versa).

XVM is provided at no additional charge with the initial CXFS 1.1 release. For future releases, XVM will be packaged, licensed, and supported as an additional software product for use with the IRIX operating system. For more information on how to obtain a license, contact your SGI service provider.

### Cumulative for 6.5 through 6.5.5, and still applicable for 6.5.6:

- **Xservers file changes**

Starting with 6.5, the file `/var/X11/xdm/Xservers` is no longer automatically replaced when installing new versions of `x_eoe.sw.eoe`. Instead, the new version is installed as `Xservers.N`. This allows most users to preserve changes that they have made to their `Xservers` file without having to merge them back in with each new software upgrade.

Also, the Xsgi command line argument `shmnumclients` is no longer supported, and will prevent the X server from coming up if it's specified in the Xserver file. **If you added the `shmnumclients` flag to the Xservers file, remove the `shmnumclients` flag before upgrading to 6.5 or later.**

- **"Filesystem too large for device" Error Message**

**"Filesystem too large for device" error message**

If you have repartitioned your disk drive with `fx` but did not create a filesystem with `mkfs`, you may see a message like this (under certain rare conditions) when booting the miniroot:

```
"Mounting file systems:
mount: /dev/dsk/dks0d1s0 on /root: Filesystem too large for device.
mount: giving up on: /root
Unable to mount partition: /dev/dsk/dks0d1s0 on /root.
This is your system disk: without it we have nothing on which to install
software.
Please manually correct your configuration and try again.
Press Enter to invoke C Shell csh:"
```

This generally indicates that you need to run `/sbin/mkfs` on the named disk partition. Inside the miniroot, a convenience script (`mrmkfsrc`) is provided to run `mkfs`.

For example, for the above failure, you could press Enter and do the following (only if the disk is free of important data, because this procedure will remove all the data on the disk):

```
# mrmkfsrc /dev/dsk/dks0d1s0
```

**# exit**

(To exit csh and have the miniroot script try to remount root.)

- **Upgrade the flash prom after installation on diskless systems** (see under O2-specific caveats and Octane-specific caveats)

- **False error message when installing unbundled products on systems running 6.5.2f or 6.5.3f**

When you install any of the unbundled products that are packaged in separate CDs onto 6.5.2f or 6.5.3f, you will probably see the following error message:

```
"This software distribution is not meant to install on the version of IRIX
currently running on this machine. Sorry."
```

This is a false error message. The products in the dist6.5 directory on the CD are fully compatible.

Workarounds:

- If you are using Inst, use the command "inst -f /CDROM/dist6.5"
- If you are using Software Manager, enter "/CDROM/dist6.5" in the Available Software field.

- **During miniroot installation: innocuous Appletalk error messages**

If you install from the miniroot, the following message may be displayed during the installation of Appletalk. You can safely ignore it.

```
"Command "( if test `grep ksd $rbase/var/adm/appletalk/services | wc -l` -eq
0; then echo "# Start K-AShare Server\n/usr/etc/appletalk/ksd -f -o -i
X/usr/bsd/hostnameX" | tr X \\140 >> $rbase/var/adm/appletalk/services; fi
)" failed (return status 127, subsystem appletalk.sw.xinet_base 1429002000)"
```

- **Obsolete software may cause installation conflicts**

Starting with the 6.5.3 release, the installation process detects some additional software package versions that are obsolete and incompatible with the 6.5 release family. During installation, you may see conflict messages caused by such software. When you see these conflict messages, simply choose to remove the incompatible software or replace it with newer versions (if available).

- **MediaMail now replaced by Netscape mail**

MediaMail is no longer available from SGI. The Netscape mail program, which is bundled

with Netscape Communicator, is the new default installed e-mail program for all SGI systems. SGI recommends a transition to Netscape e-mail (Netscape Messenger) and have included software with Netscape that enables conversion of MediaMail mail to Netscape e-mail format.

When you transition from MediaMail to Netscape mail:

- Be sure to check your home directory for a *.forward* file. If you have one that contains a line that mentions */usr/lib/Zmail/bin/reassembler*, remove or rename the *.forward* file **immediately before or after the IRIX installation**, in order to prevent problems with mail delivery to your account. On multi-user systems, each user should check for this file within their own home directory.
  
- To learn about getting started with Netscape Mail, see [About Netscape Messenger](#) (you can also access this page by choosing Find > WebTools from the Toolchest, and double-clicking the *AboutNetscapeMessenger* icon).

**Note:** If you still require MediaMail, please contact NetManage, Inc. for product and sales information: <http://www.netmanage.com>. (Note that NetManage's Z-Mail for UNIX product is the same as MediaMail.) Please be aware that MediaMail is no longer officially supported on IRIX.

- **Appletalk will not work on diskless systems**

Appletalk (Xinet Macintosh Connectivity) won't work on a diskless system because *appletalk* installs files into */usr/adm*.

- **XFS filesystem is strongly recommended**

To install this version of IRIX you should have an XFS filesystem. If you want to move a disk with a 6.5 (or later) filesystem to a pre-6.5 system, use the `-d unwritten=0` option when you run *mkfs*, or install the current XFS [patches](#) on the pre-6.5 system.

- **Installation error messages about Netscape can be ignored**

Ignore these messages if they appear during installation:

```
"The Netscape Web Browser is not installed. Please add the following
information to the mailcap file for your Web browser.
```

```
< application/x-enterlicense; /usr/etc/enterlicense %s; \>
application/x-licensemgr; /usr/etc/LicenseManager %s; \
description="Software License Installation"
```

```
The Netscape Web Browser is not installed. Please add the following
information to the mime.types file for your Web browser.
```

```
type=application/x-enterlicense exts=lic
>type=application/x-licensemgr exts=licmgr
```

```
mbase_client.sw.base: ($rbase/usr/mbase/sbin/streamplayer.exitop)
streamplayer.exitop: /usr/local/lib/netscape/mailcap not found "
```

- **During miniroot installation: innocuous disk space error messages**

You may ignore the following messages if you see them during a miniroot installation:

```
"/proc/pinfo/: no such file or directory"
```

and

```
"Automatically reconfiguring the operating system.  
dks0d1s1: Process [compress] ran out of disk space  
dks0d1s1: Process [compress] ran out of disk space  
No space left on device."
```

"ran out of disk space" refers to space on miniroot. The machine will boot because the kernel is autoconfigured on root. Note that an "out of disk space" message can only be ignored if it is the message that pertains to space on miniroot, as shown above.

- **The `ftn_eoe.sw.libblas` and `ftn_eoe.sw64.libblas` are no longer marked for default installation.**

If you require these subsystems, you must specifically select them during installation.

- **If you are upgrading from a pre-6.5 release or to a clean disk, you must open the core 6.5 CDs during the installation.**

The instructions in the Installation Instructions CD booklet will prompt you to do this at the right time.

## Platform-Specific Caveats to Read Before You Upgrade

If you have an [Indigo R4000](#), [Indigo2](#), [Octane](#), [O2](#), or [Origin 2000](#), please check the relevant caveats below before you begin your installation.

### *Indigo R4000 and Indigo2 R4000 Systems*

**If the system you are upgrading has a separate filesystem for / and /usr, then the / filesystem must be at least 25MB** in order to do the upgrade. Systems shipped with IRIX 4.0.x were shipped with separate / filesystems of approximately 16MB, which is too small for this version of IRIX.

To check, use the command `df -k /`

If the `df -k /` output looks similar to

```
Filesystem Type kbytes use avail %use Mounted on  
/dev/root efs 15275 9492 5783 62% /
```

the disk will need to be backed up, and repartitioned with the `fx` command before

IRIX can be installed.

To do this, refer to the online book *IRIX Admin: Software Installation and Licensing, Troubleshooting* section, *Using fx to Restore the Swap Partition*, for how to do this with the *fx* command. However, before you begin this procedure, make sure you back up important data! And, instead of the last step, *label/create/boot*, use the command */repartition/root*, then press Enter in answer to the prompt:

```
"fx/repartition/rootdrive: type of data partition = (xfs)"
```

Next, when you see

```
"Warning: you will need to re-install all software and restore user data from backups after changing the partition layout. Changing partitions will cause all data on the drive to be lost. Be sure you have the drive backed up if it contains any user data. Continue?"
```

press Enter.

The *kbytes* number should be at least 25600 in order to install IRIX, and it is recommended that it be at least 40MB, particularly on systems that support running 64 bit address executables (systems where *uname -s* returns IRIX64, on systems running IRIX 6.2 and later).

### ***Indigo2 Systems***

The EISA Token Ring driver is not supported.

### ***Octane Systems***

#### **Upgrade the flash prom after installation on diskless systems**

On diskless systems, the installation may fail if the flash prom is too old. To upgrade it on an Octane, enter the following lines in a shell:

```
su
/usr/sbin/flash -P /usr/cpu/firmware
```

You can compare the before and after results of *"/usr/sbin/flash -V"* to confirm the revision change. Reboot afterward.

### ***O2 Systems***

#### **• Upgrade the flash prom after installation on diskless systems**

On diskless systems, the installation may fail if the flash prom is too old. To upgrade it on an O2, enter the following in a shell:

```
su
/sbin/flashinst -T -y -q /usr/cpu/firmware/ip32prom.image
```

You can compare the before and after results of `"/sbin/flashinst -v"` to confirm the revision change. Reboot afterward.

- **If you program device drivers for the O2 PCI expansion slot**, you must use the routines (`pciio_pio_*`()) described in Chapter 22 of the *6.5 Device Driver Programmers Guide*, under the section "PCI Drivers for the IP32 (O2) Platform," to perform PIO (Program IO) accesses. **You must use the `pciio_pio_*` routines for all PIO access to the device, including the PCI config space.** These routines were made available in 6.3 via patch2801 (if your PCI device driver is already using these routines then there is nothing more you need to do).

