

# ArcIMS® 4 Installation Guide

Sun™ Solaris™



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## **Introduction**

ESRI® ArcIMS® is Internet Map Server (IMS) software for authoring, designing, publishing, and administering Internet mapping applications. ArcIMS allows Web clients, map servers, data servers, and the Web server to communicate with one another.

Use this guide to get ArcIMS up and running. If you are new to ArcIMS, start with the typical installation for your platform. Once you are familiar with ArcIMS, use this guide to help you figure out your site configuration and install ArcIMS on a distributed system.

This book assumes you have a Web server and servlet engine installed and operational and know how to administer the Web server, stop and start services/daemons, and create virtual directories. It also assumes knowledge of the Internet and related terminology.

## Overview

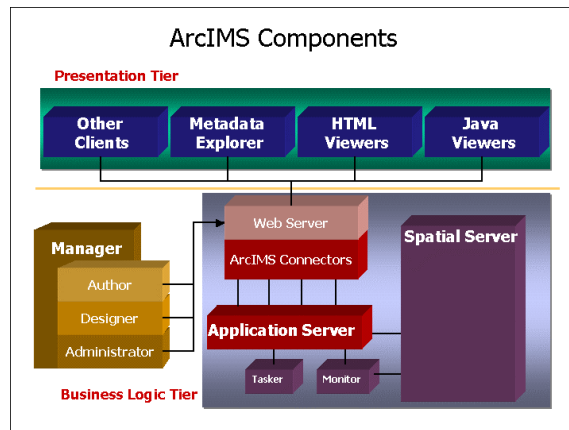
### What's included with ArcIMS 4.0?

- The installation CD with ArcIMS software. See *Using ArcIMS* for details on working with ArcIMS. To find out about ArcIMS customization, see *Customizing ArcIMS*, a five-book series you can install with the software. The *ArcXML Programmer's Reference Guide*, a programming guide for customizing map configuration files, is also included with the software. For a printable version of *Installing ArcIMS*, see ArcIMS Online at <http://arcimsonline.esri.com> for a PDF file for your platform.
- ArcExplorer™—Java™ Edition is included with ArcIMS and is documented in *Using ArcExplorer—Java Edition*.
- ArcSDE™ for Coverages is included with ArcIMS and comes with two digital documents: *Installing ArcSDE for Coverages* and *ArcSDE for Coverages Administration Guide*. *ArcSDE for Coverages* can be used without any special licenses or keycodes. Refer to the *ArcSDE for Coverages* CD for information. *Installing ArcSDE for Coverages* is optional.

### ArcIMS components

ArcIMS is made up of:

- ArcIMS Manager/Manager Applications
- ArcIMS Application Server
- ArcIMS Application Server Connectors
- ArcIMS Spatial Servers
- ArcIMS Service Administrator
- ArcIMS Viewers



Each component is described in the following paragraphs.

See the discussion of architecture in *Using ArcIMS* for more detailed information on ArcIMS components.

### ArcIMS Manager

The ArcIMS Manager provides the Web-based interface and supports the three main tasks you perform in ArcIMS—Author ArcIMS Services, Design Web pages, and Administer sites. As a Web interface, ArcIMS Manager also allows remote site management.

ArcIMS Manager resides on the Web server computer and can be accessed remotely via the Internet using the Microsoft® Internet Explorer Web browser. Remote access to ArcIMS Manager requires a onetime Remote Manager download to the remote computer. See *Installing ArcIMS Remote Manager* for instructions regarding Remote Manager.



## Installing ArcIMS 4.0 on Sun Solaris

ArcIMS Manager is supported only on Windows® using Internet Explorer. It is not supported on HP®-UX®, IBM® AIX®, Linux® Red Hat®, or Sun™ Solaris™, and it is not supported on Windows using Netscape Communicator™. This is because Netscape Communicator does not currently support scripting of applets—a feature that is critical for ArcIMS Manager.

## ArcIMS Manager Applications

The ArcIMS Manager Applications—Author, Designer, and Administrator—are also provided as independent applications that run outside a Web browser. They can be installed on any computer.

## ArcIMS Service Administrator

The ArcIMS Service Administrator is a remote site administration tool and can be used as an alternative to or in conjunction with ArcIMS Administrator. The ArcIMS Service Administrator can also be used to administer ArcSDE. To administer ArcSDE on Windows, a custom installation of the optional ArcSDE Administrator component on the ArcSDE Server is required; on UNIX, a custom installation of ArcIMS Spatial Server is required on the ArcSDE Server. The ArcIMS Service Administrator uses the JavaServer™ Pages (JSP) tag libraries and the Java API (application program interface) of the ArcIMS Java Connector.

The ArcIMS Service Administrator is installed with a typical installation and a custom Spatial Server installation on Windows and with a typical installation and ArcIMS Manager Applications installation on UNIX.

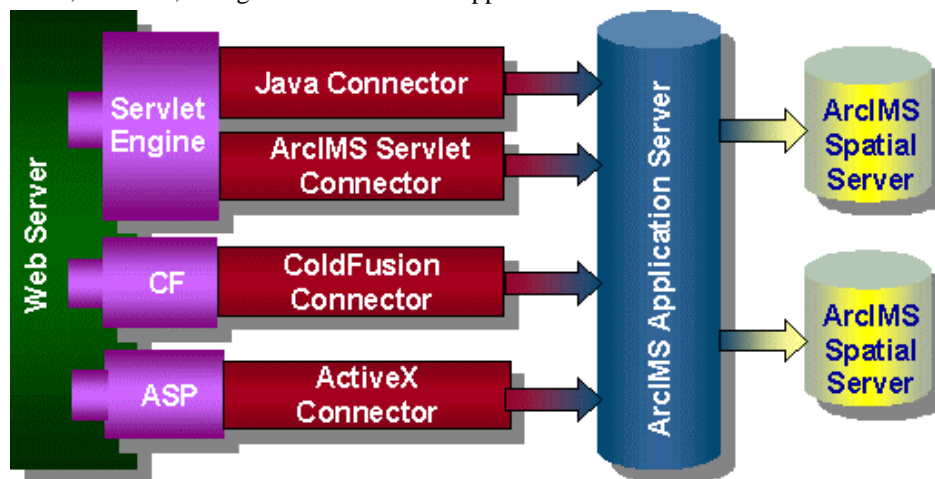
See *Using ArcIMS*, 'Using ArcIMS Service Administrator,' for details on using ArcIMS Service Administrator.

## ArcIMS Application Server

The ArcIMS Application Server handles the incoming requests and tracks which ArcIMS Services are running on which ArcIMS Spatial Servers. The ArcIMS Application Server hands off a request to the appropriate Spatial Server. The Application Server is written as a Java application and runs as a Windows service or a daemon process (on UNIX®). It may reside on any computer.

## ArcIMS Application Server Connectors

The ArcIMS Application Server Connectors are used to connect the Web server to the ArcIMS Application Server. Each instance of a connector is dedicated to one Web server and must be installed on the same computer as the Web server; however, a single Web server can support several connectors.



The ArcIMS Servlet Connector is the standard connector used for ArcIMS, and it supports the OpenGIS Consortium (OGC) Web Map Service (WMS) 1.1.0 implementation specification. It uses the ArcIMS language, ArcXML, to communicate from the Web server to the ArcIMS Application Server. The ArcIMS Servlet Connector provides Map Service-level user password authentication. You need the ArcIMS Servlet Connector to administer your ArcIMS site and author and design ArcIMS Web pages.

In addition to the ArcIMS Servlet Connector, you can use the following connectors to link the Web server to the ArcIMS Application Server:

## Installing ArcIMS 4.0 on Sun Solaris

1. ColdFusion® Connector
2. ActiveX® Connector
3. Java Connector

The ColdFusion and ActiveX connectors work with custom clients and translate their own languages into ArcXML. The ArcIMS Java Connector communicates with the ArcIMS Application Server via a Java application or JSP client. Samples can be installed with the software. For more information on these custom connectors, see the *Customizing ArcIMS* series.

The ArcIMS Java Connector runs on Windows and UNIX, the ColdFusion Connector runs on Windows and Solaris, and the ActiveX Connector runs on Windows only. If you install these connectors, the ArcIMS Servlet Connector must also be installed on your system for the custom connectors to communicate with ArcIMS.

After installation, see ArcIMS Servlet Connector in *ArcIMS Help* for information on the ArcIMS Servlet Connector and WMS. See *Customizing ArcIMS—ColdFusion Connector* for information on using the ColdFusion Connector. See *Customizing ArcIMS—ActiveX Connector* for information on using the ActiveX Connector. For JSP Connector information, see *Customizing ArcIMS—Java Connector*.

## ArcIMS Spatial Servers

The ArcIMS Spatial Server is the backbone of ArcIMS. ArcIMS Spatial Servers process requests for maps and related information and serve the data to the client. For ArcIMS Metadata Service, ArcGIS™ and ArcSDE are required.

For ArcMap™ Server, ArcGIS and ArcObjects™ runtime files are required; ArcMap Server only runs on Windows platforms. ArcIMS Spatial Servers run on a Windows NT® Server, Windows NT Workstation, Windows 2000, Windows XP, or UNIX. A graphics card is not required.

**Note:** ArcMap Server installs the ArcObjects runtime files. ArcGIS cannot reside on the same computer as the ArcObjects runtime files; therefore, ArcGIS cannot reside on the same computer as ArcMap Server.

## ArcIMS Viewers

ArcIMS provides client-side viewers:

1. ArcIMS HTML Viewer
2. ArcIMS Java Viewer
3. Metadata Explorer

The ArcIMS Viewers determine the functionality and graphical look of your Web site. The viewer is what appears in the Web browser when someone accesses your Web site.

The Java Viewers require a onetime ArcIMS Viewer download to the client user's computer and are only compatible with Web browsers that support Java plug-in functionality. See *Installing ArcIMS Viewer* for instructions regarding the Java client download.

The Metadata Explorer can only be used to view metadata from an ArcIMS Metadata Service. See *Creating and Using Metadata Services* for information on Metadata Explorer.

## Five steps to get ArcIMS up and running

There are five steps required to get ArcIMS running:

1. Verify that your site meets ArcIMS system requirements.
2. Determine your ArcIMS site configuration.
3. Install ArcIMS.
4. Configure your Web server.
5. Configure ArcIMS.

These steps are outlined below.

For the latest requirements or for any changes to the Installation Guide, see the Readme.html file on the ArcIMS Web site.

## What you need to get ArcIMS running

### Step 1: Verify that your site meets ArcIMS system requirements

#### Hardware configuration

- Memory requirements
- Disk space

#### System software

- Operating system
- Web server
- Servlet engine
- Java Runtime Environment (JRE)
- Web browser

### Step 2: Determine your ArcIMS site configuration

- ArcIMS Typical Configuration—All on a single computer
- ArcIMS Custom Configuration—ArcIMS Application Server Connectors
- ArcIMS Custom Configuration—ArcIMS ArcMap Server (Windows only)
- ArcIMS Custom Configuration—ArcIMS Manager Applications
- ArcIMS Custom Configuration—ArcIMS Spatial Servers
- ArcIMS Custom Configuration—Metadata Explorer

### Step 3: Install ArcIMS

### Step 4: Configure your Web server

- Configure your Web server and servlet engine.
- Create virtual directories.

### Step 5: Configure ArcIMS

- Set environment parameters.

See the installation flowchart for your platform for an overview of the steps required to get ArcIMS running.

## Questions, feedback, and information

### Questions and feedback

*ArcIMS Help* provides information on how to contact ESRI Technical Support with questions or comments. All questions and comments should be forwarded to ESRI Technical Support.

- Phone: 909-793-3774
- Fax: 909-792-0960
- E-mail: support@esri.com
- Hours: 6:00 a.m to 6:00 p.m. Pacific time, Monday through Friday, except ESRI holidays. If you are outside the United States, please contact your local ESRI distributor.

### ArcIMS Knowledge Base

The ArcIMS Knowledge Base is a database that contains:

- Frequently Asked Questions
- How To instructions
- Troubleshooting tips
- Error messages

You can search the Knowledge Base using keywords, or you can browse through folders that contain information on different topics relating to ArcIMS.

You can access the ArcIMS Knowledge Base from ArcOnline at <http://arcimsonline.esri.com>.

### Using *ArcIMS Help*

If you need more information about a specific topic or procedure, use *ArcIMS Help* from within ArcIMS. You can locate what you need by searching the table of contents, finding terms in the index, or finding the number of times a term appears in a section.

### Visit the ESRI home page on the Internet

Visit the ESRI home page at [www.esri.com](http://www.esri.com) for up-to-date information on ESRI software and services. It is an invaluable resource in helping you expand your understanding of geographic information system (GIS) technology and Internet mapping.

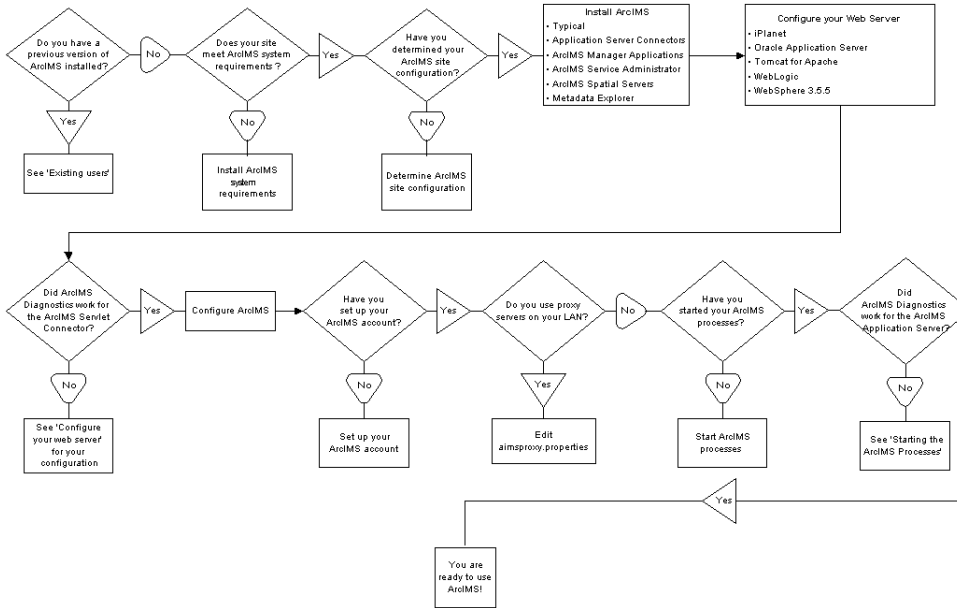
Visit the ArcIMS home page at [www.esri.com/software/arcims](http://www.esri.com/software/arcims) for the latest information about ArcIMS including a showcase of ArcIMS-enabled Web sites.

### ESRI education solutions

ESRI provides educational opportunities related to geographic information science, GIS applications, and technology. You can choose among instructor-led courses, Web-based courses, and self-study workbooks to find education solutions that fit your learning style and pocketbook. For more information, go to [www.esri.com/education](http://www.esri.com/education).

# Installation flowchart

Click a box in the flowchart to go to the appropriate section:



### Existing users

ArcIMS 4.0 users need to be aware of the following conflicts if your system has ArcIMS 3.1 installed:

- ArcIMS 4.0 creates a new directory named aims40exe when installed. It is possible to have both ArcIMS 3.1 and ArcIMS 4.0 on the same system. However, there are many areas that can cause problems, and it is recommended that you run only one version of ArcIMS on your computer. See [Uninstalling ArcIMS 3.1](#) for details.
- The ArcIMS 3.1 files EsriMapCatalog.ser (configuration file for saved services) and EsriMapCookies.ser contain your ArcIMS preferences. The ArcIMS 4.0 installation program installs a converter that converts these files to files called ArcIMSSite.sez and ArcIMSFolders.sez. To run the converter, see [ArcIMS Site Information Conversion](#).
- JRE 1.3.1 or higher is required for ArcIMS 4.0.
- See [Supported Software environments for Web servers and servlet engines supported for ArcIMS 4.0](#).

See 'What's new with ArcIMS' in *ArcIMS Help* for information on the differences between ArcIMS 3.1 and ArcIMS 4.0.

## **Uninstalling ArcIMS 3.1**

1. The ArcIMS 3.1 files EsriMapCatalog.ser (configuration file for saved services) and EsriMapCookies.ser contain your ArcIMS preferences. These files are located at <ArcIMS Installation Directory>/Middleware/Application\_Server. Back up these files prior to ArcIMS 4.0 installation so you can run the Site Starter Conversion utility after ArcIMS 4.0 installation.
2. Remove <ArcIMS Installation Directory>/aims31.exe.
3. Remove the following from the appropriate Web server location:
  - com directory
  - Esrimap\_prop
  - jaxp.jar
  - parser.jar
  - ServletConnector\_Res.properties
  - ServletConnector\_Res\_en\_US.properties
  - WMSEsrimap\_prop
4. Remove the following files from your \$HOME directory:
  - aimsdefaults.properties
  - aimsproxy.properties

### ArcIMS site information conversion

The ArcIMS 3.1 EsrimapCatalog.ser file is the ArcIMS site configuration file that stores the information about the servers that are started and the services that are running. The ArcIMS 3.1 EsrimapCookies.ser file contains ArcIMS Folders such as MapNotes and EditNotes. For ArcIMS 4.0, these files have been replaced by ArcIMSSite.sez and ArcIMSFolders.sez, respectively.

Before uninstalling ArcIMS 3.1, it is recommended that you back up your EsrimapCatalog.ser and EsrimapCookies.ser files. The ArcIMS 4.0 installation program installs a SerConverter utility in a typical installation and where ArcIMS Application Server or ArcIMS Spatial Server are installed.

After ArcIMS 4.0 installation, you need to convert the \*.ser files to \*.sez files using the SerConverter utility.