*Origin 2000  
Systems*

- **System now reboots on panic without stopping at the PROM menu**  
Rebooting on panic without stopping at the PROM menu is the new default behavior. You can stop the system during reboot by pressing the Esc key at the "Starting Up The System" message.

If the system panics during the reboot, the system will go into a panic/reboot loop. If this should happen, press the Esc key to break the loop.

If you do not want the system to reboot on panic, you can override the default `reboot_on_panic` variable with the PROM variable `rebound`. To do this, enter the following at the PROM prompt, accessed via option 5 at the PROM menu:

```
setenv rebound n
```

- **To get the MMSC version number, check the bottom line of the LCS control panel.**  
MMSC version numbers for this version of IRIX operating system should be 1.2.E (or higher). SGI recommends that you upgrade to version 1.2.E if your version is lower.

A second way to get the version of all the MMSCs is to connect to the alternate console port on one MMSC and enter the following:

```
^T track * ver
```

- **Potential FLEXlm licensing problems**

The Flexible License Manager (FLEXlm) controls the use of certain software products that are asynchronous to the IRIX operating system.

A FLEXlm key is generated for each asynchronous software product, based on a unique system identifier. Because the Origin 2000 system does not have a unique system identifier, the FLEXlm host ID of the first system module is used to create a FLEXlm key.

If an Origin 2000 system is reconfigured, a different module with a different

FLEXlm host ID could be located in the first position, causing a previously valid FLEXlm key to fail.

If a license key problem arises after a system has been reconfigured, a new license must be generated. Contact the vendor of the software product in question and give them the host ID number (the FLEXlm host ID of the first module) of the reconfigured system to generate a new key.

# Caveats to Read After You Upgrade

These caveats make you aware of changes or potential problems that could significantly affect your experience after your upgrade.

**Different caveats will be relevant for different types of users; scan the list for information that is applicable for you.**

This is not a complete list of all known bugs, workarounds, or changes, which are documented in the [release notes](#) for each individual product. In addition to reviewing this list, you may want to check "Caveat and Release Note Updates" at <http://support.sgi.com/6.5/> for any late-breaking information.

**Cumulative for 6.5 through 6.5.5, and still applicable for 6.5.6:**

- **Downgrading using a live (non-miniroot) installation**

If you are **downgrading** from **feature stream 6.5.x** to 6.5 using a live (non-miniroot) installation, *inst/swmgr* will prompt you to continue installing from the miniroot. The prompt is as follows:

```
This software must be installed from the miniroot. The system is about
to be shut down and automatically booted to the miniroot where the
installation will continue automatically. Okay to proceed?
```

It is not necessary to perform this type of installation from the miniroot. To avoid this prompt, the user should set the "live\_install" preference to "on" before typing go/pressing start.

If you want to downgrade to an earlier 6.5.x version of the feature stream, use the following set of commands:

```
set newoverride on
k *
```

```
install standard
install downgrades
install prereqs
keep incompleteoverlays
```

- **Default group file now reinstalled**

With release 6.5.3, the default group file, */etc/group*, is reinstalled. The original group file is saved as *group.O*, which appears only if you have previously edited */etc/group*. This update is necessary because some optional packages, such as *nss\_fastrack*, require the group "nobody" to be present during the installation process.

After installation, **users who have defined new groups will have to merge the old group file into the new group file**. When merging, please be sure to **preserve the entry for "nobody."**

The *Inst* command *admin config change* and the post-installation command *versions changed* will both report any changed configuration files, including the */etc/group* file. As mentioned in the [Caveats to Read Before You Upgrade](#), this should ideally be done before at the end of the installation process, but before you restart the system.

- **New file for setting NIS server**

It is no longer possible to set the NIS server in the */etc/config/ypbind.options* file. If your system is configured this way, create the file

```
/var/yp/binding/<DOMAIN>/ypservers
```

where *<DOMAIN>* is the NIS domain name. Type the NIS server on a new line in this file.

**There were several other NIS-related changes in 6.5** that affect customers who upgrade from a pre-6.5 release of the IRIX operating system. For example, the IRIX name services have been completely rewritten. Please refer to the IRIX eoe [release notes](#) (chapter 3, Changes and Additions) for details.

- **Remote host display now off by default**

In the interest of security, the ability to display applications that are running on other systems is now disabled by default. There are a few different ways you can re-enable the remote host display. For details, see "About the Remote Display Feature" in Chapter 13 of the online *Desktop User's Guide*.

- **Printer may not be recognized if turned on after system**

Even after a printer is configured, it may not function if you turn it on after turning on your system. This is because the printer device is not present in the hardware graph. To work

around this problem, perform the following commands in a shell:

```
% su
# cd /dev
# ./MAKEDEV
# ioconfig -f /hw
# exit
```

- **Full hostname now used by default**

For customers installing IRIX on new systems, or reconfiguring existing systems after IRIX is installed or upgraded: the graphical system administration tools now use the fully qualified hostname by default. This affects scripts that assume that only the partial hostname is used. Scripts may need to be modified to use `hostname -s` rather than `hostname`. If you wish, you can override this default and use only the partial hostname.

- **Gang-scheduled graphics processes can cause graphics to hang**

Graphics programs using the `schedctl(2)` system call to choose gang scheduling mode (`SGS_GANG`) may cause the graphics to hang. (Gang-scheduled processes that do not use graphics are not affected by this problem.)

### Origin 2000 Caveats

The following caveats are for large (64+ processors) Origin 2000 systems.

#### Cumulative for 6.5 through 6.5.5, and still applicable for 6.5.6:

- **IRIS FailSafe is not supported on partitioned systems for this release**

It will be supported in a future release of the IRIX operating system, however.

- **Process Activity Reporter (par) sometimes hangs**

Par hangs when the system-monitoring daemon, *rtmond*, produces a data stream that overloads the clients. As a result, clients that feed par, like *padc*, will discard events. If the *process exited* event is discarded by these clients, par hangs. When this happens, you see messages like the following in */var/adm/SYSLOG*:

```
"rtmond[669]: (CPU 0) Client <local>:11:64505 events 1718 dropped (2%) 289
writes(0% push)for 4720560 bytes, 5 push buffers for 80 KB"
```

As shown in this example, you can tell that par has hung because the message tells you that the dropped count is other than 0.

---

# CD Descriptions

## IRIX 6.5.6 CDs

**Are you upgrading a system running a pre-6.5 version of IRIX, or installing onto a clean disk?**

If so, you need to install both the 6.5 and 6.5.6 CDs (except for the 6.5 Installation Tools CD).

**Are you upgrading a system running 6.5 or later to IRIX 6.5.6?**

Then you only need to install 6.5.6 CDs, unless you want to switch release streams. (To switch release streams, see the Installation Instructions CD booklet.)

### 1. **IRIX 6.5.6 (1 of 2) Installation Tools and Overlays CD, November 99**

*(Open First)*

Contains the miniroot and other components necessary to boot the system into the basic installation environment for operating system installs and upgrades. Contains the "installation tools support for overlays" patch, which is required for live upgrades on systems running 6.5 or later. Also contains the IRIX execution environment. Contains products for both the feature and the maintenance stream.

### 2. **IRIX 6.5.6 (2 of 2) Overlays CD, November 99**

*(Must be Installed)*

Contains additional bug fixes, features for feature stream, performance tune ups, and updates for applications in the unbundled directory. Contains products for both the feature and the maintenance stream.

### 3. **IRIX Applications for 6.5, November 99**

*(Required for Workstations and Some Servers)*

Contains standard, bundled applications and related documentation. The applications on this CD run on 6.5 and 6.5.x releases.

### 4. **Freeware, November 99**

*(Optional)*

Miscellaneous freeware. This is the latest update to the Freeware series of CDs. However, there is a web site that will be more current than the CD, so if you need the latest and greatest version of something, check <http://freeware.sgi.com/> for newer versions.

### 5. **Base Documentation CD, November 99**

*(Not for Installation)*

This CD allows you to view release notes, online books, and man pages before you install or upgrade the operating system. It supersedes any earlier releases of the Base Documentation CD. See the Documentation CD page for details.

#### **Other 6.5.6 CDs**

In addition to the CDs listed above, you probably received other CDs with your IRIX 6.5.6 package. If you already have older versions of any of the products on these CDs installed, you should upgrade them during the operating system upgrade. If you do not open them, "conflict"

messages (during the upgrade process) will prompt you to open them.

Each of these separate products come with their own installation instructions, and you can load any additional new products or subsystems after the initial operating system upgrade is finished and the system has restarted.

## Core IRIX 6.5 CDs

The [Software/CD Index](#) provides an alphabetical listing of 6.5 software products, including sizes, and the CDs on which they are located for the 6.5 base operating system release.

Install the IRIX 6.5 CDs if you are:

- Upgrading to IRIX 6.5.6 from a pre-6.5 version of IRIX
- Or, installing onto a clean disk

Follow the procedure in the Installation Instructions CD Booklet that came with your IRIX 6.5.6 software.

### 1. **IRIX 6.5 Installation Tools CD, June 98**

*(Use Only If Installing 6.5 Separately From 6.5.6)*

Contains the miniroot and other components necessary to boot the system into the basic installation environment for operating system installs and upgrades. Also contains patches.

**Note:** To install both 6.5 and 6.5.6 at the same time, do not use the 6.5 Installation Tools CD. Follow the procedure in the Installation Instructions CD booklet.

### 2. **IRIX 6.5 Foundation 1 CD**

*(Must be Installed)*

Contains the base operating system, base networking, and Application Binary Interfaces (APIs). Includes execution environment ("eoe") components, which are necessary for the execution of most applications.

### 3. **IRIX 6.5 Foundation 2 CD**

*(Must be Installed)*

Contains additional base operating system/execution environment components.

### 4. **IRIX 6.5 Applications CD**

*(Required for Workstations and Some Servers)*

Contains standard, bundled applications and related documentation. See the [IRIX 6.5 Applications page](#) for more details.

### 5. **IRIX 6.5 Development Foundation CD**

*(For Developers)*

Contains products necessary for software development, including libraries, header files, a linker, assembler and other common tools required for hosting software development. This CD contains compiler components necessary for use with the MIPSpro C, C++, Fortran 77 and Fortran 90 compilers (which are purchased separately). See the IRIX Development Foundation

(IDF ) [Release notes](#) for compiler installation notes.

#### 6. **IRIX 6.5 Development Libraries CD**

*(For Developers)*

Includes additional libraries, header files, sample source code, and documentation. You may need some of these products for compiling your own source code, while others simplify debugging or writing code. Scientific libraries are included as well as OpenGL and the popular ViewKit user interface library.

**Note:** If you intend to use the compilers, dev.sw.lib (and dev.sw.lib64 for 64-bit development) must be installed.

#### 7. **IRIX 6.5 Documentation CD**

*(Not for Installation)*

This CD allows you to view release notes, online books, and man pages before you install or upgrade the operating system. See the [Documentation CD](#) page for details.

##### **Other 6.5 CDs**

In addition to the CDs listed above, you probably received other CDs with your IRIX 6.5 package, depending on your configuration. For example, there are separate CDs for NFS, SoftWindows, and demos. If you already have older versions of any of these products installed, you should upgrade them during the operating system upgrade. If you do not open them, "conflict" messages (during the upgrade process) will prompt you to open them.

Each of these separate products come with their own installation instructions, and you can load any additional new products or subsystems after the initial operating system upgrade is finished and the system has restarted.

If you are using the Before You Install checklist, [return to Step 6](#).

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# Contents of Core 6.5.6 and 6.5 CDs

On this page:

## IRIX 6.5.6

- [IRIX 6.5.6 \(1 of 2\) Installation Tools and Overlays CD, November 99](#)

- IRIX 6.5.6 (2 of 2) Overlays CD, November 99
- IRIX Applications for 6.5.6, November 99

## IRIX 6.5

- IRIX 6.5 Installation Tools CD, June 98
- IRIX 6.5 Foundation 1 CD, June 98
- IRIX 6.5 Foundation 2 CD, June 98
- IRIX 6.5 Applications CD, June 98
- IRIX 6.5 Development Foundation CD, June 98
- IRIX 6.5 Development Libraries CD, June 98

## Contents of IRIX 6.5.6

<u>Key</u>
m = maintenance stream
f = feature stream

### **6.5.6 (1 of 2) Installation Tools and Overlays, November 99**

#### **/dist directory**

**Welcome:** Customer Welcome, November 99

**oe\_656f:** IRIX Execution Environment, 6.5.6f

**oe\_656m:** IRIX Execution Environment, 6.5.6m

**robinst:** RoboInst Tools for Automatic Installations 1.2

#### **installtools directory**

**patchSG0003622:** Installation tools support for overlays patch. Enables live upgrade for systems running 6.5 or later.