1. Stop the ArcIMS Tasker, ArcIMS Monitor, and ArcIMS Application Server processes in that order:

```
./aimstasker stop
./aimsmonitor stop
./aimsappsrvr stop
```

2. Edit the SerConverter.properties file. In a text editor, open the \$AIMSHOME/Middleware/SerConverter.properties file and change the line `workingDirectory=/<ArcIMS Installation Directory>/Middleware/SerConverter` to the full path to the location of your ArcIMS 4.0 SerConverter folder.
3. Change the line `inputDirectory=`**<Installation Path to ArcIMS 3.1>**`/Middleware/Application_Server` to the full path of the location of your ArcIMS 3.1 \*.ser files.
4. Change the line `outputDirectory=`**<ArcIMS Installation Directory>**`/aims40exe/Middleware/Application_Server` to the full path of the location of your ArcIMS 4.0 Application\_Server folder.
5. Save and close the file.
6. The SerConverter utility requires that the AIMSHOME and JAVA\_HOME variables be set before running the utility. See 'Setting up your ArcIMS Account,' Step 5: Configure ArcIMS for AIX or Step 5: Configure ArcIMS for Solaris for details.
7. Run the \$AIMSHOME/bin/aimsserc script by issuing the command:

```
$AIMSHOME/bin/aimsserc.
```

The EsrimapCatalog.ser and EsrimapCookies.ser files will be converted to new files called ArcIMSSite.sez and ArcIMSFolders.sez.

The newly created \*.sez files will contain ArcIMS 3.1 site information that can be used by the ArcIMS 4.0 Application Server. Note that the existing EsrimapCatalog.ser and EsrimapCookies.ser files will not be deleted.

8. Start the ArcIMS Application Server, ArcIMS Monitor, and the ArcIMS Tasker processes:

```
./aimsappsrvr start &
./aimsmonitor start &
./aimstasker start &
```

**Note:** The Metadata Server virtual server in ArcIMS 4.0 will not show up in the converted ArcIMS site. The ArcIMS site is capable of running it; however, you need to manually create the virtual server and save the site configuration. See *Using ArcIMS* for details on creating a virtual server.



## Step 1: Verify that your site meets ArcIMS system requirements

The ArcIMS Manager Applications—Author, Designer, and Administrator—must be installed together on one computer. They don't need to be installed on the Web server. ArcIMS Manager is not available on Sun Solaris due to limitations of Web browsers for Solaris.

### Hardware configuration

#### Memory requirements

This can be a combination of disk-backed memory and physical memory:

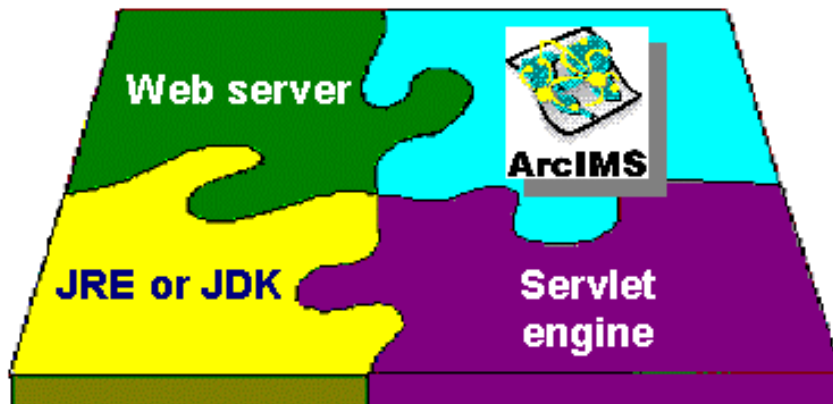
- Manager Applications: 64 MB of RAM recommended
- ArcIMS Application Server: 256 MB of RAM recommended
- ArcIMS Spatial Server: 256 MB of RAM recommended per CPU
- HTML Viewers: 64 MB of RAM recommended
- Java Viewers and ArcExplorer—Java Edition: 128 MB of RAM recommended
- All components: 256 MB of RAM recommended per CPU

#### Disk space

The disk space requirement for all ArcIMS components is 464 MB.  
For current information, see the ArcIMS installation program on the CD.

### System software

The following system software is required to run ArcIMS.



#### Operating system

- Solaris 7
- Solaris 8

**Note:** ESRI recommends that you execute ArcIMS from a C shell. The instructions in this installation document are for a C shell environment setup only.

#### Web server

ArcIMS works in conjunction with Web server software, so a Web server must be installed and operational in order to start serving maps.

## Installing ArcIMS 4.0 on Sun Solaris

System administration access to the Web server computer is necessary, and knowing how to stop and start your Web server is mandatory.

ArcIMS is fully supported on the following Web servers:

- Apache Web Server for Solaris with Jakarta-Tomcat as its servlet engine (hereafter referred to as Tomcat)
- iPlanet Web Server for Solaris using its native Java servlet engine
- IBM HTTP Server with WebSphere® as its servlet engine
- Oracle® Application Server
- WebLogic®

The servlet engine must use Java Runtime Environment (JRE) or Java 2 Software Development Kit (JDK) 1.3 or higher.

See Supported Software Environments for other Web servers and their ESRI support level.

### Java 2 patches

Java 2 patches must be installed before operating Java 2 on Solaris.

- Patches and installation instructions are at <http://www.sun.com/solaris/jre/download.html>.

### Java Runtime Environment

Java Runtime Environment 1.3 is a prerequisite for installing ArcIMS. JRE 1.3.1.01 is included on the ArcIMS CD. You must have JRE to install ArcIMS. The filename is `j2re1_3_1_01-solsparc.bin`. To execute this script:

1. CD to the location where you want to install it on your system (you must have write access in this directory). For example:

```
cd /opt
```

2. Execute the script

```
/cdrom/cdrom0/JRE/j2re1_3_1_01-solsparc.bin
```

and follow the instructions.

3. Create an environment variable for the JRE. Add the following line to your `.login` or `.cshrc` file:

4. `setenv JAVA_HOME <JRE Installation Directory>`

Make sure the `$JAVA_HOME/bin` is in the `PATH`.

5. Verify that you have the correct JRE running by typing:

```
java -version
```

For example, Sun Solaris should return the following:

```
Java HotSpot(TM) Client VM (build 1.3.1_01, mixed mode)
```

**Note:** If you use JRE 1.3.1, you need to install the required Sun OS patches listed on the [java.sun.com](http://java.sun.com) Web site for Solaris: <http://java.sun.com/j2se/1.3/install-solaris-patches.html>.

### ArcIMS Service Administrator requirements

The following software is required to use the ArcIMS Service Administrator:

- Java 2 Software Development Kit (JDK) from <http://java.sun.com>

### Metadata Service requirements

The following software is required to use the ArcIMS Metadata Service:

- ArcGIS 8.2
- ArcSDE 8.2

## Installing ArcIMS 4.0 on Sun Solaris

### Metadata Explorer requirements

The following software is required to use the Metadata Explorer:

- Java 2 Software Development Kit (JDK) from <http://java.sun.com>

### Web browser for ArcIMS Viewers

- HTML Viewer: Netscape Communicator 4.61, 4.7, or 4.75

The Java Viewer requires that a one-time download including the Java 2 plug-in and ArcIMS Viewer Download be installed.

- Java Standard Viewer: Netscape Communicator 4.61, 4.7, or 4.75

The Java Custom Viewer doesn't run in Netscape Communicator.

**Note:** See ArcOnline at <http://arcimsonline.esri.com> for the latest support information.

**Note:** All Web pages created on Sun Solaris can be viewed on Windows. See System requirements for Web browser requirements on Windows.

### Font requirement

ArcIMS components other than the Application Server and Connectors require an additional font package that comes with the Solaris software installation CD.

**Note:** This is required. ArcIMS will not function properly unless the fonts are installed.

To verify that the font is installed, type:

```
pkginfo | grep SUNWilof
```

If you see the following:

```
system      SUNWilof      ISO-8859-1 (Latin-1) Optional Fonts
```

You have the required fonts on your system.

If not, add them from your Solaris Software installation CD. Type:

```
su
pkgadd -d /cdrom/cdrom0/s0/Solaris_2.7/Product SUNWilof
```

For Solaris 8, the font package is installed by default during Solaris 8 installation.

### ArcIMS Application Server Connectors

ArcIMS Application Server requires the following optional software if you will be creating custom Viewers using ColdFusion or JSP:

#### ColdFusion Connector

- ColdFusion Server Professional or Enterprise 4.5 or 5.0

For ColdFusion information, see *Customizing ArcIMS—ColdFusion Connector* on the ArcIMS CD.

#### Java Connector

- Java 2 Software Development Kit 1.3.x (JDK)

For Java Connector information, see *Customizing ArcIMS—Java Connector*.

### ArcSDE

#### Metadata users only

- ArcSDE 8.2

## **Installing ArcIMS 4.0 on Sun Solaris**

### **Other users**

- ArcSDE 3.0.2, ArcSDE 8.0.2, ArcSDE 8.1, or ArcSDE 8.2
- ArcSDE for Coverages 8.0.2, ArcSDE for Coverages 8.1, or ArcSDE for Coverages 8.2

Once you have the required software, see Step 2: Determine your ArcIMS site configuration.

## Step 2: Determine your ArcIMS site configuration

### Choosing an ArcIMS configuration for your system

ArcIMS provides the mechanism to allow ArcIMS Spatial Servers, ArcIMS Application Servers, and the Web server to communicate with one another to serve maps and data over the Internet to client Web browsers. An ArcIMS site consists of one or more computers that host the Web server, ArcIMS Application Server, ArcIMS Spatial Server, and data.

There are many possible ArcIMS site configurations. Some sites run all ArcIMS components on a single computer, and some are composed of multiple computers. The only requirement in a multiple computer environment is that you must install the ArcIMS Application Server Connectors and Manager (Windows) on the same computer as the Web server.

Configurations will vary depending on the available computing resources and the mapping services provided. For ArcIMS Spatial Servers, processing speed and the ability to handle the load are important. Will the ArcIMS Services perform process-intensive functions or create basic map displays? How many services will be running at one time? Will the Web server computer be dedicated to the Web site or used for other purposes as well? Answers to these questions will assist in ArcIMS site configuration planning.

Configure an ArcIMS Web site based on the anticipated number of users visiting the site and the number of maps generated each day. For example, a Web site with very few anticipated users, averaging 100 to 1,000 maps per day, could run from one computer. A high-volume Web site, with 100,000 to 1,000,000 maps per day, should be distributed to multiple ArcIMS Spatial Server computers.

The ArcIMS typical installation installs all standard components on one computer. ArcIMS also supports custom configurations for multiple ArcIMS Spatial Servers, ArcIMS Application Server Connectors, and Manager Applications.

The advantages of these different installation options are listed below.

<b>Advantages of Different ArcIMS Installation Options</b>	
Typical (ArcIMS on one computer)	<ul style="list-style-type: none"> <li>• Limited computer resources.</li> <li>• Quick and easy way to learn ArcIMS.</li> <li>• Light Web site usage.</li> </ul> Remotely access ArcIMS Manager using Microsoft Internet Explorer Web browser (Windows only).
Multiple ArcIMS Spatial Servers	<ul style="list-style-type: none"> <li>• Expand configuration.</li> <li>• Add processing capabilities.</li> </ul> Heavy Web site usage.
ArcIMS Manager Applications	<ul style="list-style-type: none"> <li>• Access ArcIMS functions without needing Internet Explorer Web browser.</li> </ul> Solution for environments where Internet Explorer isn't available and for advanced users.
Application Server Connectors	Customize Web pages using ColdFusion or JSP.
Metadata Explorer	View metadata from an ArcIMS Metadata Service.

When you have determined your site configuration, see Step 3: Install ArcIMS.

## Step 3: Install ArcIMS

Choose the installation steps for your configuration:

Doing a typical installation

Installing ArcIMS custom Application Server Connectors

Installing ArcIMS Manager Applications

Installing ArcIMS Service Administrator

Installing multiple ArcIMS Spatial Servers

Installing Metadata Explorer

### Doing a typical installation

In this scenario, your Web site uses the resources of one computer; Web server software and ArcIMS applications are installed on the same computer. This configuration is useful for those with limited resources or light server loads. See Overview for details on ArcIMS components.



### Accessing your license agreement file

Before running the install, see the license agreement file for your locale. The license agreement files are in Adobe Acrobat PDF format and are located on the CD-ROM at /cdrom/cdrom0/license. Installation of this software indicates an acceptance of the license agreement. The following files are included in the /cdrom/cdrom0/license directory:

arabic.pdf

brazilian.pdf

czech.pdf

english.pdf

french.pdf

simchinese.pdf (Simplified Chinese)

tradchinese.pdf (Traditional Chinese)

korean.pdf

german.pdf

hungarian.pdf

italian.pdf

japanese.pdf

latamerican.pdf (Latin American)

latvian.pdf

lithuanian.pdf

polish.pdf

portuguese.pdf

## Installing ArcIMS 4.0 on Sun Solaris

russian.pdf  
spanish.pdf  
swedish.pdf  
ukranian.pdf

### Installing ArcIMS

Solaris 7 includes Volume Management software, which automatically mounts the CD-ROM.

**Note:** Make sure that the user account that installs ArcIMS has write permissions to the installation directory.

**Note:** For security reasons, don't install ArcIMS as super user. ESRI recommends that you create a separate user account for installing and administering ArcIMS.

The 'install' command has four options:

Usage: install <-help | -load | -remove | -verify >

Type "install -help" to read more about the installation procedure.

1. To start ArcIMS installation, type the following command from anywhere on your system:

```
% /cdrom/cdrom0/ArcIMS4.0/install -load
```

This starts the menu-driven dialog for ArcIMS software installation. Default selections are in brackets [ ].

To obtain a list of options or online help, type "?" at any prompt. You can quit the installation procedure at any time by typing "q". To return to a previous question, type the caret, "^".

2. At the Enter CD-ROM mount point: [/cdrom/cdrom0/ArcIMS4.0] prompt, type the location and press <Return>.
3. At the Enter pathname to install directory prompt, type the path to where you want ArcIMS installed on your system. The ArcIMS version and date display.
4. At the ArcIMS Application Server Package numbers to load: [all] prompt, press <Return> to accept the default and install all packages.
5. At the ArcIMS Application Server Connectors Package numbers to load: [none] prompt, type "?" to display a list of available packages. Type the numbers of the packages you want to install, type "all" to load all packages, or press <Return> to accept the default and load no packages.  
**Note:** For ArcIMS to function, you need to install the ArcIMS Application Server and at least one connector.
6. At the ArcIMS Manager Applications Package numbers to load: [all] prompt, press <Return> to accept the default and install all packages.  
**Note:** You must choose [all] to run ArcIMS Author, ArcIMS Administrator, and ArcIMS Designer.
7. At the ArcIMS Spatial Server Software Package numbers to load: [all] prompt, press <Return> to accept the default and install all packages.
8. At the ArcIMS Metadata Explorer/Gazetteer Data Package numbers to load: [all] prompt, press <Return> to accept the default and load all packages.
9. At the ArcIMS Sample Applications and Data Package numbers to load: [none] prompt, type "?" to display a list of available packages. Type the numbers of the packages you want to install, type "all" to load all packages, or press <Return> to accept the default and load no packages.  
**Note:** If you install any Sample packages, you need to install the Tutorial Data package. The Package selection complete prompt and a list of the packages you chose to install display.
10. At the Is this correct? [yes] prompt, press <Return> to accept the default and install ArcIMS. The size of the selected packages and available space display.
11. At the List file names while loading? [no] prompt, press <Return> to accept the default or type "yes" and press <Return>, if desired. ArcIMS is installed, and the Finished loading package(s) message displays.

Before you begin using ArcIMS, you must complete Step 4: Configure your Web server. See the appropriate section to configure your Web server to run ArcIMS:

iPlanet Web Server

Oracle Application Server

Tomcat for Apache

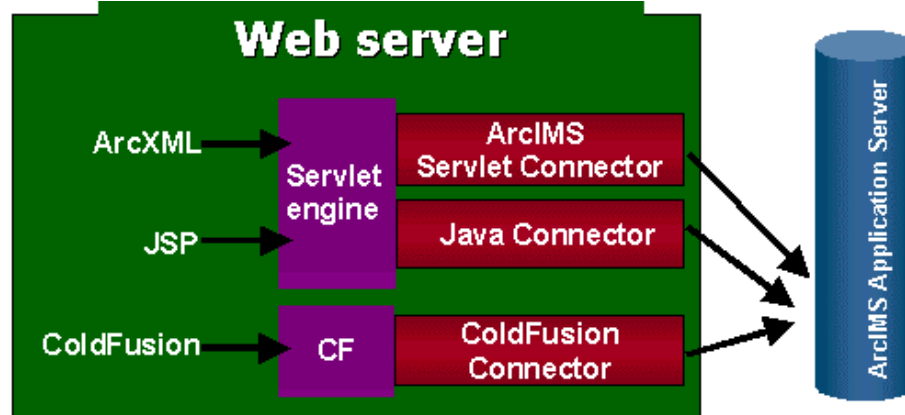
Configuring WebLogic

Configuring WebSphere 3.5.5

## Installing ArcIMS custom Application Server Connectors

In this custom scenario, you select an ArcIMS Application Server Connector depending on the development environment you plan to use for creating Web pages. The supported Application Server Connectors on Solaris are Servlet with WMS, ColdFusion, and Java.

The ArcIMS Application Server and Application Server Connector reside on the Web server. Each Web server can have more than one Application Server Connector, as long as they are of different types.



The Servlet Connector with WMS is the standard ArcIMS Connector. Select this connector if you plan to use the Web design tools in ArcIMS (Author and Designer). The Servlet Connector also provides service-level user password authentication. WMS works within the OGC WMS 1.0.0 specification.

Choose the ColdFusion Connector if you plan to embed ColdFusion applications in your Web pages. The Java Connector communicates with the ArcIMS Application Server and a JSP client. The Java Connector is not dependent on the ArcIMS Application Server and can be installed on any computer.

See System requirements for requirements for the ColdFusion Connector.

**Note:** These instructions describe only custom Application Server Connector installation. To install ArcIMS Application Server, ArcIMS Manager Applications, and ArcIMS Spatial Server, refer to Doing a typical installation.

### Accessing your license agreement file

Before running the install, see the license agreement file for your locale. The license agreement files are in Adobe Acrobat PDF format and are located on the CD-ROM at /cdrom/cdrom0/license. Installation of this software indicates an acceptance of the license agreement. The following files are included in the /cdrom/cdrom0/license directory:

- arabic.pdf
- brazilian.pdf
- czech.pdf
- english.pdf
- french.pdf
- simchinese.pdf (Simplified Chinese)
- tradchinese.pdf (Traditional Chinese)
- korean.pdf
- german.pdf
- hungarian.pdf
- italian.pdf
- japanese.pdf
- latamerican.pdf (Latin American)
- latvian.pdf
- lithuanian.pdf
- polish.pdf



## Installing ArcIMS 4.0 on Sun Solaris

portuguese.pdf  
russian.pdf  
spanish.pdf  
swedish.pdf  
ukranian.pdf

### Installing ArcIMS Application Server Connectors

Perform the following steps on the computer where you want to install ArcIMS Application Server and custom Connectors.

Solaris 7 includes Volume Management software, which automatically mounts the CD-ROM.

**Note:** Make sure that the user account that installs ArcIMS has write permissions to the installation directory.

**Note:** For security reasons, don't install ArcIMS as super user. ESRI recommends that you create a separate user account for installing and administering ArcIMS.

1. To start ArcIMS installation, type the following command from anywhere on your system:  

```
% /cdrom/cdrom0/ArcIMS4.0/install -load
```

This starts the menu-driven dialog for ArcIMS software installation. Default selections are in brackets [ ]. To obtain a list of options or online help, type "?" at any prompt. You can quit the installation procedure at any time by typing "q". To return to a previous question, type the caret, "^".
2. At the Enter CD-ROM mount point: [/cdrom/cdrom0/ArcIMS4.0] prompt, type the location and press <Return>.
3. At the Enter pathname to install directory prompt, type the path to where you want ArcIMS Application Server Connectors installed on your system. The ArcIMS version and date display.
4. At the ArcIMS Application Server Package numbers to load: [all] prompt, type "none" and press <Return>.
5. At the ArcIMS Application Server Connectors Package numbers to load: [none] prompt, type "?" to display a list of available packages.  
Type the numbers of the packages you are installing separated by commas, type "all" to load all packages, or press <Return> to accept the default and load no packages.  
**Note:** For ArcIMS to function, you need to install the Application Server and at least one connector.
6. At the ArcIMS Manager Applications Package numbers to load: [all] prompt, type "none" and press <Return>.
7. At the ArcIMS Spatial Server Software Package numbers to load: [all] prompt, type "none" and press <Return>.
8. At the ArcIMS Metadata Explorer/Gazetteer Data Package numbers to load: [all] prompt, type "none" and press <Return>.
9. At the ArcIMS Sample Applications and Data Package numbers to load: [none] prompt, type "?" to display a list of available packages. Type the numbers of the packages you are installing separated by commas, type "all" to load all packages, or press <Return> to accept the default and load no packages.  
**Note:** If you install any Sample packages, you need to install the Tutorial Data package. The Package selection complete prompt and a list of the packages you chose to install display.
10. At the Is this correct? [yes] prompt, press <Return> to accept the default and install the ArcIMS Application Server and custom Connector packages. The size of the selected packages and available space display.
11. At the List file names while loading? [no] prompt, press <Return> to accept the default or type "yes" and press <Return>, if desired. ArcIMS Application Server and custom Connector are installed, and the Finished loading package(s) message displays.

Configure the connector you installed:

ArcIMS ColdFusion Connector  
ArcIMS Java Connector  
ArcIMS Servlet Connector  
WMS

## Installing ArcIMS 4.0 on Sun Solaris

### ArcIMS ColdFusion Connector

After installing the ArcIMS ColdFusion Connector, you must configure ColdFusion Server to work with ArcIMS. The ArcIMS ColdFusion Connector requires ColdFusion Server 4.5.1 Professional or Enterprise. ColdFusion Studio is not available on Solaris.

Copy the files from /<ArcIMS Installation Directory>/aims40exe/Middleware/CF\_Connector/bin to /<ColdFusion Server Installation Directory>/lib.

These files are:

- libcfxesrimap.so
- libicu-i18n-ws6.so
- libicu-uc-ws6.so
- libicudata.so
- bxerces-c1\_3-ws6.so

Copy the files from /<ArcIMS Installation Directory>/aims40exe/Middleware/CF\_Connector/wrapper to /<ColdFusion Server Installation Directory>/CustomTags.

These files are:

- ArcIMS.cfm
- ArcIMS\_FilterSQL.cfm
- ArcIMS\_Layer.cfm
- ArcIMS\_MultiPoint.cfm
- ArcIMS\_PolyLine.cfm
- ArcIMS\_Polygon.cfm
- ArcIMS\_Polygon\_Query.cfm
- ArcIMS\_SQL.cfm
- ArcIMS\_Text.cfm
- CF\_ArcIMS.txt
- ai\_QueryForm.cfm

**Note:** The CF\_ArcIMS.txt file provides information about the custom tags for ArcIMS.

### Setting up the ColdFusion Server to recognize the ArcIMS ColdFusion connector

1. Open the ColdFusion Server Administration page and log in. On the navigation bar, find extensions and click CFX\_Tags. The tag should read CFX\_, and Type is C++. Click Add.
2. Type the following as the Tag Name:  
CFX\_esrimap
3. For the Server Library (DLL), click Browse Server and navigate to <ColdFusion Server Installation Directory>/lib/libcfxesrimap.so. Click OK and click Add.
4. Close the ColdFusion Server Administration page.

For information on ColdFusion, including configuration instructions, see *Customizing ArcIMS—ColdFusion Connector*.

### ArcIMS Java Connector

For information on using the ArcIMS JSP Connector, see *Customizing ArcIMS—JSP Connector*.

### ArcIMS Servlet Connector

If you installed the ArcIMS Servlet Connector, before you begin using ArcIMS software, you must complete Step 4: Configure your Web server. See the appropriate section to configure your Web server to run ArcIMS: Configuring iPlanet

## Installing ArcIMS 4.0 on Sun Solaris

Configuring Oracle Application Server

Configuring Tomcat for Apache

Configuring WebLogic

Configuring WebSphere 3.5.5

For information on the ArcIMS Servlet Connector, see *ArcIMS Help*.

## WMS

To configure ArcIMS to use WMS, perform the following:

1. In a text editor, open the WMSEsrimap\_prop file in the location where you placed it when you configured your Web server. For example:

**Apache with Tomcat:** <Tomcat Installation Directory>/webapps/ROOT/WEB-INF/classes

**IBM HTTP Server with WebSphere 3.5.5:** <WebSphere Installation Directory>/AppServer/servlets

**iPlanet:** <iPlanet Installation Directory>/servers/https-<machine>.<domain>/config

**Oracle Application Server:** <OAS Installation Directory>/Apache/Jserv/servlets

**WebLogic:** <WebLogic Installation Directory>/bea/wlserver6.1/config/mydomain/applications/  
DefaultWebApp/WEB-INF/classes

**Note:** If the file is not there, see Step 4: Configure your Web server.

2. Find `enable` and change it to `enable=true`.
3. Find `appServerMachine` and set it to the name of the computer where the ArcIMS Application Server is installed.
4. Find `appServerClientPort` and set it to the name of the port on which the Application Server is running (default is 5300).
5. Find `capabilitiesDir` and provide the path to the capabilities directory. For example, `capabilitiesDir=/disk1/ArcIMS/capabilities`
6. Find `debug` and set it to `debug=true` if you want detailed debug information. If you set it to true, the log file will be created inside the working directory.
7. Find `workingDirectory` and provide the path to the working directory. For example, `workingDirectory=/disk1/ArcIMS/workingdir`
8. Find `reaspect` and set it to true if you want to re-aspect the generated map images.
9. Find `defaultService` and set it to a default ArcIMS Service name. If the WMS client doesn't specify the Service, then this default Service will be used.
10. Save and close the file.
11. Stop and start your Web server:

### Apache and Tomcat:

```
<Tomcat Installation Directory>/bin/shutdown.sh  
<Apache Installation Directory>/bin/apachectl stop  
<Tomcat Installation Directory>/bin/startup.sh  
<Apache Installation Directory>/bin/apachectl start
```

### IBM HTTP Server with WebSphere:

```
<WebSphere Installation Directory>/bin/stopServer.sh  
<HTTPServer Installation Directory>/bin/adminctl stop  
<HTTPServer Installation Directory>/bin/apachectl stop  
<WebSphere Installation Directory>/bin/startServer.sh  
<HTTPServer Installation Directory>/bin/adminctl start  
<HTTPServer Installation Directory>/bin/apachectl start
```

### iPlanet:

```
<iPlanet Installation Directory>/https-<machine>.<domain>/restart  
<iPlanet Installation Directory>/https-admserv restart
```

## Installing ArcIMS 4.0 on Sun Solaris

### Oracle Application Server:

```
<OAS Installation Directory>/Apache/Apache/bin/apachectl stop  
<OAS Installation Directory>/Apache/Apache/bin/apachectl start
```

### WebLogic:

In your Web browser, type:

http://<localhost.domain.com>:<serveradminport>/console (for example, http://arcims.esri.com:10000/console). Type your password. On the left sidebar, click Servers. Right-click <WebLogic Server Name>, select Stop this server, and click Yes. Close the console.

Start WebLogic by typing:

```
<WebLogic Installation Directory>/bea/wlserver6.1/config/mydomain/  
startWebLogic.sh
```

12. To test that WMS is installed and working, open your browser and type:

```
http://<localhost>/servlet/com.esri.wms.Esrimap?Cmd=ping
```

**Note:** If your Web server port is not set to the default port (port 80), then type the following:

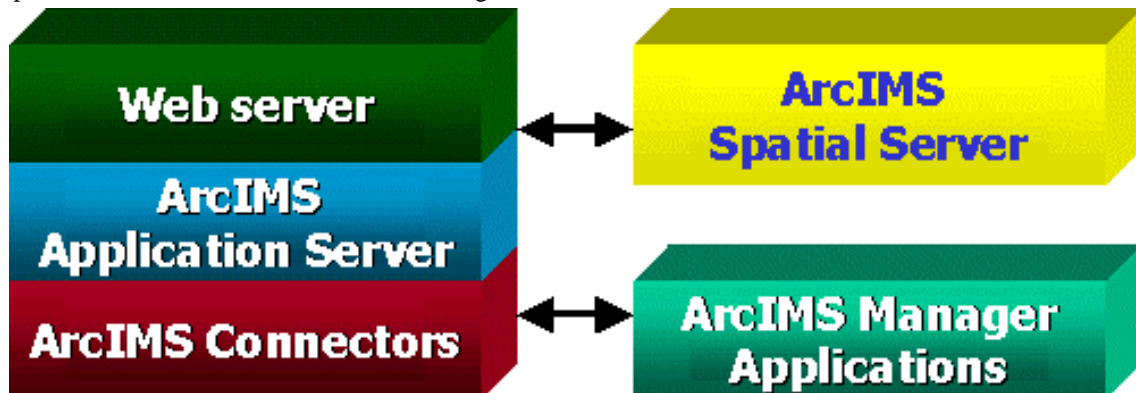
```
http://<localhost>:<port#>/servlet/com.esri.wms.Esrimap?Cmd=ping
```

The following should display: ArcIMS WMS-OGC Connector Version 4.0

For information on WMS, see *ArcIMS Help*.

## Installing ArcIMS Manager Applications

In this custom scenario, ArcIMS Manager Applications can be installed on any computer on your network. This is optimal for UNIX users since ArcIMS Manager is not available for the UNIX environment.



**Note:** These instructions describe only the ArcIMS Manager Applications installation. To install ArcIMS Spatial Server, ArcIMS Application Server, and Application Server Connectors, refer to Doing a typical installation.

### Accessing your license agreement file

Before running the install, see the license agreement file for your locale. The license agreement files are in Adobe Acrobat PDF format and are located on the CD-ROM at /cdrom/cdrom0/license. Installation of this software indicates an acceptance of the license agreement. The following files are included in the /cdrom/cdrom0/license directory:

- arabic.pdf
- brazilian.pdf
- czech.pdf
- english.pdf
- french.pdf
- simchinese.pdf (Simplified Chinese)
- tradchinese.pdf (Traditional Chinese)
- korean.pdf
- german.pdf

## Installing ArcIMS 4.0 on Sun Solaris

hungarian.pdf  
italian.pdf  
japanese.pdf  
latamerican.pdf (Latin American)  
latvian.pdf  
lithuanian.pdf  
polish.pdf  
portuguese.pdf  
russian.pdf  
spanish.pdf  
swedish.pdf  
ukranian.pdf

## Installing ArcIMS Manager Applications

Perform the following steps on the computer where you want to install ArcIMS Manager Applications. Solaris 7 includes Volume Management software, which automatically mounts the CD-ROM.

**Note:** Make sure that the user account that installs ArcIMS has write permissions to the installation directory.

**Note:** For security reasons, don't install ArcIMS as super user. ESRI recommends that you create a separate user account for installing and administering ArcIMS.

1. To start ArcIMS installation, type the following command from anywhere on your system:  

```
% /cdrom/cdrom0/ArcIMS4.0/install -load
```

This starts the menu-driven dialog for ArcIMS software installation. Default selections are in brackets [ ]. To obtain a list of options or online help, type "?" at any prompt. You can quit the installation procedure at any time by typing "q". To return to a previous question, type the caret, "^".
2. At the Enter CD-ROM mount point: [/cdrom/cdrom0/ArcIMS4.0] prompt, type the location and press <Return>.
3. At the Enter pathname to install directory prompt, type the path to where you want ArcIMS Manager Applications installed on your system. The ArcIMS version and date display.
4. At the ArcIMS Application Server Package numbers to load: [all] prompt, type "none" and press <Return>.
5. At the ArcIMS Application Server Connectors Package numbers to load: [none] prompt, press <Return> to accept the default and install no packages.
6. At the ArcIMS Manager Applications Package numbers to load: [all] prompt, press <Return> to accept the default and install all packages.
7. At the ArcIMS Spatial Server Software Package numbers to load: [all] prompt, type "none" and press <Return>.
8. At the ArcIMS Metadata Explorer/Gazetteer Data Package numbers to load: [all] prompt, type "none" and press <Return>.
9. At the ArcIMS Sample Applications and Data Package numbers to load: [none] prompt, type "?" to display a list of available packages. Type the numbers of the packages you are installing separated by commas, type "all" to load all packages, or press <Return> to accept the default and load no packages.  
**Note:** If you install any Sample packages, you need to install the Tutorial Data package. The Package selection complete prompt and a list of the packages you chose to install display.
10. At the Is this correct? [yes] prompt, press <Return> to accept the default and install the ArcIMS Manager Applications packages. The size of the selected packages and available space display.
11. At the List file names while loading? [no] prompt, press <Return> to accept the default or type "yes" and press <Return>, if desired. ArcIMS Manager Applications are installed, and the Finished loading package(s) message displays.

You are ready to use ArcIMS Manager Applications.

If you wish to use ArcIMS Service Administrator to administer ArcIMS Services, see Configuring ArcIMS Service Administrator.

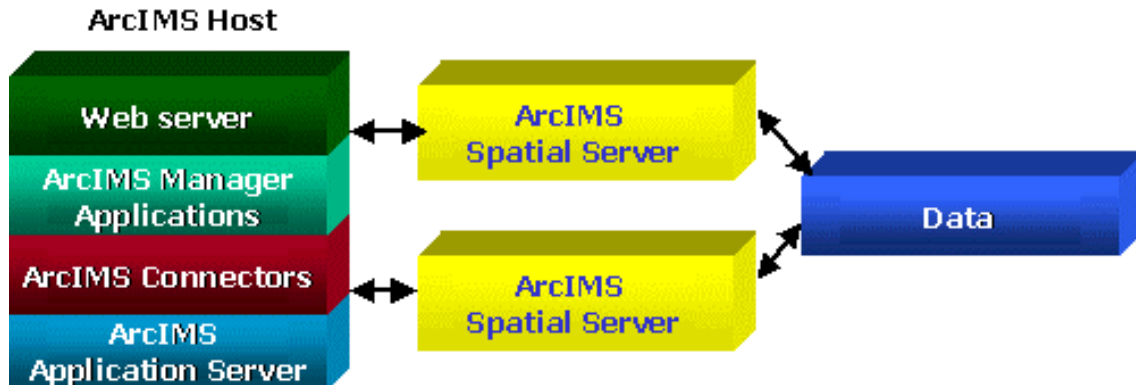
### Installing ArcIMS Service Administrator

The ArcIMS Service Administrator is a remote site administration tool and can be used as an alternative to or in conjunction with ArcIMS Administrator. The ArcIMS Service Administrator uses the JavaServer Pages (JSP) tag libraries and the Java application program interface (API) of the ArcIMS Java Connector. Java 2 Software Development Kit (JDK) is required for ArcIMS Service Administrator.

- The ArcIMS Service Administrator is installed with a typical installation or with ArcIMS Manager Applications. If you plan to administer only ArcIMS Services, you need to:
  1. Install ArcIMS Manager Applications on the computer where you wish to use ArcIMS Service Administrator.
  2. Configure ArcIMS Service Administrator for your Web server.
- The ArcIMS Service Administrator can also be used to administer ArcSDE. To administer ArcSDE on UNIX, you need to do the following:
  1. Install ArcIMS Manager Applications on the computer where you wish to use ArcIMS Service Administrator.
  2. Configure ArcIMS Service Administrator for your Web server.
  3. Install and set up the optional ArcSDE Administrator component on the ArcIMS Spatial Server computer.

### Installing multiple ArcIMS Spatial Servers

In this custom scenario, several computers run ArcIMS Spatial Servers and communicate with the Web server via TCP/IP. One computer runs Web server software with Manager Applications, ArcIMS Application Server, and Application Server Connectors, and there are multiple instances of ArcIMS Spatial Server. ArcIMS Application Server balances the load, maximizing speed and capacity if you have heavy application use.



**Note:** These instructions describe only the ArcIMS Spatial Server installation. To install ArcIMS Manager Applications, ArcIMS Application Server, and Application Server Connectors, refer to Doing a typical installation.

### Accessing your license agreement file

Before running the install, see the license agreement file for your locale. The license agreement files are in Adobe Acrobat PDF format and are located on the CD-ROM at /cdrom/cdrom0/license. Installation of this software indicates an acceptance of the license agreement. The following files are included in the /cdrom/cdrom0/license directory:

- arabic.pdf
- brazilian.pdf
- czech.pdf
- english.pdf
- french.pdf
- simchinese.pdf (Simplified Chinese)

## Installing ArcIMS 4.0 on Sun Solaris

tradchinese.pdf (Traditional Chinese)  
korean.pdf  
german.pdf  
hungarian.pdf  
italian.pdf  
japanese.pdf  
latamerican.pdf (Latin American)  
latvian.pdf  
lithuanian.pdf  
polish.pdf  
portuguese.pdf  
russian.pdf  
spanish.pdf  
swedish.pdf  
ukranian.pdf

## Installing ArcIMS Spatial Server

Perform the following steps on the computer where you want to install an ArcIMS Spatial Server.