### **6.5.6 (2 of 2) Overlays CD, November 99**

#### **/CDROM/dist directory**

**FDDIXpress\_656m:** FDDIXpress, 6.5.6m

**Register\_656m:** On-Line Registration, 2.1

**ViewKit21\_dev:** ViewKit 2.1 (BETA) Development Environment, Version 2.1.0

**ViewKit\_dev\_656m:** ViewKit Development Environment, Version 1.5.3

**ViewKit\_eoe\_656m:** ViewKit Execution Environment, Version 1.5.3

**compiler\_eoe\_656m:** IRIX Standard Execution Environment (Base Compiler Headers and Libraries, 7.2.1.3m)

**desktop\_base\_656f:** IRIX Interactive Desktop Base Software, 6.5.6f

**desktop\_base\_656m:** IRIX Interactive Desktop Base Software, 6.5.6m

**desktop\_eoe\_656f:** IRIX Interactive Desktop, 6.5.6f

**desktop\_eoe\_656m:** IRIX Interactive Desktop, 6.5.6m

**desktop\_tools\_656m:** Desktop Tools, 6.5.6m

**dev\_656f:** Development System, 7.2.1

**dev\_656m:** Development System, 7.2.1

**dmedia\_dev\_656m:** Digital Media Development Environment, 6.5.6m

**dmedia\_eoe\_656m:** Digital Media Execution Environment, 6.5.6m

**dps\_eoe\_656m:** Display PostScript/X, 2.0.8 based on PostScript Level 2

**dvdr\_656m:** Device Driver, 5.0

**dynaweb\_656m:** Dynaweb (InSight to HTML), 4.2

**ftn\_eoe\_656m:** Standard Execution Environment (Fortran Headers and Libraries, 7.2.1.3m)

**gl\_dev\_656m:** Graphics Library Development System, 6.5.6m

**hwguides\_eoe\_656m:** Hardware Owner's Guides, 1.1

**ifl\_dev\_656m:** Image Format Library Development Environment, 1.2.2

**ifl\_eoe\_656m:** Image Format Library Execution Only Environment, 1.2.2

**il\_eoe\_656m:** ImageVision Library Execution Only Environment, 3.2.1

**imgtools:** ImageVision Tools, 3.2.1

**impr\_base\_656m:** Impressario 2.3.5 Base

**impr\_dev\_656m:** Impressario 2.3.5 Developer's Kit

**impr\_print\_656m:** Impressario 2.3.5 Print Server

**impr\_rip\_656m:** Impressario 2.3.5 PostScript Renderer (Requires Optional Impressario License)

**impr\_rip\_printers\_656m:** Impressario 2.3.5 Host RIP Printers

**infosearch\_656m:** Information Searching Execution Environment, 6.5.6m

**insight\_656m:** InSight Online Doc Viewer, 4.2.1

**insight\_base\_656m:** InSight Online Doc Viewer Base Software, 4.2.1

**insight\_dev:** InSight Online Doc Viewer Development Software, 4.2.1

**inst\_dev\_656m:** Software Packager, 1.5

**io4prom\_656m:** IO4prom for 64bit OS systems, 6.5.6m

**ip32prom\_656m:** Flash PROM for IP32 systems, 6.5.6m

**irix\_dev\_656f:** IRIX Development Headers/Documentation/Examples, 6.5.6f

**irix\_dev\_656m:** IRIX Development Headers/Documentation/Examples, 6.5.6m

**isdn\_eoe\_656m:** ISDN Execution Environment, 2.0

**java\_dev:** Java Development Environment 3.1.1 (Sun JDK 1.1.6)

**license\_dev\_656m:** License Development Environment 3.4.2

**license\_eoe\_656m:** License Tools 3.4.2

**media\_warehouse\_656m:** IRIX Interactive Desktop MediaWarehouse 1.2

**motif21\_dev:** IRIX IM 2.1 Development Software, 6.5 (based on OSF/Motif 2.1.10)

**motif\_dev\_656m:** IRIX IM Development Software, 6.5 (based on OSF/Motif 1.2.4)

**motif\_eoe\_656m:** IRIX IM Execution Software (Motif 1.2 and 2.1 Combined) for 6.5.6m

**nfs\_656f:** Network File System, 6.5.6f

**nfs\_656m:** Network File System, 6.5.6m

**pcp\_eoe\_656m:** Performance Co–Pilot Execution Only Environment, 2.0

**performer\_demo\_656m:** Performer2.2.4 Demos and Demo Data

**performer\_eoe\_656m:** Performer2.2.4 Execution Environment

**print\_656f:** Printing Tools, Release 1.8.5

**print\_656m:** Printing Tools, Release 1.8.5

**sgsearch\_656m:** Fulltext Indexing & Search Environment, 2.3

**sysadmdesktop\_656f:** IRIX Interactive Desktop System Administration, 6.5.6f

**sysadmdesktop\_656m:** IRIX Interactive Desktop System Administration, 6.5.6m

**sysmon\_656m:** Desktop System Monitor, 2.1.3

**tooltalk\_eoe\_656m:** ToolTalk 1.3 Execution Only Environment

**webviewer\_656m:** WebViewer library execution only environment, 3.1

**webviewer\_dev\_656m:** WebViewer library development environment, 3.1

**x\_books\_656m:** O'Reilly & Associates, Inc. developer books, X11R5

**x\_dev\_656m:** X11 Development Environment, 3.8 based on X11R6.3

**x\_eoe\_656f:** X11 Execution Environment, 3.8 based on X11R6.3

**x\_eoe\_656m:** X11 Execution Environment, 3.8 based on X11R6.3

**/CDROM/dist/unbundled directory**

**atm\_656m:** ATM Software, 2.3.5

**dba\_656m:** Database Accelerator, 6.5.6m

**dfs\_656m:** Distributed File System, 6.5.6m

**divo\_656m:** DIVO Video Execution Environment, 6.5.6m

**evo\_656m:** Octane Personal Video Execution Environment, 6.5.6m

**galileo\_656m:** Galileo Video Execution Environment, 6.5.6m

**il\_dev\_656m:** ImageVision Library, 3.2.1

**impactI2V\_656m:** Impact Indigo2 Video Execution Environment, 6.5.6m

**impactcomp\_656m:** Impact Compression Execution Environment, 6.5.6m

**impactdm\_656m:** Impact Digital Media Base Execution Environment, 6.5.6m

**impactvideo\_656m:** Impact Video Execution Environment, 6.5.6m

**insight\_dev\_656m:** InSight Developer Book Building Tools, 4.2.1

**sirius\_656m:** Sirius Video Execution Environment, 6.5.6m

## **IRIX Applications for 6.5.6, November 99**

### **/CDROM/dist directory**

**InPerson:** InPerson Desktop Conferencing, 2.2.1

**PeoplePages:** PeoplePages – The Indigo Magic Phonebook, 1.2.1

**accessx:** Access for Movement–Impaired Users, 1.0

**acrobat:** Adobe Acrobat Reader, 3.01

**annotator:** IRIS Annotator 1.2

**appletalk:** Xinet Macintosh Connectivity 9.02

**arraysvcs:** Array Services 3.3.1

**cms\_eoe:** Color Management 2.0.5

**cosmocrete:** Cosmo Create Authoring Environment, 1.0.3

**cosmoplayer:** Cosmo Player VRML Viewer 2.1.1 for IRIX 6.5

**custlink:** CustomerLink Client Software, 2.2.3

**demos:** Demonstration Programs, 6.5

**desktop\_eoe:** IRIX Interactive Desktop, 6.5

**desktop\_tools:** Desktop Tools, 6.5

**dps\_eoe:** Display PostScript/X, 2.0.8 based on PostScript Level 2

**dynaweb:** Dynaweb (InSight to HTML), 3.1a

**elec\_svcs:** Customer Support Services Base Software, Rel. 2.2

**fddivis:** FDDI Visualyzer, 6.5

**gateway:** Internet Gateway Execution Environment, 3.1

**iforark:** LicensePower/iFOR IS4.0.1 ARK

**iforcrk:** LicensePower/iFOR IS4.0.1 CRK

**imgtools:** ImageVision Tools, 3.2.1

**impr\_base:** Impressario 2.2.5 Base

**impr\_print:** Impressario 2.2.5 Print Server

**impr\_rip:** Impressario 2.2.5 PostScript Renderer (Requires Optional Impressario License)

**impr\_rip\_printers:** Impressario 2.2.5 Host RIP Printers

**impr\_scan:** Impressario 2.2.5 Scanner Software

**infosearch:** Information Searching Execution Environment, 6.5

**insight:** InSight Online Doc Viewer, 3.1

**insight\_gloss:** IRIS InSight Online Glossary, 3.0.1

**java\_eoe:** Java Execution Environment 3.1.1 (Sun JRE 1.1.6)

**java\_plugin:** Runtime Plug-in for Irix, Java(tm) Edition 1.1.1

**license\_eoe:** License Tools 3.3

**macromedia:** Macromedia Movie Player, 1.4.1

**media\_warehouse:** IRIX Interactive Desktop MediaWarehouse 1.2

**nedit:** NEdit V4.0.3.1 – GUI style editor

**netscape:** Netscape Communicator Client, 4.7

**netwr\_client:** NetWare Client 1.1

**nss\_fasttrack:** Netscape Fasttrack Server, 3.03

**outbox:** OutBox Personal Web Site, 1.6

**print:** Printing Tools, Release 1.7.5

**sgimeeting:** SGImeeting Collaboration Environment, 1.3

**sgimeeting\_ext:** SGIMeeting Plugins, 1.3

**sgips:** Adobe Photoshop Performance Package, 1.2

**sgsearch:** Fulltext Indexing & Search Environment, 2.0

**showcase:** IRIS Showcase 3.4.2

**sitemgr:** SiteMgr – Web Content Administration, 1.1

**sysadmdesktop:** IRIX Interactive Desktop System Administration, 6.5

**sysmon:** Desktop System Monitor, 2.1.2

**vlan:** VLAN software 1.0 for IRIX 6.5

**websetup:** Web Setup and Administration, 3.1.1

**webviewer:** WebViewer library execution only environment, 3.0

**xlators\_3d:** 3D File Translators 1.1.1

### **/CDROM/dist/extras directory**

**netscape\_lite:** Netscape Navigator Client, 4.7

### **/CDROM/dev directory**

**insight\_dev:** InSight Developer Book Building Tools, 3.2

**java\_dev:** Java Development Environment 3.1.1 (Sun JDK 1.1.6)

## **Contents of IRIX 6.5**

## **Contents of IRIX 6.5 Installation Tools CD**

**Note:** The patches on this CD are necessary and are automatically selected for installation; do not deselect any of these patches. This CD also includes installation components, such as the miniroot, which are loaded automatically, and thus are not listed here as installable software.

**patchSG0003131:** 7.2.1 base compiler runtime environment for IRIX 6.2/6.3/6.4/6.5

**patchSG0003139:** libmp rollup

**patchSG0003140:** 7.2.1 FORTRAN runtime for IRIX 6.2/6.3/6.4/6.5 – REQUIRED FOR F90

**roboinst:** RoboInst Tools for Automatic Installations 1.0

**Welcome:** Customer Welcome

## **Contents of IRIX 6.5 Foundation 1 CD**

**4Dwm:** Desktop Window Manager, 6.5

**ViewKit\_eoe:** ViewKit Execution Environment, Version 1.5.2

**c++\_eoe:** Standard Execution Environment (C++ Headers and Libraries, 7.2.1)

**compiler\_eoe:** IRIX Standard Execution Environment (Base Compiler Headers and Libraries, 7.2.1)

**desktop\_base:** IRIX Interactive Desktop Base Software, 6.5

**dmedia\_eoe:** Digital Media Execution Environment, 6.5

**eoe:** IRIX Execution Environment, 6.5

**ftn\_eoe:** Standard Execution Environment (Fortran Headers and Libraries, 7.2.1)

**insight\_base:** InSight Online Doc Viewer Base Software, 3.1

**io4prom:** IO4prom for 64bit OS systems, 6.5

**ip32prom:** Flash PROM for IP32 systems, 6.5

**motif\_eoe:** IRIX IM Execution Only Environment, 6.5 (based on OSF/Motif 1.2.4)

**tooltalk\_eoe:** ToolTalk 1.3 Execution Only Environment

**websupport\_eoe:** WebSupport 1.3 eoe

**x\_oe:** X11 Execution Environment, 3.8 based on X11R6.3

### **Contents of IRIX 6.5 Foundation 2 CD**

**FDDIXpress:** FDDIXpress, 6.5

**gnu:** GNU Software configured & precompiled for IRIX, 1.0

**hwguides\_oe:** Hardware Owner's Guides, 1.1

**ifl\_oe:** Image Format Library Execution Only Environment, 1.2.1

**il\_oe:** ImageVision Library Execution Only Environment, 3.2.1

**inventor\_oe:** Inventor Execution Only Environment, 2.1.4

**isdn\_oe:** ISDN Execution Environment, 2.0

**javascript\_oe:** JavaScript library execution only environment, 1.0

**pcp\_oe:** Performance Co-Pilot Execution Only Environment, 2.0

**performer\_demo:** Performer2.2.1 Demos and Demo Data

**performer\_oe:** Performer2.2.1 Execution Environment

**sgitcl\_oe:** SGI Tcl Execution Environment, 1.1

**vfc:** Video Format Compiler, 1.2

### **Contents of IRIX 6.5 Applications CD**

**InPerson:** InPerson Desktop Conferencing, 2.2.1

**PeoplePages:** PeoplePages – The Indigo Magic Phonebook, 1.2.1

**Register:** On-Line Registration, 1.4

**accessx:** Access for Movement-Impaired Users, 1.0

**acrobat:** Adobe Acrobat Reader, 3.01

**annotator:** IRIS Annotator 1.2

**appletalk:** Xinet Macintosh Connectivity 9.02

**arraysvcs:** Array Services 3.1

**cms\_eoe:** Color Management 2.0.5

**cosmocrete:** Cosmo Create Authoring Environment, 1.0.3

**cosmoplayer:** Cosmo Player VRML Viewer 1.1 for IRIX 6.5

**custlink:** CustomerLink Client Software, 2.2.3

**demos:** Demonstration Programs, 6.5

**desktop\_eoe:** IRIX Interactive Desktop, 6.5

**desktop\_tools:** Desktop Tools, 6.5

**dps\_eoe:** Display PostScript/X, 2.0.8 based on PostScript Level 2

**dynaweb:** Dynaweb (InSight to HTML), 4.1

**elec\_svcs:** Customer Support Services Base Software, Rel. 2.2

**fddivis:** FDDI Visualyzer, 6.5

**gateway:** Internet Gateway Execution Environment, 3.1

**iforark:** LicensePower/iFOR IS4.0.1 ARK

**iforcrk:** LicensePower/iFOR IS4.0.1 CRK

**imgtools:** ImageVision Tools, 3.2.1

**impr\_base:** Impressario 2.2.5 Base

**impr\_print:** Impressario 2.2.5 Print Server

**impr\_rip:** Impressario 2.2.5 PostScript Renderer (Requires Optional Impressario License)

**impr\_rip\_printers:** Impressario 2.2.5 Host RIP Printers

**impr\_scan:** Impressario 2.2.5 Scanner Software

**infosearch:** Information Searching Execution Environment, 6.5

**insight:** InSight Online Doc Viewer, 3.1

**insight\_gloss:** IRIS InSight Online Glossary, 3.0

**java\_eoe:** Java Execution Environment 3.1 (Sun JRE 1.1.5)

**license\_eoe:** License Tools 3.4.2

**macromedia:** Macromedia Movie Player, 1.4.1

**mbase\_client:** WebFORCE MediaBase 2.1 – Client

**media\_warehouse:** IRIX Interactive Desktop MediaWarehouse 1.2

**nedit:** NEdit V4.0.3i – GUI style editor

**netscape:** Netscape Communicator Client, 4.05

**netscape\_lite:** Netscape Navigator Client, 4.05

**netwr\_client:** NetWare Client 1.1

**ns\_admin:** Netscape Administration Server, 2.13

**ns\_fasttrack:** Netscape Fasttrack Personal Server, 2.01

**ocs\_client:** WebFORCE MediaBase 2.1 – OCS Client Execution Only Environment

**outbox:** OutBox Personal Web Site, 1.5

**print:** Printing Tools, Release 1.7.5

**sgips:** Adobe Photoshop Performance Package, 1.2

**sgsearch:** Fulltext Indexing & Search Environment, 2.3

**sgimeeting\_ext:** SGIMeeting Plugins, 1.1

**showcase:** IRIS Showcase 3.4.2

**sitemgr:** SiteMgr – Web Content Administration, 1.1

**sysadmdesktop:** IRIX Interactive Desktop System Administration, 6.5

**sysmon:** Desktop System Monitor, 2.1.2

**vlan:** VLAN software 1.0 for IRIX 6.5

**websetup:** Web Setup and Administration, 3.1

**webviewer:** WebViewer library execution only environment, 3.0

**xlators\_3d:** 3D File Translators 1.1.1

### **Contents of IRIX 6.5 Development Foundation CD**

**CaseVision:** CASEVision Environment, Version 2.6.5

**ProDev:** ProDev WorkShop 2.6 Tutorial

**SpeedShop:** Developer Magic: SpeedShop 1.3

**WorkShop:** Developer Magic: WorkShop 2.6.5

**WorkShopMPF:** WorkShop Pro MPF CASE products, Version 2.8

**c++\_dev:** C++ Headers and Libraries, 7.2.1

**c\_dev:** C Headers and Libraries, 7.2.1

**compiler\_dev:** Base Compiler Development Environment, 7.2.1

**ftn77\_dev:** Fortran 77 Headers and Libraries, 7.2.1

**ftn90\_dev:** Fortran 90 Headers and Libraries, 7.2.1

**ftn\_dev:** Fortran Headers and Libraries, 7.2.1

**langtools:** Source Code Utilities 1.0

**modules:** Modules package 2.2.1

### **Contents of IRIX 6.5 Development Libraries CD**

**ViewKit\_dev:** ViewKit Development Environment, Version 1.5.2

**cms\_dev:** Color Management Software 2.0.5 Development

**complib\_dev:** ChallengeComplib, 3.1.1

**complib\_eoe:** ChallengeComplib Execution Environment, 3.1.1

**dev:** Development System, 7.2.1

**dmedia\_dev**: Digital Media Development Environment, 6.5

**dvdr**: Device Driver, 5.0

**gl\_dev**: Graphics Library Development System, 6.5

**ifl\_dev**: Image Format Library Development Environment, 1.2.1

**impr\_dev**: Impresario 2.2.5 Developer's Kit

**inst\_dev**: Software Packager, 1.5

**irix\_dev**: IRIX Development Headers/Documentation/Examples, 6.5

**java\_dev**: Java Development Environment 3.1 (Sun JDK 1.1.5)

**license\_dev**: License Development Environment 3.3

**motif\_books**: OSF Motif developer books, 1.2.3

**motif\_dev**: IRIX IM Development Software, 6.5 (based on OSF/Motif 1.2.4)

**netscape\_dev**: Netscape Communicator Developer's Environment, 4.05

**webviewer\_dev**: WebViewer library development environment, 3.0

**x\_books**: O'Reilly & Associates, Inc. developer books, X11R5

**x\_dev**: X11 Development Environment, 3.8 based on X11R6.3

If you are using the Before You Install checklist, [return to Step 6](#).

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## Key New Features and Changes

The goal of the IRIX 6.5 release family is to provide a high quality and stable operating system for all SGI systems. This release family supports all SGI hardware platforms supported by IRIX 6.2, 6.3, and 6.4, except for Crimson. Significant additional software has been packaged with IRIX 6.5, including some important system and network management and interoperability tools.

The page contains a partial list of the key new features and changes for:

## IRIX 6.5.6

## IRIX 6.5

Look for information about the IRIX 6.5 release family on Supportfolio Online (<http://support.sgi.com>) and [www.sgi.com](http://www.sgi.com).

For details on any of these new features and changes, refer to the release notes.

**Please be aware that some features listed here are only applicable for certain software bundles or hardware configurations.**

## **IRIX 6.5.6 Key New Features**

The following features are in the core 6.5.6 overlays.

### **New Hardware Supported**

- R12KS CPU on sgi2200, sgi2400, and sgi2800 systems (pending overall product release)
- QLA2200 (both copper and optical) is supported for FC-AL, FC-AL via the Emulex hub or Fabric attach via the Brocade Silksworm 2000 switches (initially supported in 6.5.5)
- 270 Mhz processor for O2 and Silicon Graphics Octane (initially supported in 6.5.4)
- HDTV XIO Board for Silicon Graphics Onyx2 and SGI Origin 2000 systems (this now includes the former Cray Origin2000 system) (initially supported in 6.5.4)
- Systems using the MIPS R12000 processor (initially supported in 6.5.3)
- Digital Video Multiplexer option board (DPLEX) for Silicon Graphics Onyx (initially supported in 6.5.3)
- Redundant Power Supply (RPS) (initially supported in 6.5.3)
- 21" Monitor Support for O2 and Octane (initially supported in 6.5.3)
- Flat Panel Monitor for O2 systems (initially supported in 6.5.2)
- 16 pipe InfiniteReality2E systems (initially supported in 6.5.2)
- GSN network adapter (initially supported in 6.5.2)
- Gigabit Ethernet for Octane and SGI Origin systems (initially supported in 6.5.1)
- 128p Metarouter for Origin 2000 systems (formerly known as Cray Origin2000 systems) (initially supported in 6.5.1)
- Dual Channel Display option for O2 systems (initially supported in 6.5.1)
- XR hardware for InfiniteReality2E (initially supported in 6.5.1)
- 225QC for SGI Origin 200 (initially supported in 6.5.1)

### **Software**

Feature Stream Only:

- Support for the Scheduled Transfers (ST) protocol. The ST protocol is an ANSI Standard level two through four protocol suite designed to support extremely high performance data movement. ST provides a socket-based interface to applications, which lets you directly port the existing networking applications to ST. ST also supports the OS Bypass mode of operation, which allows smaller messages to be sent and received with extremely low latencies. In this initial release of ST, only the Gigabyte System Network (GSN) network adapter is supported.
- Support for the CXFS 1.1 Early Access release, which provides a cluster file system that allows file sharing between machines. CXFS includes the following features:
  - High resiliency and availability
  - Reduced storage costs
  - Scalable high performance

Each CXFS host has a direct Fibre Channel path to the shared disks, which provides near-local file performance, even though the data on the disks is shared among multiple IRIX hosts. CXFS removes the server and network bottlenecks for the shared data paths.

**Note:** The CXFS 1.1 Early Access release is available for a limited number of licenses; if you are interested in obtaining a license, contact your SGI service provider. A dedicated Early Access web link will provide the following:

- The latest CXFS and XVM images that include the latest fixes
- Updated documentation in postscript format
- Motif 2.1/ViewKit 2.1 (initially added in 6.5.2)
- IRIX Oplock Support (initially added in 6.5.2)
- Support for Non EUC encoding and locales (sjis/big5/gbk/utf8) (initially added in 6.5.2)

#### Maintenance and Feature Stream:

- Support for a multi-threaded version of the automatic filesystem mount daemon *autofs*. This enhanced functionality allows for simultaneous multiple automounts. If a particular server for an automounted filesystem is not running or is slow to respond, one *autofs* thread can wait for that server while other *autofs* threads mount filesystems from other servers. This capability improves the automount performance and simultaneously provides longer wait times for downed servers, which should lead to a decrease in automount failures.
- 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) that can occur on their system. 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 (*espmnd*), and a database daemon (*espsdbd*). 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's Guide*, and the Embedded Support Partner man pages. This feature was initially added in 6.5.5.

- 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 the *IRIX Admin: Disks and Filesystems* and the `mkfs_xfs(1M)` man page. This feature was initially added in 6.5.5.
- SCSL is widely used in scientific and technical compute intensive applications and is intended to be a follow on product to Challengecomplib on all supported IRIX platforms at the next major IRIX release. Features such as convolution/correlation and filter routines to the Signal Processing functionality previously only available in Challengecomplib are now incorporated into the SCSL version 1.2 release. Additional IRIX features added to SCSL for this release are improved ordering techniques for the sparse linear solvers, performance enhancements for the MIPS R12000 processor, rollup bug fixes from SCSL 1.1, and all other Challengecomplib 3.1 functionality. SCSL can be downloaded free of charge from the Download Cool Software page at <http://www.sgi.com/Products/Evaluation/>. For customers who do not have web access and are enrolled under a valid support contract, CD media can be requested free of charge from their local support center. Non-contract customers can order SCSL from their local sales representative. For more information on SCSL, see <http://www.sgi.com/software/scsl.html>. This feature was initially added in 6.5.5.
- 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*. This feature was initially added in 6.5.5.
- 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. This feature was initially added in 6.5.5.
- Support for SAN addressing (initially added in 6.5.5)
- 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 the *IRIX Admin: System Configuration and Operation*, Chapter 7 "Managing User Processes." (initially added in 6.5.4)
- Distributed Computing Environment (DCE) Client for accessing shared resources in distributed computing DCE/DFS serving environments (initially added in 6.5.4)
  - Kernel libraries only
  - Requires installation of DCE/DFS 1.2.2a software for full functionality
- (Octane systems only) The worst-case interrupt response time is guaranteed to be less than one millisecond on properly configured Octane systems (initially added in 6.5.3)
- Support for the X security and appgroup extensions (combined with a new Netscape plugin, these allow the embedding of X applications in Web pages) (initially added in 6.5.3)

- Extra support for European fonts, including the new Euro currency symbol (initially added in 6.5.3)
- New Software Manager and Inst commands to simplify selections for upgrades (initially added in 6.5.3)
- 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 (initially added in 6.5.4)
- LDAP 3.0 now supported (initially added in 6.5.3)
- AutoFS extended to use UNS for map information (initially added in 6.5.2)
- Support for DCShare application sharing extension (initially added in 6.5.2)
- Fibre channel support to Dmnet (initially added in 6.5.2)
- Three new HP printer drivers (initially added in 6.5.2)

#### Applications CD:

- Upgrade to Netscape Communicator 4.7; for details, see <http://home.netscape.com/communicator/v4.5/tour/index.html>
- CosmoPlayer 2.1.1 release (initially added in 6.5.5)
- Netscape FastTrack Server 3.03 contains an updated version of the Administration Server 3.52 (initially added in 6.5.5)
- SGImeeting Collaboration Environment, 1.3, Net-based data-conferencing, application-sharing software (SGImeeting Collaboration Environment, 1.0 was added in 6.5.2)
- SGImeeting Extensions, 1.3, offer 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.