Solaris 7 includes Volume Management software, which automatically mounts the CD-ROM.

**Note:** Make sure that the user account that installs ArcIMS has write permissions to the installation directory.

**Note:** For security reasons, don't install ArcIMS as super user. ESRI recommends that you create a separate user account for installing and administering ArcIMS.

1. To start ArcIMS installation, type the following command from anywhere on your system:  

```
% /cdrom/cdrom0/ArcIMS4.0/install -load
```

This starts the menu-driven dialog for ArcIMS software installation. Default selections are in brackets [ ]. To obtain a list of options or online help, type "?" at any prompt. You can quit the installation procedure at any time by typing "q". To return to a previous question, type the caret, "^".
2. At the Enter CD-ROM mount point: [/cdrom/cdrom0/ArcIMS4.0] prompt, type the location and press <Return>.
3. At the Enter pathname to install directory prompt, type the path to where you want ArcIMS Spatial Servers installed on your system. The ArcIMS version and date display.
4. At the ArcIMS Application Server Package numbers to load: [all] prompt, type "none" and press <Return>.
5. At the ArcIMS Application Server Connectors Package numbers to load: [none] prompt, press <Return> to accept the default and install no packages.
6. At the ArcIMS Manager Applications Package numbers to load: [all] prompt, type "none" and press <Return>.
7. At the ArcIMS Spatial Server Software Package numbers to load: [all] prompt, press <Return> to install the Spatial Server software. The Package selection complete prompt and the package you chose to install display.
8. At the ArcIMS Metadata Explorer/Gazetteer Data Package numbers to load: [all] prompt, type "none" and press <Return>.
9. At the ArcIMS Sample Applications and Data Package numbers to load: [none] prompt, type "?" to display a list of available packages. Type the numbers of the packages you are installing separated by commas, type "all" to load all packages, or press <Return> to accept the default and load no packages.  
**Note:** If you install any Sample packages, you need to install the Tutorial Data package. The Package selection complete prompt and a list of the packages you chose to install display.
10. At the Is this correct? [yes] prompt, press <Return> to accept the default and install the ArcIMS Spatial Server packages. The size of the selected packages and available space display.
11. At the List file names while loading? [no] prompt, press <Return> to accept the default or type "yes" and press <Return>, if desired. ArcIMS Spatial Server is installed, and the Finished loading package(s) message displays.

## Installing ArcIMS 4.0 on Sun Solaris

12. In your environment, set the AIMSHOME variable to the location where you installed the spatial server component:

```
setenv AIMSHOME <ArcIMS Spatial Server Installation Directory>/
aims40exe
```

13. Modify the startup parameters for the ArcIMS Monitor process located in the file: \$AIMSHOME/Xenv/aimsmonitor. Search for the section:

"OPTIONALLY MODIFY THE VALUES OF THESE VARIABLES".

- a. Set the value of AIMSHOME to the same location as in Step 12 above.
- b. Set the value of JAVA\_HOME to the location of your JRE.

**Note:** Java VM is assumed to be located at \$JAVA\_HOME/bin/java.

14. Make sure that the following directories are mounted and visible on this computer:

- a. The Output directory that was established as a virtual directory on your Web server. (See Step 4: Configure your Web server.)

- b. All data directories referenced in all your map configuration files.

**Note:** These directories must be mounted using exactly the same pathnames as on the Web server computer; for example, if your map configuration files reference data located in the directory /machine2/data, then /machine2 must be mounted on this computer as well. The path /net/machine/machine2/data is not considered the same, and ArcIMS will not work.

15. The ArcIMS Monitor process relies on the Monitor.properties file for some of its information. Navigate to \$AIMSHOME/Monitor/Monitor.properties, open the file in a text editor, and follow the descriptions to customize the process. The Monitor.properties file needs to be edited prior to starting the aimsmonitor process.

Edit the Monitor.properties file and change the value "localhost" to the name of your Application Server.

For example:

```
registryHost = <server name>.esri.com
```

16. Start the ArcIMS Monitor process.

You may set up the ArcIMS Monitor process as a daemon that starts up every time your computer is rebooted, or you may choose to start it manually when required.

- a. To start the ArcIMS Monitor process at system boot, refer to the instructions provided in the file \$AIMSHOME/Xenv/aimsmonitor.

- b. To start ArcIMS Monitor manually, navigate to the \$AIMSHOME/Xenv directory and type the following:

```
./aimsmonitor start &
```

17. Start ArcIMS Administrator on the Web server computer (or do a Site Refresh in Administrator if it is already running) to see the new Spatial Server listed under Servers.

After installing an ArcIMS Spatial Server, see *Using ArcIMS*, 'Administering your site,' for details on how to administer the ArcIMS Spatial Server.

See *ArcIMS Help* for more information on configuring your Web site.

**Note:** When you install ArcIMS Spatial Servers on a system where you already have an existing ArcIMS 4.0 site configuration, you need to manually add a Metadata Server virtual server. See *Using ArcIMS* for details on configuring virtual servers for ArcIMS.

## Installing Metadata Explorer

In this custom scenario, you install Metadata Explorer and Gazetteer data to view metadata from an ArcIMS Metadata Service. Java 2 Software Development Kit (JDK) is required for ArcIMS Metadata Explorer.

**Note:** These instructions describe only Metadata Explorer and Gazetteer data installation. To install the ArcIMS Host (ArcIMS Manager, ArcIMS Application Server, ArcIMS Spatial Server, and Application Server Connectors), refer to Doing a typical installation.

## Accessing your license agreement file

Before running the install, see the license agreement file for your locale. The license agreement files are in Adobe Acrobat PDF format and are located on the CD-ROM at /cdrom/cdrom0/license. Installation of this



## Installing ArcIMS 4.0 on Sun Solaris

software indicates an acceptance of the license agreement. The following files are included in the /cdrom/cdrom0/license directory:

arabic.pdf  
brazilian.pdf  
czech.pdf  
english.pdf  
french.pdf  
simchinese.pdf (Simplified Chinese)  
tradchinese.pdf (Traditional Chinese)  
korean.pdf  
german.pdf  
hungarian.pdf  
italian.pdf  
japanese.pdf  
latamerican.pdf (Latin American)  
latvian.pdf  
lithuanian.pdf  
polish.pdf  
portuguese.pdf  
russian.pdf  
spanish.pdf  
swedish.pdf  
ukranian.pdf

## Installing Metadata Explorer

On the computer where you wish to install Metadata Explorer, perform the following steps:

Solaris 7 includes Volume Management software, which automatically mounts the CD-ROM.

**Note:** Make sure that the user account that installs ArcIMS has write permissions to the installation directory.

**Note:** For security reasons, don't install ArcIMS as super user. ESRI recommends that you create a separate user account for installing and administering ArcIMS.

1. To start ArcIMS installation, type the following command from anywhere on your system:  

```
% /cdrom/cdrom0/ArcIMS4.0/install -load
```

This starts the menu-driven dialog for ArcIMS software installation. Default selections are in brackets [ ]. To obtain a list of options or online help, type "?" at any prompt. You can quit the installation procedure at any time by typing "q". To return to a previous question, type the caret, "^".
2. At the Enter CD-ROM mount point: [/cdrom/cdrom0/ArcIMS4.0] prompt, type the location and press <Return>.
3. At the Enter pathname to install directory prompt, type the path to where you want where you want Metadata Explorer installed. The ArcIMS version and date display.
4. At the ArcIMS Application Server Package numbers to load: [all] prompt, type "none" and press <Return>.
5. At the ArcIMS Application Server Connectors Package numbers to load: [none] prompt, press <Return> to accept the default and install no packages.
6. At the ArcIMS Manager Applications Package numbers to load: [all] prompt, type "none" and press <Return>.
7. At the ArcIMS Spatial Server Software Package numbers to load: [all] prompt, type "none" and press <Return>.
8. At the ArcIMS Metadata Explorer/Gazetteer Data Package numbers to load: [all] prompt, press <Return> to accept the default and load all packages.

## Installing ArcIMS 4.0 on Sun Solaris

9. At the ArcIMS Sample Applications and Data Package numbers to load: [none] prompt, type "?" to display a list of available packages. Type the numbers of the packages you are installing separated by commas, type "all" to load all packages, or press <Return> to accept the default and load no packages.  
**Note:** If you install any Sample packages, you need to install the Tutorial Data package. The Package selection complete prompt and a list of the packages you chose to install display.
10. At the Is this correct? [yes] prompt, press <Return> to accept the default and install the ArcIMS Manager Applications packages. The size of the selected packages and available space display.
11. At the List file names while loading? [no] prompt, press <Return> to accept the default or type "yes" and press <Return>, if desired. ArcIMS Manager Applications are installed, and the Finished loading package(s) message displays.

See *Creating and Using Metadata Services* for information on Metadata Explorer.

You need to configure your Web server to use ArcIMS Metadata Explorer.

### Step 4: Configure your Web server

Choose the steps for your Web server and servlet engine:

Configuring iPlanet

Configuring Oracle Application Server

Configuring Tomcat for Apache

Configuring WebLogic

Configuring WebSphere 3.5.5

#### Configuring iPlanet 6.0

After installing ArcIMS, you must configure your Web server for ArcIMS. If your Web server is not operational, contact your system administrator before you proceed. See [www.iplanet.com](http://www.iplanet.com) for information on problems with iPlanet.

#### Setting up your Web server for ArcIMS

1. If you do not already have a servlet directory defined, create one in the docs directory.  
`mkdir <iPlanet Installation Directory>/servers/docs/servlet`
2. Copy the com directory from <ArcIMS Installation Directory>/aims40exe/Middleware/Servlet\_Connector to <iPlanet Installation Directory>/servers/docs/servlet.
3. Copy the following from <ArcIMS Installation Directory>/aims40exe/Middleware/Servlet\_Connector to <iPlanet Installation Directory>/servers/https-<localhost>.<domain>.com/config:
  - Esrimap\_prop
  - ServletConnector\_Res.properties
  - ServletConnector\_Res\_en\_US.properties
  - WMSEsrimap\_prop
4. Open the Esrimap\_prop file in a text editor.
5. Change the value of appServerMachine to the name of your Application Server computer. For example:  
`appServerMachine=<server name>.esri.com`
6. Save and close the file.
7. Make sure your Web server is running and, in your Web browser, type:  
`http://<localhost.domain.com>:<serveradminport>`  
For example: `http://arcims.esri.com:10000`  
**Note:** If you don't know your server's administration port, open <iPlanet Installation Directory>/servers/https-admserv/config/admin.conf in a text editor and read the `http://<localhost.domain.com>:<serveradminport>` there.
8. Type your user name and password and click OK. The iPlanet Web Server Administration Server screen displays.
9. Select the server from the dropdown list and click Manage. The Server On/Off screen displays. Make sure the server is on.
10. Click Java in the navigation bar along the top.
11. The Enable/Disable Servlets/JSP screen displays. Make sure the Enable Java Globally and Enable Java for class defaultclass options are checked. Click OK.
12. Click Class Manager in the upper right corner of the screen. The Manage Virtual Servers screen displays.
13. Click Document Preferences on the left sidebar. The Document Preferences screen displays.
14. Add the following first in the list under Index Filenames:  
`default.htm,default.html,index.htm`  
Click OK.

## Installing ArcIMS 4.0 on Sun Solaris

### Creating virtual directories

After installing ArcIMS, you must create virtual directories for Output and website. A virtual directory is a mapped location on the Web server to a physical path.

1. Click Content Mgmt in the navigation bar along the top.
2. Click Additional Document Directories in the sidebar.
3. Create a directory named output for the URL prefix and map it to the location where ArcIMS Spatial Server output will be stored.
4. Web site files can be stored under <iPlanet Installation Directory>/servers/docs.  
You can specify that location when asked to provide a website directory when initializing the ArcIMS Administrator. If you wish to save Web site files to another location, you must map it the same way the ArcIMS Spatial Server Output virtual directory was mapped. Create a virtual directory named Website and map it to the desired location.
5. Click OK, then click Apply in the upper right corner of the screen. Click Apply Changes to save all changes.
6. Close iPlanet Web Server Administration Server.

### Making ArcIMS files available to Web users

1. To provide your Web users with the ArcIMS files that are necessary to view your Java Web pages, you need to do the following:  

```
cp -r <ArcIMS Installation Directory>/ViewerDownload/install <Path to website directory>/
```

  
For more information, see Installing ArcIMS Viewer.

### Using the Diagnostics tool to test your ArcIMS installation

1. Stop and start the iPlanet Web Server:  

```
setenv JAVA_HOME <JDK Installation Directory>
setenv PATH $JAVA_HOME/bin:$PATH
<iPlanet Installation Directory>/https-<machine>.<domain>/restart
<iPlanet Installation Directory>/https-admserv restart
```
2. Open <ArcIMS Installation Directory>/Xenv/ArcIMS\_Diagnostics/ArcIMS\_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.
3. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
4. Click 1 to test the ArcIMS Servlet Connector.  
If this test is successful, your ArcIMS Servlet Connector is configured correctly.  
If you receive an error message, select the error number in the dropdown list and click View. The error number and a description then display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See Configuring iPlanet for ArcIMS Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring iPlanet for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for instructions on running ArcIMS.

### Configuring Oracle Application Server with Apache

After installing ArcIMS, you must configure your Web server for ArcIMS. If your Web server and servlet engine are not operational, contact your system administrator before you proceed. See [www.oracle.com](http://www.oracle.com) for information on problems with OAS.

1. Copy the following from <ArcIMS Installation Directory>/aims40exe/Middleware/Servlet\_Connector to <OAS Installation Directory>/Apache/Jserv/servlets:  
com directory

## Installing ArcIMS 4.0 on Sun Solaris

Esrimap\_prop  
ServletConnector\_Res.properties  
ServletConnector\_Res\_en\_US.properties  
WMSEsrimap\_prop

2. Open the Esrimap\_prop file in a text editor.
3. Change the value of appServerMachine to the name of your Application Server computer. For example:  
appServerMachine=<server name>.esri.com
4. Save and close the file.

## Creating virtual directories

After installing ArcIMS, you must create virtual directories for Output and Website. A virtual directory is a mapped location on the Web server to a physical path.

1. Open the file <OAS Installation Directory>/Apache/Apache/conf/httpd.conf.
2. In the Alias section, add the following for Website and Output:
3. Alias /output "<Path to output directory>/output"  
<Directory "<Path to output directory>/output">  
Options Indexes MultiViews  
AllowOverride None  
Order allow,deny  
Allow from all  
</Directory>  
Alias /website "<Path to website directory>/website"  
<Directory "<Path to website directory>/website">  
Options Indexes MultiViews  
AllowOverride None  
Order allow,deny  
Allow from all  
</Directory>

For the Web pages designed in ArcIMS to start automatically, make sure your DirectoryIndex line includes default.htm. For example:

```
DirectoryIndex index.html default.htm
```

4. Save and close the file.

## Making ArcIMS files available to Web users

1. To provide your Web users with the ArcIMS files that are necessary to view your Java Web pages, you need to do the following:  
cp -r <ArcIMS Installation Directory>/aims40exe/ViewerDownload/install  
<Path to website directory>

For more information, see Installing ArcIMS Viewer.

## Using the Diagnostics tool to test your ArcIMS installation

1. Start Oracle Application Server by typing:  
setenv JAVA\_HOME <JDK Installation Directory>  
setenv PATH \$JAVA\_HOME/bin:\$PATH  
<OAS Installation Directory>/Apache/Apache/bin/apachectl restart
2. Open <ArcIMS Installation Directory>/aims40exe/Xenv/ArcIMS\_Diagnostics/ArcIMS\_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.
3. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
4. Click 1 to test the ArcIMS Servlet Connector.  
If this test is successful, your ArcIMS Servlet Connector is configured correctly.

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If you receive an error message, select the error number in the dropdown list and click View. The error number and a description then display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See *Configuring Oracle Application Server for ArcIMS Service Administrator* for information on configuring ArcIMS Service Administrator.

See *Configuring Oracle Application Server for Metadata Explorer* for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

## Configuring Tomcat for Apache Web Server

After installing ArcIMS on your system, you must configure the Apache Web Server and Tomcat for ArcIMS. These instructions assume Apache and Tomcat are already running properly. If your Web server and servlet engine are not operational, contact your system administrator before you proceed. See [www.apache.org](http://www.apache.org) for information on problems with Apache and Tomcat.

### Setting up your Web server for ArcIMS

1. Open `<Apache Installation Directory>/conf/httpd.conf` in a text editor. Verify that the `tomcat-apache.conf` file is declared as an include in the `httpd.conf` file.  
If it is not declared, add the following at the bottom of the `httpd.conf` file:  
`include <Tomcat Installation Directory>/conf/tomcat-apache.conf`
2. Verify that the line  
`ApJServMount /servlet /ROOT`  
is included in the `tomcat-apache.conf` file. If it is not listed, add it to the end of the file.
3. Save and close the file.
4. Copy the following from `<ArcIMS Installation Directory>/aims40exe/Middleware/Servlet_Connector` to `<Tomcat Installation Directory>/webapps/ROOT/WEB-INF/classes:`  
`com directory`  
`Esrimap_prop`  
`ServletConnector_Res.properties`  
`ServletConnector_Res_en_US.properties`  
`WMSEsrimap_prop`
5. Open the `Esrimap_prop` file in a text editor.
6. Change the value of `appServerMachine` to the name of your Application Server computer. For example:  
`appServerMachine=<server name>.esri.com.`
7. Save and close the file.

### Creating virtual directories

After installing ArcIMS, you must create virtual directories for Output and Website. A virtual directory is a mapped location on the Web server to a physical path.