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 (initially added in 6.5.5)

For more information about the bundled software that is included with this release, see [CD Contents](#) and the Bundled Software and Licenses web page that you can access from the Welcome web page.

## IRIX 6.5 Key New Features

IRIX 6.5 feature categories:

### Binary Compatibility

## Origin Scalability

Desktop

PC & Macintosh

Digital Media

Interoperability

Documentation Content and Delivery

PCI

Graphics

Personal System Management

I/O

Scheduling

Networking

Security

New Hardware Support

Software Distribution

Origin Database

Standards

Origin Enterprise System

Workgroup System Management

Management

X11/Motif

Origin Reliability, Availability,  
Serviceability (RAS)

## **Binary Compatibility**

Includes both a 32-bit and a 64-bit runtime environment. Systems that use the 64-bit runtime environment support both 32-bit and 64-bit applications; systems that use the 32-bit runtime environment, such as the O2, will only support 32-bit applications.

Systems that support a 32-bit runtime environment with 64-bit extensions\*:

- Indigo R4000
- Indigo2
- Indy
- Challenge S/M R4000
- Indy/Challenge
- O2
- O2 R10000

*\*64-bit extensions include support for XFS filesystem and 64-bit long integers, excluding 64-bit address spaces.*

Systems that support a 64-bit runtime environment:

- Challenge R4000
- Onyx R4000
- Power Indigo2
- Power Challenge
- Power Onyx
- Indigo2 Extreme 10000
- Indigo2 Impact 10000
- Origin 200
- Origin 2000
- Onyx2
- Octane

## **Desktop**

## Products:

- Site Manager 1.1, for web content validation and version control, workflow support, 3D visualization, and server traffic statistics
- Adobe Acrobat 3.0, for viewing PDF documents
- Nedit, new default text editor; jot is also available
- Accessibility Panel, new graphical interface for AccessX software, allowing movement-impaired users to use the keyboard and mouse more efficiently
- WebViewer 3.0 now supports CSS1 Style sheets, Netscape plug-ins, JavaScript, history mechanism, animated GIFs (WebViewer is embedded in System Manager, File Manager, Software Manager, InfoSearch, EZ-setup, Site Manager, Out of Box Experience, and SGIHelp)
- Netscape Communicator 4.05 provides support for Navigator (browser), Messenger (e-mail), Composer (content creation), and Collabra (news reader); MediaMail no longer supported—see [preinstallation caveat](#)
- Netscape Communicator Lite 4.05 provides support for Navigator (browser) only

## General Changes:

- Desktop now called IRIX Interactive Desktop (previously Indigo Magic)
- For security, ability to display applications that are running on other systems is now off by default (see the online *Desktop User's Guide*, "About the Remote Display Feature," for details)
- Performance improvements in application startup
- Impressario now supports PostScript Printer Description (PPD); HP and Lexmark PPD drivers are included with software

## Digital Media

- Media Player now supports movies played to video output
- Movielib file now supports Quicktime MJPEG-A files
- Movielib, Media Player, and Movie Maker now support DV DIF files
- Sony DAT Qualification (LibDatAudio)
- Support new Audio Subcode I/O
- Hardware generated audio events, sample rate changes
- O2 and Octane Digital Media Buffers (dmbuffers) now support the same interface—the Octane 6.4 interface (for compatibility, the O2 IRIX 6.3 interface will continue to be supported)
- For compatibility, VL Buffers continues to be supported for IRIX 6.2 and earlier applications (dmbuffers are recommended for new application development)

## Documentation Content and Delivery

- InfoSearch, new and improved online viewer and search engine for books, man pages, and Release Notes
- New on the Toolchest: Help > Quick Answers; Help > Hints and Shortcuts
- See [Resources](#) section for comprehensive overview of useful information and support

## Graphics

- Support for OpenGL 1.1 on all systems
- Imaging performance increased for O2
  - Increased performance for luminance (8 and 16-bit) and RGB images
  - Increased performance for general and separable convolves
  - Increased throughput through the imaging engine

## I/O

- Guaranteed Rate I/O (GRIO) support
- Project quotas
- User space serial I/O
- Fibre channel Arbitrated Loop Topology (AL)

## Networking

- Simple Network Management Protocol (SNMP) version 2
- (Origin systems only) HP-UX MIB/SNMP provides network manageability in enterprise environments
- Unified Name Service now supports yp services
- NFS for data-serving
- (Origin systems only) Distributed Computing Environment (DCE) Client for accessing shared resources in distributed computing DCE/DFS serving environments

## Origin Database

- Database Accelerator (DBA)

## Origin Enterprise System Management

- Computer Associates Unicenter® TNG(TM) Framework(TM)

## Origin Reliability, Availability, Serviceability (RAS)

- SBE reporting mechanism
- Automatic disabling of failing components while booting
- Extended memory error handling

## Origin Scalability Features

- Single system environment consisting of up to 128 processors
  - Single system image
  - Support for balanced batch and timeshare workloads
  - Single administrative entity
- Partitioned system environment consisting of up to 128 processors
  - Partitioned system image with firewalls between each origin partition
  - Application availability with Failsafe (option)

- Administration through IRIS Console

## **PC & Macintosh Interoperability**

- (O2 systems only) SoftWindows 95 for Windows 3.1 and Windows 95 terminal emulation on IRIX
- Xinet Appletalk for Macintosh file and print sharing
- Novell Netware
- (Origin systems only) Syntax TAS provides instant interoperability with Windows 95 (Server Message Block), Macintosh, and Novell clients
- SAMBA (on Freeware CD) provides interoperability with Server Message Block (SMB) clients

## **PCI**

- Support for multifunction cards
- User-level PCI drivers can now be developed for Octane

## **Personal System Management**

Products:

- New and improved personal system administration interactive guides and tools (accessible from the System Manager)
- Process Manager, graphical tool to manage processes
- Hosts Guide, graphical tool to setup your network

General Changes:

- Startup login screen is user configurable (for example, user icons can be replaced with any image)
- Support for personal filetypes—allows users to create custom icons for their desktops
- Keyword search now supported in System Manager
- Backup and Restore graphical tool now uses *cpio*

## **Scheduling**

- (Origin systems, Onyx2 systems only) The worst-case interrupt response time is guaranteed to be less than one millisecond on properly configured Origin and Onyx2 systems with up to eight CPUs
- Miser predictive batch scheduler
- Share II resource manager (option)

## **Security**

- Most features of the Commercial Security Pack are now bundled into IRIX 6.5
- Least Privilege (POSIX P1003.1e), which allows allocation of system privileges individually

- (rather than setuid)
- Access Control List
- Single Sign-on via Distributed Computing Environment (DCE)

### Software Distribution Features

- Inst now supports ISO 9660 CDs

### Standards

Standards compliance under IRIX 6.4 will be extended, with the addition of:

- Year 2000 compliance as defined by the X/Open group
- UNIX 95 Certified Single UNIX Specification – Spec 1170/UNIX 95
- DII-COE Kernel Version 3.2 available for development projects
- Full pthreads support, including system scope

### Workgroup System Management

- (Origin systems only) EnlightenDSM Workgroup Server provides Distributed System Management for small enterprises and workgroups.
- (O2, Octane, Onyx2 systems only) EnlightenDSM Workgroup Client provides Distributed System Management for small enterprises and workgroups

### X11/Motif

- Improved performance for X11 and Motif
- Thread-safe Xlib and Xt
- Support for X11R6.3 server and libraries (previously X11R6.1), including support for Low-Bandwidth X
- Continue to support Motif 1.2.4
- Improvements to the hardware colormap implementation minimizes colormap flashing for Impact and Octane graphics systems

If you are using the Before You Install checklist, return to [Step 7](#).

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# Using the Base Documentation CD

## About This CD

For customers with new systems that shipped with this release, new and updated documentation can be viewed offline using the IRIX 6.5 Base Documentation CD, November 99.

The IRIX 6.5 Base Documentation CD allows you to access standard release notes, online books, and man pages before you install the system software. You view the documentation directly from the CD; you do not use this CD to install documentation. No license is required to use the tools provided on the CD. (Documentation is installed, by default, with software CDs. To find out about accessing *installed* documentation see [General Documentation](#).)

The IRIX 6.5 Base Documentation CD is not shipped with the IRIX 6.5.x Update Kits. Corresponding book documentation, release note, and man page information can be viewed by customers who have purchased SGI systems through the web on the *Supportfolio Online* site (<http://support.sgi.com/surfzone/search>).

**Note:** There is a duplicate copy of Start Here on the Base Documentation CD.

**Tip:** This CD is an ISO9660 standard CD, which means that it can be used in most CD-ROM drives. This allows your IRIX-based system to mount the CD from a variety of remote CD-ROM drives (as long as they are connected to operating systems that support exporting ISO9660 filesystems).

### How to Use This CD

1. Login and insert the Base Documentation CD into your CD-ROM drive.

2. Open a shell:

From the Toolchest, choose Desktop > Open Unix Shell.