1. Open the file `<Apache Installation Directory>/conf/httpd.conf`.
2. In the Alias section, add the following for Website and Output:  

```
Alias /output "/<Path to output directory>/output"  
<Directory "/<Path to output directory>/output">  
    Options Indexes MultiViews  
    AllowOverride None  
    Order allow,deny  
    Allow from all  
</Directory>  
Alias /website "/<Path to website directory>/website"  
<Directory "/<Path to website directory>/website">  
    Options Indexes MultiViews  
    AllowOverride None
```

## Installing ArcIMS 4.0 on Sun Solaris

```
Order allow,deny
Allow from all
</Directory>
```

3. For the Web pages designed in ArcIMS to start automatically, make sure your DirectoryIndex line includes default.htm. For example:

```
DirectoryIndex index.html default.htm
```

4. Save and close the file.

## Making ArcIMS files available to Web users

1. To provide your Web users with the ArcIMS files that are necessary to view your Java Web pages, you need to do the following:

```
cp -r <ArcIMS Installation Directory>/aims40exe/ViewerDownLoad/install
<Path to website directory>
```

For more information, see Installing ArcIMS Viewer.

## Using the Diagnostics tool to test your ArcIMS installation

1. Start the Tomcat and Apache services by typing:  
setenv JAVA\_HOME <JDK Installation Directory>  
<Tomcat Installation Directory>/bin/startup.sh  
<Apache Installation Directory>/bin/apachectl start
2. Open <ArcIMS Installation Directory>/aims40exe/Xenv/ArcIMS\_Diagnostics/ArcIMS\_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.
3. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
4. Click 1 to test the ArcIMS Servlet Connector.

If this test is successful, your ArcIMS Servlet Connector is configured correctly.

If you receive an error message, select the error number in the dropdown list and click View. The error number and a description then display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See WMS for information on configuring for WMS.

See Configuring Tomcat for Apache for ArcIMS Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring Tomcat for Apache for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for instructions on running ArcIMS.

## Configuring WebLogic

After installing ArcIMS, you must configure your Web server for ArcIMS. If your Web server is not operational, contact your system administrator before you proceed. See [www.bea.com](http://www.bea.com) for information on problems with WebLogic.

1. In your Web browser, type:  
http://<localhost.domain.com>:<serveradminport>/console, for example,  
http://arcims.esri.com:10000/console.
2. Type your password.
3. On the left sidebar, click Servers.
4. Right-click <WebLogic Server Name>, select Stop this server, and click Yes.
5. Copy the following items from <ArcIMS Installation Directory>/aims40exe/Middleware/Servlet\_Connector to <WebLogic Installation Directory>/bea/wlserver6.1/config/mydomain/applications/DefaultWebApp/WEB-INF/classes:
  - com directory com directory
  - Esrimap\_prop

## Installing ArcIMS 4.0 on Sun Solaris

- ServletConnector\_Res.properties
- ServletConnector\_Res\_en\_US.properties files
- WMSEsrimap\_prop

**Note:** You may need to create a classes directory.

6. Open the Esrimap\_prop file in a text editor.
7. Change the value of AppServerMachine to the name of your Application Server computer. For example:  
AppServerMachine=<server name>.esri.com
8. Save and close the file.
9. In a text editor, open the <WebLogic Installation Directory>/bea/wlserver6.1/config/mydomain/applications/DefaultWebApp/WEB-INF/web.xml file.
10. Find the line <web-app> and add the following under it:

```
<servlet>
<servlet-name>Esrimap</servlet-name>
<servlet-class>com.esri.esrimap.Esrimap</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>Esrimap</servlet-name>
<url-pattern>/servlet/com.esri.esrimap.Esrimap/*</url-pattern>
</servlet-mapping>
<welcome-file-list>
<welcome-file>default.htm</welcome-file>
</welcome-file-list>
```

11. Save and close the file.
12. Create a directory for ArcIMS image output:  
mkdir <WebLogic Installation Directory>/bea/wlserver6.1/config/mydomain/applications/DefaultWebApp/output  
**Note:** Make sure you have write permission to this directory.
13. Create a directory for ArcIMS Web site files:  
mkdir <WebLogic Installation Directory>/bea/wlserver6.1/config/mydomain/applications/DefaultWebApp/website  
**Note:** Make sure you have write permission to this directory.
14. Start WebLogic by typing:  
<WebLogic Installation Directory>/bea/wlserver6.1/config/mydomain/startWebLogic.sh
15. In the WebLogic console, on the left sidebar, click Web Applications.
16. Click DefaultWebApp.
17. On the right panel, under the Files tab, check the box to enable Index Directories and click Apply.

## Making ArcIMS files available to Web users

1. To provide your Web users with the ArcIMS files that are necessary to view your Java Web pages, you need to do the following:  
cp -r <ArcIMS Installation Directory>/aims40exe/ViewerDownload/install <Path to website directory>  
For more information, see Installing ArcIMS Viewer.

## Using the Diagnostics tool to test your ArcIMS installation

1. Start WebLogic by typing:  
<WebLogic Installation Directory>/bea/wlserver6.1/config/mydomain/startWebLogic.sh



## Installing ArcIMS 4.0 on Sun Solaris

2. Open <ArcIMS Installation Directory>/aims40exe/Xenv/ArcIMS\_Diagnostics/ArcIMS\_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.
3. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
4. Click 1 to test the ArcIMS Servlet Connector.  
If this test is successful, your ArcIMS Servlet Connector is configured correctly.  
If you receive an error message, select the error number in the dropdown list and click View. The error number and a description then display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See WMS for information on configuring for WMS.

See Configuring WebLogic for ArcIMS Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring WebLogic for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for instructions on running ArcIMS.

## Configuring WebSphere 3.5.5 for IBM HTTP server

After installing ArcIMS, you must configure your Web server for ArcIMS. If your Web server and servlet engine are not operational, contact your system administrator before you proceed. See [www.ibm.com](http://www.ibm.com) for information on problems with WebSphere.

1. Copy the following from <ArcIMS Installation Directory>/aims40exe/Middleware/Servlet\_Connector to <WebSphere Installation Directory>/WebSphere/AppServer/servlets:
  - com directory
  - Esrimap\_prop
  - ServletConnector\_Res.properties
  - ServletConnector\_Res\_en\_US.properties files
  - WMSEsrimap\_prop
2. Open the Esrimap\_prop file in a text editor.
3. Change the value of AppServerMachine to the name of your Application Server computer. For example:  
AppServerMachine=<server name>.esri.com
4. Save and close the file.

## Creating virtual directories

After installing ArcIMS, you must create virtual directories for output and website. A virtual directory is a mapped location on the Web server to a physical path.

1. Open the file <IBM HTTP Server Installation Directory>/conf/httpd.conf in a text editor.
2. In the Alias section, add the following for Web site and server output:

```
Alias /output "<Path to output directory>/output"  
<Directory "<Path to output directory>/output">  
    Options Indexes MultiViews  
    AllowOverride None  
    Order allow,deny  
    Allow from all  
</Directory>  
Alias /website "<Path to website directory>/website"  
<Directory "<Path to website directory>/website">  
    Options Indexes MultiViews  
    AllowOverride None  
    Order allow,deny  
    Allow from all  
</Directory>
```

## Installing ArcIMS 4.0 on Sun Solaris

3. For the Web pages designed in ArcIMS to start automatically, make sure your DirectoryIndex line includes default.htm. For example:  

```
DirectoryIndex index.html default.htm
```
4. Save and close the file.

## Making ArcIMS files available to Web users

1. To provide your Web users with the ArcIMS files that are necessary to view your Java Web pages, you need to do the following:  

```
cp -r <ArcIMS Installation Directory>/aims40exe/ViewerDownLoad/install  
<Path to website directory>
```

For more information, please see Installing ArcIMS Viewer.

## Using the Diagnostics tool to test your ArcIMS installation

1. Start the Administrator and HTTP servers by navigating to <IBM HTTP Server Installation Directory>/bin and typing:  

```
setenv JAVA_HOME <JDK Installation Directory>  
setenv PATH $JAVA_HOME/bin:$PATH  
./adminctl start  
./apachectl start
```
2. Start the WebSphere Server:  

```
<WebSphere Installation Directory>/bin/startServer.sh
```
3. Open <ArcIMS Installation Directory>/aims40exe/Xenv/ArcIMS\_Diagnostics/ArcIMS\_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.
4. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
5. Click 1 to test the ArcIMS Servlet Connector.  
If this test is successful, your ArcIMS Servlet Connector is configured correctly.  
If you receive an error message, select the error number in the dropdown list and click View. The error number and a description then display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See WMS for information on configuring for WMS.

See Configuring WebSphere 3.5.5 for ArcIMS Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring WebSphere 3.5.5 for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for instructions on running ArcIMS.

## Configuring your Web server for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server:

Configuring iPlanet

Configuring Oracle Application Server

Configuring Tomcat for Apache

Configuring WebLogic

Configuring WebSphere 3.5.5

## Configuring iPlanet for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server:

1. In a text editor, open <ArcIMS Installation Directory>/aims40exe/Middleware/Application\_Server/AppServer.properties.

## Installing ArcIMS 4.0 on Sun Solaris

- Find `preferenceFile=` and edit it to point to the `sitePreferences.properties` file:  
`preferenceFile=<ArcIMS Installation Directory>/aims40exe/Middleware/  
Application_Server/sitePreferences.properties`
  - Save and close the file.
  - In your Web browser, type:  
`http://<localhost.domain.com>:<serveradminport>`  
For example: `http://arcims.esri.com:10000`  
**Note:** If you don't know your server's administration port, open `<iPlanet Installation Directory>/servers/https-admserv/config/admin.conf` in a text editor and read the `http://<localhost.domain.com>:<serveradminport>` there.
  - Type your user name and password and click OK.
  - Click the Global Settings tab.
  - Click Configure JRE/JDK Paths on the left sidebar.
  - Click JDK.
  - For path, type the JDK Path, for example, `<JDK Installation Directory>/jdk1.3.1`. The Libpath and Classpath can be left blank.
  - Click OK and exit iPlanet.
  - In a text editor, open `<iPlanet Installation Directory>/https-<localhost>.<domain>.com/config/Web-apps.xml`.
  - Scroll to the end of the file and add the following lines before `</vs>`:  
`<Web-app uri="/esriadmin" dir="<ArcIMS Installation Directory>/  
aims40exe/Administrator/esriadmin" />`  
**Note:** Make sure you specify a valid directory path for Web-app. Invalid entries for Web-app will prevent your iPlanet Web server from starting. Also, the context path you specify, `/esriadmin`, is case sensitive. You might want to create additional Web-apps with names like `ESRIAdmin` or `ESRIADMIN` pointing to ArcIMS Service Administrator.
  - Save and close the file.
  - Stop and Start the iPlanet Web Server:  
`setenv JAVA_HOME <JDK Installation Directory>  
setenv PATH $JAVA_HOME/bin:$PATH  
<iPlanet Installation Directory>/https-<machine>.<domain>/restart  
<iPlanet Installation Directory>/https-admserv restart`
- See *Using ArcIMS*, 'Appendix A: Using ArcIMS Service Administrator,' for information.  
See *Configuring iPlanet for Metadata Explorer* for information on configuring Metadata Explorer.  
See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

## Configuring Oracle Application Server for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server:

- Install Oracle9iAS Containers for J2EE (OC4J).  
**Note:** You can find OC4J in the `<OAS Installation Directory>/J2EE_containers/oc4j.zip` file after you've installed Oracle 9i Application Server. If you don't have the `oc4j.zip` file, you can install it from your Oracle Application Server 9i installation CD or you can download it from Oracle's Web site.  
To install OC4J, unzip the `oc4j.zip` file in the Oracle installation directory and follow the instructions in the `README.TXT` file.
- In a text editor, open `<J2EE Installation Directory>/config/application.xml` and add the following line under the line `<orion-application>`:  
`<web-module id="esriadmin" path="<ArcIMS Installation  
Directory>/aims40exe/Administrator/esriadmin" />`
- Save and close the file.

## Installing ArcIMS 4.0 on Sun Solaris

4. In a text editor, open <J2EE Installation Directory>/config/default-web-site.xml and add the following under the line <web-site port="8888">:  

```
<web-app application="default" name="esriadmin" root="/esriadmin" />
```
  5. Save and close the file.
  6. Start OC4J.
  7. In a text editor, open <OAS Installation Directory>/Apache/Apache/conf/httpd.conf and add the following two lines:  

```
ProxyPass /esriadmin http://hostname:8888/esriadmin  
ProxyPassReverse /esriadmin http://hostname:8888/esriadmin
```
  8. Save and close the file.
  9. In a text editor, open <ArcIMS Installation Directory>/aims40exe/Middleware/Application\_Server/AppServer.properties.
  10. Find `preferenceFile=` and edit it to point to the `sitePreferences.properties` file:  

```
preferenceFile=<ArcIMS Installation Directory>/  
aims40exe/Middleware/Application_Server/sitePreferences.properties
```
  11. Save and close the file.
  12. Start Oracle Application Server by typing:  

```
<OAS Installation Directory>/Apache/Apache/bin/apachectl restart
```
- See *Using ArcIMS*, 'Appendix A: Using ArcIMS Service Administrator,' for information.  
See *Configuring Oracle Application Server for Metadata Explorer* for information on configuring Metadata Explorer.  
See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

## Configuring Tomcat for Apache for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server:

1. Navigate to <ArcIMS Installation Directory>/aims40exe/Administrator and copy the esriadmin directory to <Tomcat Installation Directory>/webapps.
  2. In a text editor, open <Apache Installation Directory>/conf/httpd.conf.
  3. Find the alias section and add a new alias pointing to ArcIMS Service Administrator:  

```
Alias /esriadmin "<Tomcat Installation Directory>/webapps/esriadmin"
```
  4. Save and close the file.
  5. In a text editor, open <ArcIMS Installation Directory>/aims40exe/Middleware/Application\_Server/AppServer.properties.
  6. Find `preferenceFile=` and edit it to point to the `sitePreferences.properties` file:  

```
preferenceFile=<ArcIMS Installation Directory>/aims40exe/Middleware/  
Application_Server/sitePreferences.properties
```
  7. Save and close the file.
  8. Start the Tomcat and Apache services by typing:  

```
setenv JAVA_HOME <JDK Installation Directory>  
setenv PATH $JAVA_HOME/bin:$PATH  
<Tomcat Installation Directory>/bin/startup.sh  
<Apache Installation Directory>/bin/apachectl start
```
- See *Using ArcIMS*, 'Appendix A: Using ArcIMS Service Administrator,' for information.  
See *Configuring Tomcat for Apache for Metadata Explorer* for information on configuring Metadata Explorer.  
See Step 5: Configuring ArcIMS for the final step required to get ArcIMS running.

### Configuring WebLogic for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server:

1. Start WebLogic by typing:  
`<WebLogic Installation Directory>/bea/wlserver6.1/config/mydomain/startWebLogic.sh`
2. In your Web browser, type:  
`http://<localhost.domain.com>:<serveradminport>/console.`  
(For example, `http://arcims.esri.com:10000/console`)
3. Type your password.
4. On the left sidebar, click Web Applications.
5. Click Configure a new Web Application.
6. For the Name, type: `esriadmin`
7. For Path URI, type: `<ArcIMS Installation Directory>/aims40exe/Administrator/esriadmin`
8. Click Create.
9. On the left sidebar, click Servers.
10. Click `<WebLogic Server Name>`.
11. Click Deployments.
12. Click Web Applications.
13. Click the right arrow to move `esriadmin` from Available to Chosen.
14. Click Apply.
15. Close the console.

See *Using ArcIMS*, 'Appendix A: Using ArcIMS Service Administrator,' for information.

See *Configuring WebLogic for Metadata Explorer* for information on configuring Metadata Explorer.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

### Configuring WebSphere 3.5.5 for ArcIMS Service Administrator

If you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server:

1. In a text editor, open `<ArcIMS Installation Directory>/aims40exe/Middleware/Application_Server/AppServer.properties`.
2. Find `preferenceFile=` and edit it to point to the `sitePreferences.properties` file:  
`preferenceFile=<ArcIMS Installation Directory>/aims40exe/Middleware/Application_Server/sitePreferences.properties`
3. Save and close the file.
4. Start the Administrator and HTTP servers by navigating to `<IBM HTTP Server Installation Directory>/bin` and typing:  

```
./adminctl start
./apachectl start
```
5. Start the WebSphere Server:  
`<WebSphere Installation Directory>/bin/startServer.sh`
6. Start the WebSphere Administrative Client:  
`<WebSphere Installation Directory>/bin/adminclient.sh`  
The WebSphere console displays.
7. Click Console, click Tasks, click Convert a War File.
8. On the left sidebar, expand Nodes, expand the computer name, then expand Default Server.
9. Select Default Servlet Engine.
10. Click Next.
11. Expand Virtual Hosts.

## Installing ArcIMS 4.0 on Sun Solaris

12. Select default\_host.
  13. Click Next.
  14. Browse to <ArcIMS Installation Directory>/aims40exe/Administrator/esriadmin.war.
  15. Click Next.
  16. Browse to your destination directory, usually under the default\_host directory at <WebSphere Installation Directory>/Appserver/hosts/default\_host.
  17. Click Next.
  18. For Web Application Web Path, type: esriadmin
  19. For Web Application Name, type: esriadmin
  20. Click Finish.  
After the Web application is deployed, you will see Command "warfile.convert" completed successfully Information dialog; click OK.
  21. Expand the WebSphere Administrative Domain, expand the <hostname> node, expand Default server, then expand Default Servlet Engine.
  22. Right-click on the esriadmin node and select Restart Web App.  
You will see the Command esriadmin.setRefreshConfig completed successfully Information dialog; click OK.
  23. Close the WebSphere Advanced Administrative Console.
  24. Create a directory called lib under <WebSphere Installation Directory>/Appserver/hosts/default\_host/esriadmin/web/WEB-INF.
  25. Navigate to <WebSphere Installation Directory>/Appserver/hosts/default\_host/esriadmin/servlets  
and copy the arcims\_taglib.tld and I18n.tld files to <WebSphere Installation Directory>/Appserver/hosts/default\_host/esriadmin/web/WEB-INF/lib.
  26. Start the Administrator and HTTP servers by navigating to <IBM HTTP Server Installation Directory>/bin and typing:  
./adminctl start  
./apachectl start
  27. Start the WebSphere Server:  
<WebSphere Installation Directory>/bin/startServer.sh
- See *Using ArcIMS*, 'Appendix A: Using ArcIMS Service Administrator,' for information.  
See Configure WebSphere 3.5.5 for Metadata Explorer for information on configuring Metadata Explorer.  
See Step 5: Configuring ArcIMS for the final step required to get ArcIMS running.

## Setting up ArcSDE UNIX and Linux Servers for ArcIMS Service Administrator

### Introduction

This document describes how to set up ArcSDE UNIX and Linux servers for use with the ArcIMS Service Administrator. This document presumes that you have already installed and configured your ArcSDE Server for the DB2, Informix, and Oracle relational database management systems.

To use an ArcSDE Server with ArcIMS Service Administrator, you should already have installed ArcIMS Service Administrator and configured your Web server for ArcIMS Service Administrator. See the ArcIMS Service Administrator instructions for your platform: HP-UX, IBM AIX, Linux Red Hat, or Sun Solaris.

### Background

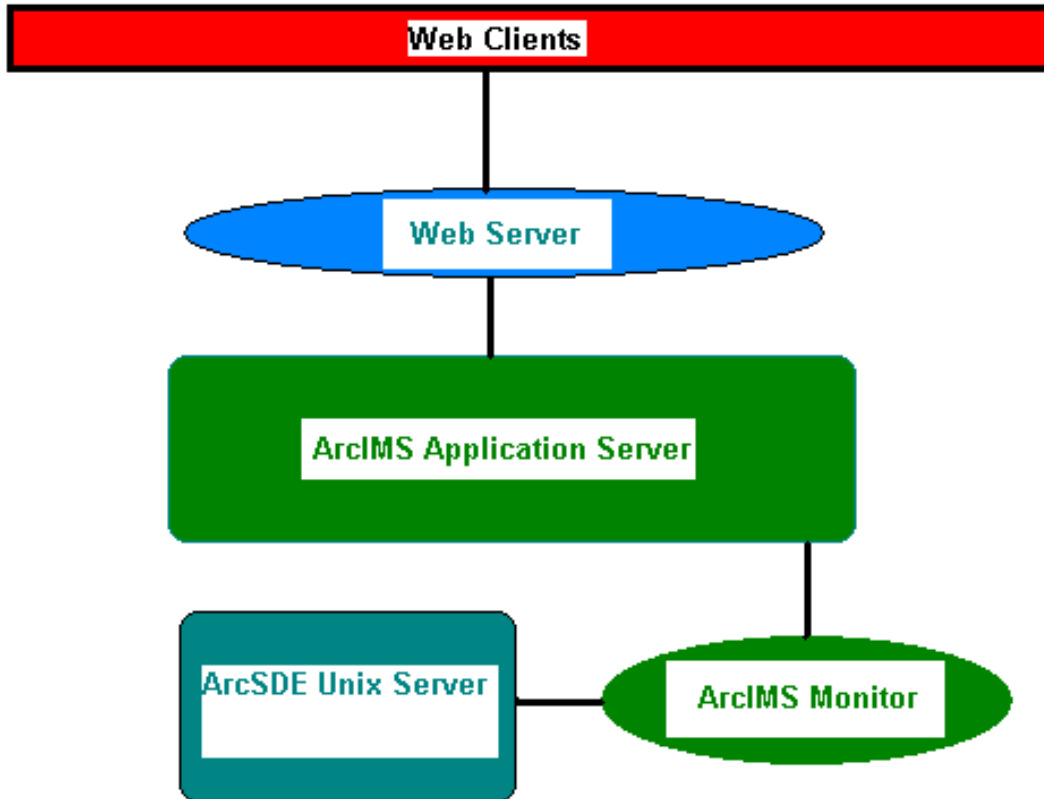
The ArcIMS Service Administrator is a JavaServer Pages application. It uses a presentation tier within a Web browser to administer an ArcSDE service. The ArcIMS Monitor and ArcIMS Application Server are used to direct SDE administration requests to an ArcSDE Server. Functionality administered at this release includes:

- Start, stop, pause, resume an ArcSDE three-tier service.

## Installing ArcIMS 4.0 on Sun Solaris

- List or terminate all ArcSDE gsrvr connections.
- Retrieve an ArcSDE server status including number of connections and release number.

This Web-based administrator uses the ArcIMS Application Server and ArcIMS Monitor to send requests to the ArcSDE Application Server. A user makes a request through an HTML page. This page is generated by JSP, which uses a proxy tier to generate ArcXML requests which are sent through the application server to an ArcIMS monitor. The ArcIMS monitor then generates ArcSDE instance management requests.



## Setting up the ArcSDE Server

To Install and configure ArcSDE, you must install and configure your ArcSDE Server first. Make sure you can start your ArcSDE service with the `sdemon -o start` command. Make sure the `services.sde` file in `$$SDEHOME/etc` contains a valid service name entry: `sde82_inf 5200/tcp`

1. You must also have the `jsde82_sdk.jar` and the `jsde82_sdkres.jar` files in your CLASSPATH. These .jar files can be installed from the ArcSDE installation CD. The easiest way to locate them in your CLASSPATH is to place them into your .jdk or .jre installation directory under the lib/ext folder.
2. Install ArcIMS Monitor for your platform onto your ArcSDE Server: HP-UX, IBM AIX, Linux Red Hat, or Sun Solaris.

You should run the install as the same user who owns the .SDE binaries and directories. Most likely, this will be the .SDE user.

3. Once the software is installed:
  - a. Type: `cd <ArcIMS Installation Directory>/aims40exe/Monitor`
  - b. Open the `Monitor.properties` file in a text editor.
  - c. Change the `registryHost` setting from `localhost` to your ArcIMS Application Server:  
`registryHost=<server name>.<domain>.com`
  - d. Uncomment the `sdePropertiesFilename` parameter: `sdePropertiesFilename=Sde.properties`

## Installing ArcIMS 4.0 on Sun Solaris

- e. Save and close the file.
4. Open the Sde.Properties file in that same directory in a text editor:
  - a. Uncomment the instanceNames property and set it equal to your ArcSDE service name:  
`instanceNames=esri_sde`
  - b. Uncomment the portNumbers property and set it equal to your ArcSDE server port number:  
`portNumbers=5151`
  - c. Uncomment the sdehomes property and set it equal to your \$SDEHOME path: `sdehomes=/  
server  
name>/sde82`
5. Open the aimsmonitor script in the <ArcIMS install location>/Xenv directory in a text editor:
  - a. Uncomment the AIMSHOME property and set it to the path to your ArcIMS Installation Directory:  
`AIMSHOME=/  
server  
name>/aims40exe; export AIMSHOME`
  - b. Uncomment the JAVA\_HOME property and set it to the path to your Java or .jre installation:  
`JAVA_HOME=/usr/java/jre1.3.1_02`

**Note:** For this utility, you must have JDK or JRE installed. You can install this from the ArcIMS installation CD.
6. Uncomment the \$LD\_LIBRARY\_PATH and \$LIBPATH properties accordingly. Append your existing \$LD\_LIBRARY\_PATH or \$LIBPATH to this entry as well.
7. Start the ArcIMS monitor in the \$AIMSHOME/Xenv directory:  
`./aimsmonitor start &`
8. Open ArcIMS Service Administrator and login. If you have set up the software correctly, you will see an ArcSDE option.

See *Using ArcIMS*, 'Appendix A: Using ArcIMS Service Administrator,' for information on the ArcIMS Service Administrator.

For information about installing, configuring, or running ArcSDE, refer to the appropriate ArcSDE documentation.

## Configuring your Web server for ArcIMS Metadata Explorer

If you wish to use ArcIMS Metadata Explorer, you must configure your Web server:

Configuring iPlanet

Configuring Oracle Application Server

Configuring Tomcat for Apache

Configuring WebLogic

Configuring WebSphere 3.5.5

### Configuring iPlanet for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server:

**Note:** Skip to Step 8 if you already configured your JRE/JDK paths for ArcIMS Service Administrator.

1. In your Web browser, type:  
`http://<localhost.domain.com>:<serveradminport>`  
For example: `http://arcims.esri.com:10000`  
**Note:** If you don't know your server's administration port, open <iPlanet Installation Directory>/servers/https-admserv/config/admin.conf in a text editor and read the `http://<localhost.domain.com>:<serveradminport>` there.
2. Type your user name and password and click OK.
3. Click the Global Settings tab.
4. Click Configure JRE/JDK Paths on the left sidebar.
5. Click JDK.
6. For path, type the JDK Path. For example, <JDK Installation Directory>/jdk1.3.1. The Libpath and Classpath can be left blank.
7. Click OK and exit iPlanet.



## Installing ArcIMS 4.0 on Sun Solaris

- In a text editor, open <iPlanet Installation Directory>/https-<localhost>.<domain>.com/config/Web-apps.xml.
- Scroll to the end of the file and add the following lines before </vs>.  

```
<Web-app uri="/metadataexplorer" dir="<ArcIMS Installation Directory>/aims40exe/Metadata/MetadataExplorer" />
```

**Note:** Make sure you specify a valid directory path for Web-app. Invalid entries for Web-app will prevent your iPlanet Web server from starting. Also, the context path you specify, /metadataexplorer, is case sensitive. You might want to create additional Web-apps with names such as MetadataExplorer or METADATAEXPLORER pointing to ArcIMS Metadata Explorer.

- Save and close the file.
- Stop and start the iPlanet Web Server:  

```
setenv JAVA_HOME <JDK Installation Directory>
setenv PATH $JAVA_HOME/bin:$PATH
<iPlanet Installation Directory>/https-<machine>.<domain>/restart
<iPlanet Installation Directory>/https-admserv restart
```

See *Creating and Using Metadata Services* for information on Metadata Explorer.

See *Configuring iPlanet for ArcIMS Service Administrator* for information on configuring ArcIMS Service Administrator.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

## Configuring Oracle Application Server for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server:

**Note:** Skip to Step 2 if you already installed Oracle9iAS Containers for ArcIMS Service Administrator.

- Install Oracle9iAS Containers for J2EE (OC4J).  
**Note:** You can find OC4J in the <OAS Installation Directory>/J2EE\_containers/oc4j.zip file after you've installed Oracle 9i Application Server. If you don't have the oc4j.zip file, you can install it from your Oracle Application Server 9i installation CD or you can download it from Oracle's Web site.  
To install OC4J, unzip the oc4j.zip file in the OAS installation directory and follow the instructions in the README.TXT file.
- In a text editor, open <J2EE Installation Directory>/config/application.xml and add the following line under the line <orion-application> :  

```
<web-module id="metadataexplorer" path=" <ArcIMS Installation Directory>/aims40exe/Metadata/MetadataExplorer" />
```
- Save and close the file.
- In a text editor, open <J2EE Installation Directory>/config/default-web-site.xml and add the following under the line <web-site port="8888">:  

```
<web-app application="default" name="metatdataexplorer"
root="/metadataexplorer" />
```
- Save and close the file.
- Start OC4J.
- In a text editor, open <OAS Installation Directory>/Apache/Apache/conf/httpd.conf and add the following two lines:  

```
ProxyPass /metadataexplorer http://hostname:8888/metadataexplorer
ProxyPassReverse /metadataexplorer http://hostname:8888/
metadataexplorer
```
- Save and close the file.
- Start Oracle Application Server by typing:  

```
<OAS Installation Directory>/Apache/Apache/bin/apachectl restart
```

See *Creating and Using Metadata Services* for information on Metadata Explorer.

## Installing ArcIMS 4.0 on Sun Solaris

See *Configuring Oracle Application Server for ArcIMS Service Administrator* for information on configuring ArcIMS Service Administrator.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

### Configuring Tomcat for Apache for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server:

1. Navigate to <ArcIMS Installation Directory>/aims40exe/Metadata and copy the MetadataExplorer directory to <Tomcat Installation Directory>/webapps.
2. In a text editor, open <Apache Installation Directory>/conf/httpd.conf.
3. Find the alias section and add a new alias pointing to ArcIMS Service Administrator:  
Alias /metadataexplorer "<Tomcat Installation Directory>/webapps/MetadataExplorer"
4. Save and close the file.
5. Start the Tomcat and Apache services by typing:  
setenv JAVA\_HOME <JDK Installation Directory>  
setenv PATH \$JAVA\_HOME/bin:\$PATH  
<Tomcat Installation Directory>/bin/startup.sh  
<Apache Installation Directory>/bin/apachectl start

See *Creating and Using Metadata Services* for information on Metadata Explorer.

See *Configuring Tomcat for Apache for ArcIMS Service Administrator* for information on configuring ArcIMS Service Administrator.

See Step 5: Configuring ArcIMS for the final step required to get ArcIMS running.

### Configuring WebLogic for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server:

1. Start WebLogic by typing:  
<WebLogic Installation Directory>/bea/wlserver6.1/config/mydomain/startWebLogic.sh
2. In your Web browser, type:  
http://<localhost.domain.com>:<serveradminport>/console, for example,  
http://arcims.esri.com:10000/console.
3. Type your password.
4. On the left sidebar, click Web Applications.
5. Click Configure a new Web Application.
6. For the name, type: metadataexplorer
7. For Path URI, type: <ArcIMS Installation Directory>/aims40exe/Metadata/MetadataExplorer
8. Click Create.
9. On the left sidebar, click Servers.
10. Click <WebLogic Server Name>.
11. Click Deployments.
12. Click Web Applications.
13. Click the right arrow to move metadataexplorer from Available to Chosen.
14. Click Apply.
15. On the left sidebar, click Servers.
16. Right-click WebLogic, select Stop this server, and click Yes.
17. Close the console.

See *Creating and Using Metadata Services* for information on Metadata Explorer.

## Installing ArcIMS 4.0 on Sun Solaris

See Configuring WebLogic for ArcIMS Service Administrator for information on configuring ArcIMS Service Administrator.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

### Configuring WebSphere 3.5.5 for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server:

1. Start the Administrator and HTTP servers by navigating to <IBM HTTP Server Installation Directory>/bin and typing:  

```
./adminctl start  
./apachectl start
```
2. Start the WebSphere Server:  

```
<WebSphere Installation Directory>/bin/startServer.sh
```
3. Start the WebSphere Administrative Client:  

```
<WebSphere Installation Directory>/bin/adminclient.sh
```

The WebSphere console displays.
4. Click Console, click Tasks, click Convert a War File.
5. On the left sidebar, expand Nodes, expand the computer name, then expand Default Server.
6. Select Default Servlet Engine.
7. Click Next.
8. Expand Virtual Hosts.
9. Select default\_host.
10. Click Next.
11. Browse to <ArcIMS Installation Directory>/aims40exe/Metadata/MetadataExplorer.war.
12. Click Next.
13. Browse to your destination directory, usually under the default\_host directory at <WebSphere Installation Directory>/Appserver/hosts/default\_host.
14. Click Next.
15. For Web Application Web Path, type: metadataexplorer
16. For Web Application Name, type: metadataexplorer
17. Click Finish.  
After the Web application is deployed, you will see Command warfile.convert completed successfully Information dialog; click OK.
18. Expand the WebSphere Administrative Domain, expand the <hostname> node, expand Default server, then expand Default Servlet Engine.
19. Right-click on the metadataexplorer node and select Restart Web App.  
You will see the Command metadataexplorer.setRefreshConfig completed successfully Information dialog; click OK.
20. Close the WebSphere Advanced Administrative Console.
21. Create a directory called lib under <WebSphere Installation Directory>/Appserver/hosts/default\_host/metadataexplorer/web/WEB-INF.
22. Navigate to <WebSphere Installation Directory>/Appserver/hosts/default\_host/metadataexplorer/servlets and copy the arcims\_taglib.tld and i18n.tld files to <WebSphere Installation Directory>/Appserver/hosts/default\_host/metadataexplorer/web/WEB-INF/lib.
23. Start the Administrator and HTTP servers by navigating to <IBM HTTP Server Installation Directory>/bin and typing:  

```
./adminctl start  
./apachectl start
```

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24. Start the WebSphere Server:

```
<WebSphere Installation Directory>/bin/startServer.sh
```

See *Creating and Using Metadata Services* for information on Metadata Explorer.

See *Configuring WebSphere 3.5.5 for ArcIMS Service Administrator* for information on configuring ArcIMS Service Administrator.

See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

### Step 5: Configure ArcIMS

Perform the following activities to set up your ArcIMS environment:

Setting up your ArcIMS account

Using ArcIMS with a proxy server

Starting the ArcIMS processes

Running ArcIMS

ESRI recommends that you execute ArcIMS from a C shell. The following instructions are for a C shell environment setup.

#### Setting up your ArcIMS account

ESRI recommends that you set up a separate account for installing and administering ArcIMS.

1. Add the following lines to your `.login` or `.cshrc` file:  

```
setenv AIMSHOME <ArcIMS Installation Directory>/aims40exe  
setenv LD_LIBRARY_PATH $AIMSHOME/lib:$AIMSHOME/bin
```

Make sure that `$AIMSHOME/bin` is in the `PATH`.
  2. To enable the changes, type:  

```
% source <.login or .cshrc>
```

The `$AIMSHOME/Xenv` directory contains sample system startup files such as the `.login` and `.cshrc` files.
  3. Copy the `$AIMSHOME/Xenv/aimsdefaults.properties` file to your `HOME` directory.  

```
% cp $AIMSHOME/Xenv/aimsdefaults.properties $HOME
```
  4. Edit the `$HOME/aimsdefaults.properties` file.

**Note:** Do not use system or user variables in this file. Provide the complete path.

    - a. Replace all references to `ARCIMSHOST` with the full name of your host computer.
    - b. Add a working directory location. Updating this variable will save time in navigating to the location where map configuration files are stored. To change this location, you must add a path to the following variable:  

```
WorkingDir=<path to location where you wish to store map  
configuration files>
```
    - c. For geocoding, you must add a path to the following variable:  

```
IndexBuilderEXE=<ArcIMS Installation  
Directory>/aims40exe/  
IndexBuilder/aimsindxb.exe
```
    - d. Update the value of the following variable to point to the location of the image output directory:  

```
ImagePath=/disk1/ArcIMS/output
```
    - e. Update the value of the following line to point to the location of a valid browser:  

```
WebBrowser=<Netscape Installation Directory>/netscape
```
    - f. To access *ArcIMS Help*, update the value of the following line to reflect the location of your ArcIMS installation:  

```
ArcIMSHelp=<ArcIMS Installation Directory>/Manager/Help/  
arcims_help.htm
```
    - g. Update the value of the following variable to point to the location of the Web site where created sites are output:  

```
WebSiteDir=/disk1/ArcIMS/website
```

#### Using ArcIMS with a proxy server

Use the Proxy Server properties to specify whether your LAN uses a proxy server to connect to the Internet. A proxy server is a computer on your LAN that connects to the Internet without compromising the security of

## Installing ArcIMS 4.0 on Sun Solaris

your internal network. If you are not sure how your LAN connects to the Internet, contact your system administrator.