3. Go to the CDROM directory:

Use the *cd* command:

```
% cd /CDROM
```

Inside of the directory are the six different CD scripts, which you can see listed with the *ls* command:

```
% ls
```

```
CDgrelnotes  CDinsight  CDrelnotes
CDinfosearch CDman      CDsgihelp
```

4. Use the CD scripts to access the documentation on the CD. To run any of the scripts, in a UNIX shell, enter *./* followed by the script name.

For example:

```
% ./CDgrelnotes
```

What follows are descriptions of what each of the scripts do:

- `./CDgrelnotes` – launches *[g]relnotes*, which you can use to view Release Notes. You can specify the product name in the command. For example, to view the release notes for Netscape you would enter: `./CDgrelnotes netscape`
- `./CDman` – displays man pages when used like the *man* command. For example, to see the man page on *inst*, enter `./CDman inst`
- `./CDinsight` – launches the online book viewer, *InSight*. Displays the online book library on the CD. **Note:** If you are running IRIX 6.2 on your workstation, you must have version 3.0 of InSight or higher in order for this to work.
- `./CDsgihelp` – displays *instructions* for making *sgihelp* work with the content on the CD. (Involves setting a couple of X-resources in a local *.Xdefaults* file.)
- `./CDinfosearch` – displays *instructions* for making InfoSearch work with the content on the CD. (Involves editing some configuration files.) InfoSearch is used for searching and viewing all online books, release notes, and man pages. **You must already be running 6.5 for *CDinfosearch* to work with the content of this CD.**

If you are using the Before You Install checklist, return to Step 5.

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## 6.5 Software/CD Index

This page provides an alphabetical list of the IRIX 6.5 software shipped by SGI at the time of the base 6.5 operating system release. You can use this page to look up the CD location, size, or full name of individual products.

**Note:** Subject to change; some software may not be listed here. Also, **this index is for the 6.5 base operating system only**. It does not include any 6.5.x product information. 6.5.6 listings are on the CD Contents page.

### LISTING KEY

**Software Name:** Full Product Name, **CD Name** Approximate Product Size (Kbytes)

**Note:** The CD names that appear in all capital letters are the core IRIX 6.5 CDs; asterisks (\*) indicate other types of CDs for 6.5. Different configurations receive different CD packages, and some software is sold separately.

#### **Software on IRIX 6.5 CDs**

**4Dwm:** Desktop Window Manager, 6.5 FOUNDATION 1 481 Kbytes

**accessx:** Access for Movement–Impaired Users, 1.0 6.5 APPLICATIONS 270 Kbytes

**acrobat:** Adobe Acrobat Reader, 3.01 6.5 APPLICATIONS 7136 Kbytes

**annotator:** IRIS Annotator 1.2 6.5 APPLICATIONS 22928 Kbytes

**appletalk:** Xinet Macintosh Connectivity 9.02 6.5 APPLICATIONS 8526 Kbytes

**arraysvcs:** Array Services 3.1 6.5 APPLICATIONS 1048 Kbytes

**aso:** Audio/Serial Option Card Serial Support 1.3 for Audio Serial Option\* 537 Kbytes

**aso\_audio:** Audio/Serial Option Card Audio Support 1.3 for Audio Serial Option\* 451 Kbytes

**c++\_dev:** C++ Headers and Libraries, 7.2.1 DEVELOPMENT FOUNDATION 11054 Kbytes

**c++\_eoe:** Std. Exec. Environ. (C++ Headers & Libraries, 7.2.1) FOUNDATION 1 973 Kbytes

**CaseVision:** CASEVision Environment, Version 2.6.5 DEVELOPMENT FOUNDATION 2024 Kbytes

**cms\_dev:** Color Management Software 2.0.5 Development DEVELOPMENT LIBRARIES 445 Kbytes

**cms\_eoe:** Color Management 2.0.5 6.5 APPLICATIONS 3101 Kbytes

**compiler\_dev:** Base Compiler Development Environment, 7.2.1 DEVELOPMENT FOUNDATION 39102 Kbytes

**compiler\_eoe:** IRIX Standard Execution Environment (Base Compiler Headers and Libraries, 7.2.1) FOUNDATION 1 20954 Kbytes

**complib\_dev:** ChallengeComplib, 3.1.1 DEVELOPMENT LIBRARIES 76182 Kbytes

**complib\_eoe:** ChallengeComplib Execution Environment, 3.1.1 DEVELOPMENT LIBRARIES 78814 Kbytes

**cosmocrete:** Cosmo Create Authoring Environment, 1.0.3 6.5 APPLICATIONS 9623 Kbytes

**cosmoplayer:** Cosmo Player VRML Viewer 2.1 for IRIX 6.3, 6.5 APPLICATIONS 4213 Kbytes

**custlink:** CustomerLink Client Software, 2.2.3 6.5 APPLICATIONS 4848 Kbytes

**c\_dev:** C Headers and Libraries, 7.2.1 DEVELOPMENT FOUNDATION 2261 Kbytes

**demos:** Demonstration Programs, 6.5 APPLICATIONS 235436 Kbytes

**demos\_O2:** O2 Demonstration Programs, 1.2 O2 Demos\* 414384 Kbytes

**demos\_octane:** Octane Demonstration Programs, 1.2 Octane Demos\* 479967 Kbytes

**desktop\_base:** IRIX Interactive Desktop Base Software, 6.5 FOUNDATION 1 3956 Kbytes

**desktop\_eoe:** IRIX Interactive Desktop, 6.5 APPLICATIONS 5853 Kbytes

**desktop\_tools:** Desktop Tools, 6.5 APPLICATIONS 1102 Kbytes

**dev:** Development System, 7.2.1 DEVELOPMENT LIBRARIES 22735 Kbytes

**divo:** DIVO Video Execution Environment, 1.1 for IRIX 6.5 DIVO Video Execution Environment\* 6628 Kbytes

**dmedia\_dev:** Digital Media Development Environment, 6.5 DEVELOPMENT LIBRARIES 26575 Kbytes

**dmedia\_eoe:** Digital Media Execution Environment, 6.5 FOUNDATION 1 89064 Kbytes

**dps\_eoe:** Display PostScript/X, 2.0.8 based on PostScript Level 2 6.5 APPLICATIONS 2571 Kbytes

**dvdr:** Device Driver, 4.1 DEVELOPMENT LIBRARIES 3601 Kbytes

**dynaweb:** Dynaweb (InSight to HTML), 3.1a 6.5 APPLICATIONS 2231 Kbytes

**elec\_svcs:** Customer Support Services Base Software, Rel. 2.2 6.5 APPLICATIONS 332 Kbytes

**eoe:** IRIX Execution Environment, 6.5 FOUNDATION 1 284757 Kbytes

**evo:** Octane Personal Video Execution Environment, 6.5 Octane Personal Video Execution Environment\* 19080 Kbytes

**fddivis:** FDDIVisualyzer, 6.5 APPLICATIONS 393 Kbytes

**FDDIXPress:** FDDIXPress, 6.5 FOUNDATION 2 1344 Kbytes

**ftn77\_dev:** Fortran 77 Headers and Libraries, 7.2.1 DEVELOPMENT FOUNDATION 4319 Kbytes

**ftn90\_dev:** Fortran 90 Headers and Libraries, 7.2.1 DEVELOPMENT FOUNDATION 6855 Kbytes

**ftn\_dev:** Fortran Headers and Libraries, 7.2.1 DEVELOPMENT FOUNDATION 46975 Kbytes

**ftn\_eoe:** Standard Execution Environment (Fortran Headers and Libraries, 7.2.1) FOUNDATION 1 55136 Kbytes

**galileo:** Galileo Video Execution Environment, 6.5 Galileo Video Execution Environment\* 3143 Kbytes

**gateway:** Internet Gateway Execution Environment, 3.1 6.5 APPLICATIONS 1339 Kbytes

**gl\_dev:** Graphics Library Development System, 6.5 DEVELOPMENT LIBRARIES 37562 Kbytes

**gnu:** GNU Software configured & precompiled for IRIX, 1.0 FOUNDATION 2 46140 Kbytes

**hwguides\_eoe:** Hardware Owner's Guides, 1.1 FOUNDATION 2 45891 Kbytes

**ifl\_dev:** Image Format Library Development Environment, 1.2.1 DEVELOPMENT LIBRARIES 8840 Kbytes

**ifl\_eoe:** Image Format Library Execution Only Environment, 1.2.1 FOUNDATION 2 8111 Kbytes

**iforark:** LicensePower/iFOR IS4.0.1 ARK 6.5 APPLICATIONS 4051 Kbytes

**iforcrk:** LicensePower/iFOR IS4.0.1 CRK 6.5 APPLICATIONS 579 Kbytes

**il\_eoe:** ImageVision Library Execution Only Environment, 3.2.1 FOUNDATION 2 19546 Kbytes

**imgtools:** ImageVision Tools, 3.2.1 6.5 APPLICATIONS 2495 Kbytes

**impactcomp:** Impact Compression Execution Environment 6.5 Impact Compression Execution Environment\* 2518 Kbytes

**impactvideo:** Impact Video Execution Environment, 6.5 Impact Video Execution Environment\* 3487 Kbytes

**impr\_base:** Impressario 2.2.5 Base 6.5 APPLICATIONS 3052 Kbytes

**impr\_dev:** Impressario 2.2.5 Developer's Kit DEVELOPMENT LIBRARIES 9921 Kbytes

**impr\_print:** Impressario 2.2.5 Print Server 6.5 APPLICATIONS 5498 Kbytes

**impr\_rip:** Impressario 2.2.5 PostScript Renderer (Requires Optional Impressario License) 6.5 APPLICATIONS 2360 Kbytes