If you use proxy servers, then set the appropriate properties in the `aimsproxy.properties` file, which is located in your `$HOME` directory.

- If your LAN uses a proxy server to connect to the Internet for HTTP protocol requests:
  1. Open `$AIMSHOME/Xenv/aimsproxy.properties` in a text editor.
  2. Set the `HostName` and Port of the proxy server to use. For example:

```
httpproxyhost=proxy.esri.com
httpproxyport=5000
```
  3. After editing the `aimsproxy.properties` file, copy it to your `$HOME` directory

```
cp $AIMSHOME/Xenv/aimsproxy.properties $HOME
```
- If your LAN connects to the Internet via a proxy server using a secure HTTP protocol (HTTPS):
  1. Open `$AIMSHOME/Xenv/aimsproxy.properties` in a text editor.
  2. Set the `HostName` and Port of the https proxy server to use. For example:

```
httpsproxyhost=httpsproxy.esri.com
httpsproxyport=5010
```
  3. After editing the `aimsproxy.properties` file, copy it to your `$HOME` directory:

```
cp $AIMSHOME/Xenv/aimsproxy.properties $HOME
```
- If your LAN doesn't use a proxy server and is directly connected to the Internet, do **not** set these properties. By default, they are not set.

## Starting the ArcIMS processes

Three scripts are located in the `$AIMSHOME/Xenv` directory. These scripts are used to start the ArcIMS processes. They are:

`aimsappsrvr`—Starts and Stops the ArcIMS Application Server  
`aimsmonitor`—Starts and Stops the ArcIMS Monitor  
`aimstasker`—Starts and Stops the ArcIMS Tasker

**Note:** To start the ArcIMS Monitor process at system boot, refer to the instructions provided in the file `$AIMSHOME/Xenv/automatic_startup_instructions`.

The ArcIMS processes rely on property files for some of their information. These files are located at:

- **Application Server:** `$AIMSHOME/Middleware/Application_Server/AppServer.properties`
- **Monitor:** `$AIMSHOME/Monitor/Monitor.properties`
- **Tasker:** `$AIMSHOME/Middleware/Tasker/Tasker.properties`

Each file contains a description of the various settings. Follow the descriptions to customize the processes. The `Monitor.properties` and the `Tasker.properties` files need to be edited prior to starting the `aimsmonitor` and `aimstasker` processes.

1. Edit the `Monitor.properties` file and change the value to the name of your Application Server. For example:

```
registryHost = <server name>.esri.com
```
2. Edit the `Tasker.properties` file and change the value to the name of your Application Server. For example:

```
registryHost = <server name>.esri.com
```
3. To start the processes manually, navigate to the `$AIMSHOME/Xenv` directory and start the services in the following order:

```
./aimsappsrvr start &
./aimsmonitor start &
./aimstasker start &
```
4. To test the processes, open `/<ArcIMS Installation Directory>/aims40exe/Xenv/ArcIMS_Diagnostics/ArcIMS_Diagnostics.html` in Netscape. The ArcIMS Diagnostics displays.
  - a. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.

## Installing ArcIMS 4.0 on Sun Solaris

b. Click 2 to test the ArcIMS Application Server.

If this test is successful, your ArcIMS Application Server is configured correctly.

If you receive an error message, select the error number in the dropdown list. The error number and a description then display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

5. To stop the processes manually, navigate to the \$AIMSHOME/Xenv directory and stop the services in the following order:

```
./aimstasker stop  
./aimsmonitor stop  
./aimsappsrvr stop
```

## Running ArcIMS

The various ArcIMS components can be launched by typing the following commands at the system prompt:

```
aimsadmin  
aimsauthor  
aimsdesigner
```

The scripts are located in the \$AIMSHOME/bin directory and are accessed by including this directory in the \$PATH variable.

You are ready to use ArcIMS.

# Troubleshooting

Most problems associated with starting ArcIMS occur because of a problem with the system environment. Often, a critical step was missed during the installation or configuration of the software. This topic reviews common problems with suggested approaches to solving them.

- The ports used by ArcIMS are already in use on my system.
- My ArcIMS Catalog hangs when I select local data.

---

**Problem:** The ports used by ArcIMS are already in use on my system.

**Solution:** Change the port numbers ArcIMS uses. ArcIMS uses predefined ports to communicate between the Application Server and the Servlet Connector and the Application Server and the Spatial Server.

The default ports are:

5300 for communication between the Application Server and the Servlet Connector.

5353 for communication between the Application Server and the Spatial Server.

If there is a conflict with existing ports, it will be necessary to change the ArcIMS ports. Follow these steps:

1. Edit the following lines in \$AIMSHOME/Middleware/Servlet\_Connector/Esrimap\_prop.  
appServerMachine=APPSMACHINE  
appServerClientPort=5300 \*\*Change port number  
**Note:** If using iPlanet 4.x, edit the Esrimap\_prop file located in the <iPlanet Installation Directory>/server4/https-<localhost>.<domain>/config directory.
2. Edit the following lines in \$AIMSHOME/Middleware/ Application\_Server/AppServer.properties.  
connectorPort=5300 \*\*Change port number  
regPort=5353 \*\*Change port number
3. Edit the following line in the \$AIMSHOME/Monitor/Monitor.properties:  
registryPort=5353  
Change 5353 to the regPort assigned in Step 2.
4. Shut down the ArcIMS Tasker, ArcIMS Monitor, and ArcIMS Application Server processes:  
./aimstasker stop  
./aimsmonitor stop  
./aimsappsrvr stop
5. Restart your Web server. Then start the ArcIMS Application Server, ArcIMS Monitor, and the ArcIMS Tasker processes:  
./aimsappsrvr start &  
./aimsmonitor start &  
./aimstasker start &

**Problem:** My ArcIMS Catalog hangs when I select local data.

**Solution:** On UNIX, ArcIMS works best with Automount file systems as opposed to static mount file systems.

When a static mount NFS server is down, just as performing an ls on root (/) will hang, ArcIMS will hang if you select the local data access option in the ArcIMS Catalog.



## Uninstalling ArcIMS 4.0

You must remove the following items to uninstall ArcIMS:

1. Remove <ArcIMS Installation Directory>/aims40exe.
2. Remove the following from the appropriate Web server location:
  - com directory
  - Esrimap\_prop
  - ServletConnector\_Res.properties
  - ServletConnector\_Res\_en\_US.properties
  - WMSEsrimap\_prop

For example:

**Apache with Tomcat:** <Tomcat Installation Directory>/webapps/ROOT/WEB-INF/classes; esriadmin and MetadataExplorer directories from <Tomcat Installation Directory>/webapps, if applicable

**iPlanet:** com directory from <iPlanet Installation Directory>/servers/docs/servlet; Esrimap\_prop, ServletConnector\_Res.properties, ServletConnector\_Res\_en\_US.properties, and WMSEsrimap\_prop files from <iPlanet Installation Directory>/servers/https-<localhost>.<domain>.com/config

**IBM HTTP Server with WebSphere:** <WebSphere Installation Directory>/AppServer/servlets

**Oracle Application Server:** <OAS Installation Directory>/Apache/Jserv/servlets

**WebLogic:** <WebLogic Installation Directory>/bea/wlserver6.1/config/mydomain/applications/DefaultWebApp/WEB-INF/classes

3. Remove the following files from your \$HOME directory:
  - aimsdefaults.properties
  - aimsproxy.properties, if applicable

# Installing ArcIMS Viewer

The ArcIMS Viewer installation allows your end users to view ArcIMS Web sites created using the Java Viewers.

The client is supported on Windows 98, Windows NT, Windows 2000, Windows XP, HP-UX, IBM AIX, Linux Red Hat, SGI IRIX and Sun Solaris; 128 MB of RAM are required for the Java clients.

**Note:** You must uninstall ArcIMS Manager 3.1 and ArcExplorer 3.1—Java Edition on your Windows computer before you install ArcIMS Viewer.

The items installed are:

- Java Plug-in 1.3.1 (if needed)
- ESRI ArcIMS Viewer
- ArcExplorer 4—Java

See the section for your platform:

Installing ArcIMS Viewer on HP-UX

Installing ArcIMS Viewer on IBM AIX

Installing ArcIMS Viewer on Linux Red Hat

Installing ArcIMS Viewer on Microsoft Windows

Installing ArcIMS Viewer on Sun Solaris

## Installing ArcIMS Viewer on HP-UX

The ArcIMS Host computer runs the ArcIMS Web site, and the ArcIMS remote computer accesses the Web site from a Web browser via the Intranet or Internet.

An Intranet client has NFS access to the ArcIMS Host, and an Internet client has only HTTP access.

**Note:** ArcIMS Web sites created using the Java Custom Viewer cannot be viewed from an HP-UX remote computer.

To view ArcIMS Web sites created using the ArcIMS Java Standard Viewer, the following components must be installed on the remote computer:

- JRE 1.3 (the Java Plug-in is included with JRE)
- ArcIMS Viewer

If the remote computer has ArcIMS Manager or ArcExplorer—Java Edition installed, the JRE and ArcIMS Viewer are already available on it. If not, Internet clients are prompted to install these via the ArcIMS Viewer installation. Intranet clients can copy the necessary components to their computer. See Installing ArcIMS Viewer on a remote HP-UX computer.

There are four steps required to set up a remote ArcIMS Viewer:

1. Setting up the ArcIMS Host computer
2. Installing JRE 1.3 on a remote computer
3. Installing ArcIMS Viewer on a remote HP-UX computer
4. Setting up ArcExplorer—Java Edition on a remote computer

The steps have different instructions for Internet and Intranet clients, where appropriate.

## Setting up the ArcIMS Host computer on UNIX

To provide Internet clients with the ability to download the ArcIMS Viewer from an ArcIMS Web site, the ArcIMS Web site Administrator must do the following:

```
cp -r $AIMSHOME/ViewerDownload/install <path to your ArcIMS Website directory>
```

For information on the ArcIMS website directory specific to the type of Web server you are using, see 'Configuring your Web server' for HP-UX.

If you are using an iPlanet Web server, you must make changes to support the use of ArcIMS Viewer. See the instructions for 'Configuring your iPlanet Web server for ArcIMS Viewer.'

## Installing ArcIMS 4.0 on Sun Solaris

Once you have set up the ArcIMS Host computer, the next step is to install JRE 1.3 on a remote HP-UX computer.

### Installing JRE 1.3 on a remote HP-UX computer

#### Internet clients only

When a remote HP-UX computer tries to access an ArcIMS Java Standard Web site, the application automatically detects whether the JRE and the Plug-in are installed. If not, the browser is redirected to the HP Web site to download JRE 1.3. If you have already installed JRE 1.3 but still receive the redirect message, the Plug-in may not be configured properly.

**Note:** Computers running HP-UX version 11.0 have a default version of JRE 1.3 installed at /opt/java1.3/jre.

#### Internet and Intranet clients

1. Register and follow the instructions to download and install JRE.
2. ESRI recommends that you increase the Java VM memory parameters. Open the Java Plug-in Control Panel and set the required memory parameters in the field named Java Run Time parameters to  
-Xms10m -Xmx256m  
and click Apply.  
The Java Plug-in Control Panel is located at <JRE Installation Directory>/bin/ControlPanel.
3. Configure JRE 1.3:
  - a. Make sure the correct JRE is being used. Add the following to your .cshrc file:

```
setenv JAVA_HOME <JRE Installation Directory>
set path = ( $JAVA_HOME/bin $path)
```
  - b. For Netscape to use the correct Plug-in, add the following variables to your .cshrc file:

```
setenv NPX_PLUGIN_PATH <path to Java install>/plugin/PA_RISC/ns4
setenv NPX_JRE_PATH <JRE Installation Directory>
```
  - c. Source the .cshrc file:

```
source .cshrc
```

Once you have JRE 1.3 installed, the next step is to install ArcIMS Viewer.

### Installing ArcIMS Viewer on a remote HP-UX computer

#### Internet clients only

1. Once you have installed JRE and configured JPI, close your browser to clear the cache and reopen it.
2. Type the URL to the ArcIMS Web site:  
`http://<hostname>/Website/<name>/default.htm`
3. At the ESRI ArcIMS Viewer screen, click Download installer for Unix.
4. In the Save As window, select a location to save the Viewer installer: AEJava.bin. Click OK.
5. Make sure that AEJava.bin has execute permissions. If not, type:  
`chmod 755 AEJava.bin`
6. Execute the Viewer installer:  
`./AEJava.bin`
7. At the language screen, choose a language and click OK.
8. At the Location of JRE screen, choose the location where you installed JRE 1.3. This should be the same as what your \$NPX\_JRE\_PATH variable is set to in Step 3 of 'Installing JRE 1.3 on a remote HP-UX computer.' Click Next.  
**Note:** You must have write access to the lib and bin directories in JRE.
9. At the Introduction screen, click Next.
10. At the Installation Directory screen, choose the installation directory and click Install. The installer creates a directory called AEJava4.0 at this location.  
**Note:** The Viewer JAR files and libraries are installed directly into the JRE directory that you selected in Step 8. See the install.log file located in AEJava/UninstallerData for a list of where each file is copied.

## Installing ArcIMS 4.0 on Sun Solaris

11. At the Install Complete screen, click Done.
12. Close the browser to clear the cache, and reopen it.

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX computer.

### Intranet clients only

Check with your ArcIMS system administrator if you do not know what \$AEJHOME should be set to.

1. Copy the Viewer \*.jar files to your JRE ext directory:  

```
cp $AEJHOME/lib/*.jar $NPX_JRE_PATH/lib/ext
```
2. Add \$AEJHOME/lib to your LD\_LIBRARY\_PATH in your .cshrc file:  

```
setenv LD_LIBRARY_PATH $AEJHOME/lib:$LD_LIBRARY_PATH
```

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer Java Edition on a remote UNIX computer.

## Setting up ArcExplorer—Java Edition on a remote UNIX computer

### Intranet and Internet clients

Check with your ArcIMS system administrator if you do not know what \$AEJHOME should be set to.

1. To enable ArcExplorer—Java Edition, set the following variable in your .cshrc file:  

```
setenv AEJHOME <ArcExplorer Installation Directory>/aej40exe
```
2. In your .cshrc file, add \$AEJHOME/bin to your \$PATH variable or set an alias to the startup script:  

```
set path = ( $path $AEJHOME/bin )
```

or  

```
alias aejava $AEJHOME/bin/aejava
```
3. To enable ArcExplorer—Java Edition Help, copy the aimsclient.properties file from <ArcExplorer Installation Directory>/Xenv to your \$HOME directory, open the file in a text editor, and edit the values for:  

```
WebBrowser=/<Netscape Installation Directory>/netscape  
AEJavaHelp=/<ArcIMS Installation Directory>/Help/aejava_help.htm
```
4. Save and close the file.
5. Source your .cshrc file:  

```
source .cshrc
```
6. To start ArcExplorer—Java Edition, type:  

```
aejava
```

You can now use ArcExplorer—Java Edition to view local data and ArcIMS services.

**Note:** If your remote IBM AIX computer accesses an ArcIMS Web site created using the Java Standard Viewer on Windows or Solaris, then you will encounter the following warning message: 'You need a font named Arial to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Standard Viewer.

**Note:** If your remote Windows computer accesses an ArcIMS Web site created using the Java Custom Viewer on IRIX, then you will encounter the following warning message: 'You need a font named Helvetica to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Custom Viewer.

## Installing ArcIMS Viewer on IBM AIX

The ArcIMS Host computer runs the ArcIMS Web site, and the ArcIMS remote computer accesses the Web site from a Web browser via the Intranet or Internet.

An Intranet client has NFS access to the ArcIMS Host, and an Internet client has only HTTP access.

**Note:** ArcIMS Web sites created using the Java Custom Viewer cannot be viewed from an AIX remote computer.

## Installing ArcIMS 4.0 on Sun Solaris

To view ArcIMS Web sites created using the ArcIMS Java Standard Viewer, the following components must be installed on the remote computer:

- JRE 1.3 (the Java Plug-in is included with JRE)
- ArcIMS Viewer

If the remote computer has ArcIMS Manager or ArcExplorer—Java Edition installed, the JRE and ArcIMS Viewer are already available on it. If not, Internet clients are prompted to install these via the ArcIMS Viewer installation. Intranet clients can copy the necessary components to their computer. See Installing ArcIMS Viewer on a remote AIX computer.

There are four steps required to set up a remote ArcIMS Viewer:

1. Setting up the ArcIMS Host computer
2. Installing JRE 1.3 on a remote computer
3. Installing ArcIMS Viewer on a remote AIX computer
4. Setting up ArcExplorer—Java Edition on a remote computer

The steps have different instructions for Internet and Intranet clients, where appropriate.

## Setting up the ArcIMS Host computer on UNIX

To provide Internet clients with the ability to download the ArcIMS Viewer from an ArcIMS Web site, the ArcIMS Web site Administrator must do the following:

```
cp -r $AIMSHOME/ViewerDownload/install <path to your ArcIMS Website
directory>
```

For information on the ArcIMS website directory specific to the type of Web server you are using, see 'Configuring your Web server' for IBM AIX.

If you are using iPlanet Web server, you must make changes to support the use of ArcIMS Viewer. See the instructions for 'Configuring your iPlanet Web server for ArcIMS Viewer.'

Once you have set up the ArcIMS Host computer, the next step is to install JRE 1.3 on a remote IBM AIX computer.

## Installing JRE 1.3 on a remote IBM AIX computer

### Internet clients only

When a remote computer tries to access an ArcIMS Java Standard Web site, the application automatically detects whether the JRE and Plug-in are installed. If it does not detect your JRE, you need to go to the following IBM Web site to download JRE 1.3: <http://www.ibm.com/java/jdk>.

If you have already installed JRE 1.3, but it is not detected, the Plug-in may not be configured properly. Skip to Step 4 below for instructions on configuring JRE 1.3 and the Plug-in.

### Internet and Intranet clients

The URL for the IBM JRE 1.3 download is <http://www.ibm.com/java/jdk>.