**impr\_rip\_printers:** Impressario 2.2.5 Host RIP Printers 6.5 APPLICATIONS 7098 Kbyte

**impr\_scan:** Impressario 2.2.5 Scanner Software 6.5 APPLICATIONS 326 Kbytes

**infosearch:** Information Searching Execution Environment, 6.5 APPLICATIONS 36832 Kbytes

**InPerson:** InPerson Desktop Conferencing, 2.2.1 6.5 APPLICATIONS 4505 Kbytes

**insight:** InSight Online Doc Viewer, 3.1 6.5 APPLICATIONS 7165 Kbytes

**insight\_base:** InSight Online Doc Viewer Base Software, 3.1 FOUNDATION 1 9836 Kbytes

**insight\_gloss:** IRIS InSight Online Glossary, 3.0 6.5 APPLICATIONS 372 Kbytes

**inst\_dev:** Software Packager, 1.5 DEVELOPMENT LIBRARIES 1570 Kbytes

**inventor\_dev:** Inventor 3D Development Toolkit, 2.1.4 Inventor\* 41770 Kbytes

**inventor\_eoe:** Inventor Execution Only Environment, 2.1.4 FOUNDATION 2 19734 Kbytes

**inventor\_games:** Inventor Games, Release 1.3 Inventor\* 13446 Kbytes

**io4prom:** IO4prom for 64bit OS systems, 6.5 FOUNDATION 1 3089 Kbytes

**ip32prom:** Flash PROM for IP32 systems, 6.5 FOUNDATION 1 266 Kbytes

**irix\_dev:** IRIX Development Examples, 6.5 DEVELOPMENT LIBRARIES 1314 Kbytes

**isdn\_eoe:** ISDN Execution Environment, 2.0 FOUNDATION 2 1603 Kbytes

**javascript\_eoe:** JavaScript library execution only environment, 1.0 FOUNDATION 2 550 Kbytes

**ava\_dev:** Java Development Environment 3.1 (Sun JDK 1.1.5) DEVELOPMENT LIBRARIES 20066 Kbytes

**java\_eoe:** Java Execution Environment 3.1 (Sun JRE 1.1.5) 6.5 APPLICATIONS 10078 Kbytes

**langtools:** Source Code Utilities 1.0 DEVELOPMENT FOUNDATION 507 Kbytes

**license\_dev:** License Development Environment 3.3 DEVELOPMENT LIBRARIES 1802 Kbytes

**license\_eoe:** License Tools 3.3 6.5 APPLICATIONS 1402 Kbytes

**macromedia:** Macromedia Movie Player, 1.4.1 6.5 APPLICATIONS 1776 Kbytes

**mbase\_client:** SGI MediaBase 2.1 – Client 6.5 APPLICATIONS 6516 Kbytes

**media\_warehouse:** IRIX Interactive Desktop MediaWarehouse 1.2 6.5 APPLICATIONS 550 Kbytes

**modules:** Modules package 2.2.1 DEVELOPMENT FOUNDATION 253 Kbytes

**motif\_books:** OSF Motif developer books, 1.2.3 DEVELOPMENT LIBRARIES 14068 Kbytes

**motif\_dev:** IRIX IM Development Software, 6.5 (based on OSF/Motif 1.2.4) DEVELOPMENT LIBRARIES 28608 Kbytes

**motif\_eoe:** IRIX IM Execution Only Environment, 6.5 (based on OSF/Motif 1.2.4) FOUNDATION 1 8098 Kbytes

**nedit:** NEdit V4.0.3i – GUI style editor 6.5 APPLICATIONS 687 Kbytes

**netscape:** Netscape Communicator Client, 4.51 6.5 APPLICATIONS 19318 Kbytes

**netscape\_dev:** Netscape Communicator Developer's Environment, 4.05 DEVELOPMENT LIBRARIES 17 Kbytes

**netscape\_lite:** Netscape Navigator Client, 4.05 6.5 APPLICATIONS 15702 Kbytes

**netwr\_client:** NetWare Client 1.1 6.5 APPLICATIONS 1564 Kbytes

**nfs:** Network File System, 6.5 ONC3/NFS version 3\* 11604 Kbytes

**ns\_admin:** Netscape Administration Server, 2.13 6.5 APPLICATIONS 2351 Kbytes

**ns\_fasttrack:** Netscape Fasttrack Personal Server, 2.01 6.5 APPLICATIONS 14112 Kbytes

**ocs\_client:** SGI MediaBase 2.1 – OCS Client Execution Only Environment 6.5 APPLICATIONS 2439 Kbytes

**outbox:** OutBox Personal Web Site, 1.5 6.5 APPLICATIONS 456 Kbytes

**OutOfBox:** O2 OutOfBox Experience, version 2.2 O2 Out Of Box Experience\* 4515 Kbytes

**patchSG0003131:** Patch SG0003131: 7.2.1 base compiler runtime environment for IRIX 6.2/6.3/6.4/6.5 INSTALLATION TOOLS 16761 Kbytes

**patchSG0003139:** Patch SG0003139: libmp rollup INSTALLATION TOOLS 2023 Kbytes

**patchSG0003140:** Patch SG0003140: 7.2.1 FORTRAN runtime for IRIX 6.2/6.3/6.4/6.5 – REQUIRED FOR F90 INSTALLATION TOOLS 146809 Kbytes

**pcnfsd:** PC–NFS 2.0.2 Server Components ONC3/NFS version 3\* 53 Kbytes

**pcp\_eoe:** Performance Co–Pilot Execution Only Environment, 2.0 FOUNDATION 2 3428 Kbytes

**PeoplePages:** PeoplePages – The Indigo Magic Phonebook, 1.2.1 6.5 APPLICATIONS 620 Kbytes

**performer\_demo:** Performer2.2.1 Demos and Demo Data FOUNDATION 2 9109 Kbytes

**performer\_eoe:** Performer2.2.1 Execution Environment FOUNDATION 2 77908 Kbytes

**print:** Printing Tools, Release 1.7.5 6.5 APPLICATIONS 2073 Kbytes

**ProDev:** ProDev WorkShop 2.6 Tutorial DEVELOPMENT FOUNDATION 33729 Kbytes

**react:** REACT/pro IRIX Realtime Extensions, Release 3.2 React\* 1546 Kbytes

**Register:** On-Line Registration, 1.4 6.5 APPLICATIONS 3060 Kbytes

**roboinst:** RoboInst Tools for Automatic Installations 1.0 INSTALLATION TOOLS 586 Kbytes

**sgips:** Adobe Photoshop Performance Package, 1.2 6.5 APPLICATIONS 206 Kbytes

**sgitcl\_eoe:** SGI Tcl Execution Environment, 1.1 FOUNDATION 2 6219 Kbytes

**sgsearch:** Fulltext Indexing & Search Environment, 2.0 6.5 APPLICATIONS 300 Kbytes

**showcase:** IRIS Showcase 3.4.2 6.5 APPLICATIONS 29221 Kbytes

**sirius:** Sirius Video Execution Environment, 6.5 Sirius Video Execution Environment\* 2395 Kbytes

**sitemgr:** SiteMgr – Web Content Administration, 1.1 6.5 APPLICATIONS 1931 Kbytes

**SpeedShop:** Developer Magic: SpeedShop 1.3 DEVELOPMENT FOUNDATION 5304 Kbytes

**sysadmdesktop:** IRIX Interactive Desktop System Administration, 6.5 APPLICATIONS 7974 Kbytes

**sysmon:** Desktop System Monitor, 2.1.2 6.5 APPLICATIONS 525 Kbytes

**tooltalk\_dev:** ToolTalk 1.3 Development Environment Tooltalk\* 4626 Kbytes

**tooltalk\_eoe:** ToolTalk 1.3 Execution Only Environment FOUNDATION 1 3093 Kbytes

**trix\_eoe:** Trusted IRIX Execution Environment, 6.5 Trusted IRIX\* 2704 Kbytes

**vf:** Video Format Compiler, 1.2 FOUNDATION 2 907 Kbytes

**ViewKit\_dev:** ViewKit Development Environment, Version 1.5.2 DEVELOPMENT LIBRARIES 14055 Kbytes

**ViewKit\_eoe:** ViewKit Execution Environment, Version 1.5.2 FOUNDATION 1 2899 Kbytes

**vlan:** VLAN software 1.0 for IRIX 6.5 APPLICATIONS 66 Kbytes

**websetup:** Web Setup and Administration, 3.1 6.5 APPLICATIONS 752 Kbytes

**websupport\_eoe:** WebSupport 1.3 eoe FOUNDATION 1 2776 Kbytes

**webviewer:** WebViewer library execution only environment, 3.0 6.5 APPLICATIONS 4722 Kbytes

**webviewer\_dev:** WebViewer library development environment, 3.0 DEVELOPMENT LIBRARIES 11951 Kbytes

**Welcome:** Customer Welcome, Jun. 98 INSTALLATION TOOLS

**windview:** WindView system visualization for IRIX, 1.2 React\* 3636 Kbytes

**WorkShop:** Developer Magic: WorkShop 2.6.5 DEVELOPMENT FOUNDATION 62098 Kbytes

**WorkShopMPF:** WorkShop Pro MPF CASE products, Version 2.8 DEVELOPMENT FOUNDATION 9349 Kbytes

**xlators\_3d:** 3D File Translators 1.1.1 6.5 APPLICATIONS 5191 Kbytes

**x\_books:** O'Reilly & Associates, Inc. developer books, X11R5 DEVELOPMENT LIBRARIES 6563 Kbytes

**x\_dev:** X11 Development Environment, 3.8 based on X11R6.3 DEVELOPMENT LIBRARIES 8369 Kbytes

**x\_eoe:** X11 Execution Environment, 3.8 based on X11R6.3 FOUNDATION 1 50344 Kbytes

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