1. Register and follow the instructions to download the JRE. See Java Runtime Environment for more information.
2. ESRI recommends that you increase the Java VM memory parameters. Open the Java Plug-in Control Panel located at <JRE Installation Directory>/bin/JavaPluginControlPanel. Set the required memory parameters in the field named Java Run Time Parameters:  

```
-Xms10m -Xmx256m
```

Click Apply.  
Make sure that you add \$JAVA\_HOME/bin to LIBPATH. See 'System requirements' for more information.
3. Configure JRE 1.3:
  - a. Make sure the correct JRE is being used. Add the following to your .cshrc file:

```
setenv JAVA_HOME <JRE Installation Directory>
set path = ( $JAVA_HOME/bin $path)
```
  - b. Source the .cshrc:

```
source .cshrc
```

## Installing ArcIMS 4.0 on Sun Solaris

- c. For Netscape to use the correct Plug-in, copy the javaplugin.a file from your \$JAVA\_HOME/bin directory to your Netscape plugin directory:

```
cp /<JRE Installation Directory>/bin/javaplugin.a /<Netscape
Installation Directory>/plugins
```

Once you have JRE 1.3 installed, the next step is to install ArcIMS Viewer.

## Installing ArcIMS Viewer on a remote IBM AIX computer

### Internet clients only

1. Once you have installed JRE, close your browser to clear the cache and reopen it.
2. Type the URL to the ArcIMS Web site:  
`http://<hostname>/Website/<name>/default.htm`
3. At the ESRI ArcIMS Viewer screen, click Download installer for Unix.
4. In the Save As window, select a location to save the Viewer installer: AEJava.bin. Click OK.
5. Make sure that AEJava.bin has execute permissions. If not, type:  
`chmod 755 AEJava.bin`
6. Execute the Viewer installer:  
`./AEJava.bin`
7. At the language screen, choose a language and click OK.
8. At the Location of JRE screen, choose the location where you installed JRE 1.3. This should be the same as what your \$JAVA\_HOME variable is set to in Step 3 of Installing JRE 1.3 on a remote computer. Click Next.  
**Note:** You must have write access to the lib and bin directories in JRE.
9. At the Introduction screen, click Next.
10. At the Installation Directory screen, choose the installation directory and click Install. The installer creates a directory called AEJava4.0 at this location.  
**Note:** The Viewer JAR files and libraries are installed directly into the JRE directory that you selected in Step 8. See the install.log file located in AEJava/UninstallerData for a list of where each file is copied.
11. At the Install Complete screen, click Done.
12. Close the browser to clear the cache, and reopen it.

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX computer.

### Intranet clients only

Check with your ArcIMS system administrator if you do not know what \$AEJHOME should be set to.

1. Copy the Viewer \*.jar files to your JRE ext directory:  
`cp $AEJHOME/lib/*.jar /<JRE Installation Directory>/lib/ext`
2. Add \$AEJHOME/lib to your LIBPATH in your .cshrc file:  
`setenv LIBPATH $AEJHOME/lib:$LIBPATH`

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX computer.

## Setting up ArcExplorer—Java Edition on a remote UNIX computer

### Intranet and Internet clients

Check with your ArcIMS system administrator if you do not know what \$AEJHOME should be set to.

1. To enable ArcExplorer—Java Edition, set the following variable in your .cshrc file:  
`setenv AEJHOME <ArcExplorer Installation Directory>/aej40exe`

## Installing ArcIMS 4.0 on Sun Solaris

2. In your `.cshrc` file, add `$AEJHOME/bin` to your `$PATH` variable or set an alias to the startup script:  

```
set path = ( $path $AEJHOME/bin )  
or  
alias aejava $AEJHOME/bin/aejava
```
3. To enable ArcExplorer—Java Edition Help, copy the `aimsclient.properties` file from `<ArcExplorer Installation Directory>/Xenv` to your `$HOME` directory, open the file in a text editor, and edit the values for:  

```
WebBrowser=/<Netscape Installation Directory>/netscape  
AEJavaHelp=/<ArcIMS Installation Directory>/Help/aejava_help.htm
```
4. Save and close the file.
5. Source your `.cshrc` file:  

```
source .cshrc
```
6. To start ArcExplorer—Java Edition, type:  

```
aejava
```

You can now use ArcExplorer—Java Edition to view local data and ArcIMS services.

**Note:** If your remote IBM AIX computer accesses an ArcIMS Web site created using the Java Standard Viewer on Windows or Solaris, then you will encounter the following warning message: 'You need a font named Arial to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Standard Viewer.

**Note:** If your remote Windows computer accesses an ArcIMS Web site created using the Java Custom Viewer on IRIX, then you will encounter the following warning message: 'You need a font named Helvetica to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Custom Viewer.

## Installing ArcIMS Viewer on Linux Red Hat

The ArcIMS Host computer runs the ArcIMS Web site, and the ArcIMS remote computer accesses the Web site from a Web browser via the Intranet or Internet.

An Intranet client has NFS access to the ArcIMS Host, and an Internet client has only HTTP access.

**Note:** ArcIMS Web sites created using the Java Custom Viewer cannot be viewed from a Linux remote computer.

To view ArcIMS Web sites created using the ArcIMS Java Standard Viewer, the following components must be installed on the remote computer:

- JRE 1.3 (the Java Plug-in is included with JRE)
- ArcIMS Viewer

If the remote computer has ArcIMS Manager or ArcExplorer—Java Edition installed, the JRE and ArcIMS Viewer are already available on it. If not, Internet clients are prompted to install these via the ArcIMS Viewer installation. Intranet clients can copy the necessary components to their computer. See *Installing ArcIMS Viewer on a remote Linux computer*.

There are four steps required to set up a remote ArcIMS Viewer:

1. Setting up the ArcIMS Host computer
2. Installing JRE 1.3 on a remote computer
3. Installing ArcIMS Viewer on a remote Linux computer
4. Setting up ArcExplorer—Java Edition on a remote computer

The steps have different instructions for Internet and Intranet clients, where appropriate.

## Setting up the ArcIMS Host computer on UNIX

To provide Internet clients with the ability to download the ArcIMS Viewer from an ArcIMS Web site, the ArcIMS Web site Administrator must do the following:

```
cp -r $AIMSHOME/ViewerDownload/install <path to your ArcIMS Website directory>
```

## Installing ArcIMS 4.0 on Sun Solaris

For information on the ArcIMS website directory specific to the type of Web server you are using, see 'Configuring your Web server' Linux Red Hat.

If you are using an iPlanet Web server, you must make changes to support the use of ArcIMS Viewer. See the instructions for 'Configuring your iPlanet Web server for ArcIMS Viewer.'

Once you have set up the ArcIMS Host computer, the next step is to install JRE 1.3 on a remote Linux Red Hat computer.

## Installing JRE 1.3 on a remote Linux Red Hat computer

### Internet clients only

When a remote Linux computer tries to access an ArcIMS Java Standard Web site, the application automatically detects whether the JRE and the Plug-in are installed. If not, the browser is redirected to the Sun Web site to download JRE 1.3. If you have already installed JRE 1.3 but still receive the redirect message, the Plug-in may not be configured properly. Skip to Step 4 below for instructions on configuring JRE 1.3 and the Plug-in.

### Internet and Intranet clients

The URL for the Linux JRE 1.3 download is <http://java.sun.com/j2se/1.3/jre/>.

1. Register and follow the instructions to download and install JRE.
2. ESRI recommends that you increase the Java VM memory parameters. Open the Java Plug-in Control Panel and set the required memory parameters in the field named Java Run Time parameters to  
`-Xms10m -Xmx256m`  
and click Apply.

The Java Plug-in Control Panel is located at <JRE Installation Directory>/bin/ControlPanel.

3. Execute the JRE script for Linux.
4. Configure JRE 1.3:
  - a. Make sure the correct JRE is being used. Add the following to your .cshrc file:  
`setenv JAVA_HOME <JRE Installation Directory>`  
`set path = ( $JAVA_HOME/bin $path )`
  - b. For Netscape to use the correct Plug-in, add the following variables to your .cshrc file:  
`setenv NPX_PLUGIN_PATH <JRE Installation Directory>/plugin/i386/ns4`  
`setenv NPX_JRE_PATH <JRE Installation Directory>`
  - c. Source the .cshrc file:  
`source .cshrc`

Once you have JRE 1.3 installed, the next step is to install ArcIMS Viewer.

## Installing ArcIMS Viewer on a remote Linux Red Hat computer

### Internet clients only

1. Once you have installed JRE and configured JPI, close your browser to clear the cache and reopen it.
2. Type the URL to the ArcIMS Web site:  
`http://<hostname>/Website/<name>/default.htm`
3. At the ESRI ArcIMS Viewer screen, click Download installer for Unix.
4. In the Save As window, select a location to save the Viewer installer: AEJava.bin. Click OK.
5. Make sure that AEJava.bin has execute permissions. If not, type:  
`chmod 755 AEJava.bin`
6. Execute the Viewer installer:  
`./AEJava.bin`
7. At the language screen, choose a language and click OK.



## Installing ArcIMS 4.0 on Sun Solaris

- At the Location of JRE screen, choose the location where you installed JRE 1.3. This should be the same as what your \$NPX\_JRE\_PATH variable is set to in Step 4 of Installing JRE 1.3 on a remote Linux computer. Click Next.  
**Note:** You must have write access to the lib and bin directories in JRE.
- At the Introduction screen, click Next.
- At the Installation Directory screen, choose the installation directory and click Install. The installer creates a directory called AEJava4.0 at this location.  
**Note:** The Viewer JAR files and libraries are installed directly into the JRE directory that you selected in Step 8. See the install.log file located in AEJava/UninstallerData for a list of where each file is copied.
- At the Install Complete screen, click Done.
- Close the browser to clear the cache, and reopen it.  
You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX computer.

### Intranet clients only

Check with your ArcIMS system administrator if you do not know what \$AEJHOME should be set to.

- Copy the Viewer \*.jar files to your JRE ext directory:  

```
cp $AEJHOME/lib/*.jar $NPX_JRE_PATH/lib/ext
```
- Add \$AEJHOME/lib to your LD\_LIBRARY\_PATH in your .cshrc file:  

```
setenv LD_LIBRARY_PATH $AEJHOME/lib:$LD_LIBRARY_PATH
```

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX computer.

## Installing ArcIMS Viewer on Microsoft Windows

To install ArcIMS Viewer on Windows 98, Windows NT, Windows 2000, or Windows XP, see the instructions for your Web browser:

Installing ArcIMS Viewer on Internet Explorer 5.0

Installing ArcIMS Viewer on Internet Explorer 5.5 and 6.0

Installing ArcIMS Viewer on Netscape

### Installing ArcIMS Viewer on Internet Explorer 5.0 on Microsoft Windows

To install ArcIMS Viewer on Windows 98, Windows NT, Windows 2000, or Windows XP:

- Type the URL to the ArcIMS Web site:  

```
http://<hostname>/Website/<name>
```

  
**Note:** If you do not have the correct Java Plug-in, you will be prompted to install Java 2 Runtime Environment. Otherwise skip to Step 6.
- At the Security Warning screen for Java Plug-in 1.3, click Yes.
- At the Locale selection screen, click Install.
- At the Software License Agreement screen, click Yes.
- At the Choose Destination Location screen, click Next. JRE 1.3.1 is installed on your computer, and the ArcIMS Viewer installation begins.  
**Note:** You may see Steps 6 and 7; otherwise skip to Step 8.
- Install on Demand displays, if Java Virtual Machine is needed. Click Download.
- A Security Warning for Microsoft Virtual Machine displays. Click Yes.
- At the Security Warning screen for Java Plug-in, click Yes.
- Click Start Installer for Windows.
- At the language screen, choose English and click OK.
- At the Location Directory screen, click Next.
- At the Location of JRE screen, highlight the directory and click Install.
- At the Installation Complete screen, click Done.

## Installing ArcIMS 4.0 on Sun Solaris

14. Close your browser to clear the cache and reopen it.
15. Type the URL to the Web site:  
`http://<hostname>/Website/<name>.`
16. Now you can access the ArcIMS Web site.

**Note:** If you receive the following error message, 'Problem in opening a connection to the installer on the Server. It is possible that the installer cannot be found or has a different name,' tell your ArcIMS system administrator to refer to the instructions for Configuring your iPlanet Web server for ArcIMS Viewer.

## Uninstalling ArcIMS Viewer

To uninstall ArcIMS Viewer:

1. Choose Start | Settings | Control Panel and double-click Add/Remove Programs on Windows NT, or Change/Remove on Windows 2000; or choose Start | Control Panel and double-click Add or Remove Programs on Windows XP.
2. Click ESRI ArcIMS Viewer and click Add/Remove on Windows NT or Change/Remove on Windows 2000 or Windows XP.

## Installing ArcIMS Viewer on Internet Explorer 5.5 or 6.0 on Microsoft Windows

To install ArcIMS Viewer on Windows 98, Windows NT, Windows 2000, or Windows XP:

1. Type the URL to the ArcIMS Web site:  
`http://<hostname>/Website/<name>`  
**Note:** If you do not have the correct Java Plug-in, you will be prompted to install Java 2 Runtime Environment. Otherwise skip to Step 6.
2. At the Security Warning screen for Java Plug-in 1.3, click Yes.
3. At the Locale selection screen, click Install.
4. At the Java 2 Runtime Environment Software License Agreement screen, click Yes.
5. At the Choose Destination Location screen, click Next. JRE 1.3.1 is installed on your computer, and the ArcIMS Viewer installation begins.  
**Note:** You may see Steps 6 and 7; otherwise skip to Step 8.
6. Install on Demand displays, if Java Virtual Machine is needed. Click Download.
7. A Security Warning for Microsoft Virtual Machine displays. Click Yes.
8. At the Security Warning screen for InstallAnywhere Web Installer, click Yes.
9. Click Start Installer for Windows.
10. At the language screen, choose English and click OK.
11. At the Installation Directory screen, click Next.
12. At the Location of JRE screen, highlight the correct path and click Install. If you do not highlight the path, the ArcIMS Viewer installation will not be complete.
13. At the Installation Complete screen, click Done.
14. Close your browser to clear the cache and reopen it.
15. Type the URL to the Web site:  
`http://<hostname>/Website/<name>.`

Now you can access the ArcIMS Web site.

**Note:** If you receive the following error message, 'Problem in opening a connection to the installer on the Server. It is possible that the installer cannot be found or has a different name,' tell your ArcIMS system administrator to refer to the instructions for Configuring your iPlanet Web server for ArcIMS Viewer.

## Uninstalling ArcIMS Viewer

To uninstall ArcIMS Viewer:

1. Choose Start | Settings | Control Panel and double-click Add/Remove Programs on Windows NT, or Change/Remove on Windows 2000; or choose Start | Control Panel and double-click Add or Remove Programs on Windows XP.
2. Click ESRI ArcIMS Viewer and click Add/Remove on Windows NT or Change/Remove on Windows 2000 or Windows XP.

## Installing ArcIMS 4.0 on Sun Solaris

### Installing ArcIMS Viewer on Netscape 4.75 or 6 on Microsoft Windows

To install ArcIMS Viewer on Windows 98, Windows NT, Windows 2000, or Windows XP:

1. Type the URL to the ArcIMS Web site:  
`http://<hostname>/Website/<name>`  
**Note:** If you do not have the correct Java Plug-in, you will be prompted to install Java 2 Runtime Environment, otherwise skip to Step 5.
2. At the Plug-in not loaded screen, click Get the Plug-in.
3. After being directed to the Java Web site, you will be prompted to download Java 2 Runtime Environment. Follow the instructions.
4. Install JRE.
5. Type the URL to the ArcIMS Web site:  
`http://<hostname>/Website/<name>`
6. On Netscape 6.0, at the Java Plug-in security warning, select Grant this session. On Netscape 4.75, at the Java Security screen, select Grant.
7. Click Start Installer for Windows.
8. At the language screen, choose English and click OK.
9. At the Installation Directory screen, click Next.
10. At the Location of JRE screen, highlight the correct path and click Install.
11. At the Installation Complete screen, click Done.
12. Close your browser to clear the cache and reopen it.
13. Type the URL to the Web site:  
`http://<hostname>/Website/<name>`.

Now you can access the ArcIMS Web site.

**Note:** If you receive the following error message, 'Problem in opening a connection to the installer on the Server. It is possible that the installer cannot be found or has a different name,' tell your ArcIMS system administrator to refer to the instructions for Configuring your iPlanet Web server for ArcIMS Viewer.

### Uninstalling ArcIMS Viewer

To uninstall ArcIMS Viewer:

1. Choose Start | Settings | Control Panel and double-click Add/Remove Programs on Windows NT, or Change/Remove on Windows 2000; or choose Start | Control Panel and double-click Add or Remove Programs on Windows XP.
2. Click ESRI ArcIMS Viewer and click Add/Remove on Windows NT or Change/Remove on Windows 2000 or Windows XP.

### Installing ArcIMS Viewer on Sun Solaris

The ArcIMS Host computer runs the ArcIMS Web site, and the ArcIMS remote computer accesses the Web site from a Web browser via the Intranet or Internet.

An Intranet client has NFS access to the ArcIMS Host, and an Internet client has only HTTP access.

**Note:** ArcIMS Web sites created using the Java Custom Viewer cannot be viewed from a Solaris remote computer.

To view ArcIMS Web sites created using the ArcIMS Java Standard Viewer, the following components must be installed on the remote computer:

- JRE 1.3 (the Java Plug-in is included with JRE)
- ArcIMS Viewer

If the remote computer has ArcIMS Manager or ArcExplorer—Java Edition installed, the JRE and ArcIMS Viewer are already available on it. If not, Internet clients are prompted to install these via the ArcIMS Viewer installation. Intranet clients can copy the necessary components to their computer. See Installing ArcIMS Viewer on a remote Solaris computer.

## Installing ArcIMS 4.0 on Sun Solaris

There are four steps required to set up a remote ArcIMS Viewer:

1. Setting up the ArcIMS Host computer
2. Installing JRE 1.3 on a remote computer
3. Installing ArcIMS Viewer on a remote Solaris computer
4. Setting up ArcExplorer—Java Edition on a remote computer

The steps have different instructions for Internet and Intranet clients, where appropriate.

### Setting up the ArcIMS Host computer on UNIX

To provide Internet clients with the ability to download the ArcIMS Viewer from an ArcIMS Web site, the ArcIMS Web site Administrator must do the following:

```
cp -r $AIMSHOME/ViewerDownLoad/install <path to your ArcIMS Website
directory>
```

For information on the ArcIMS website directory specific to the type of Web server you are using, see 'Configuring your Web server' for Sun Solaris.

If you are using an iPlanet Web server, you must make changes to support the use of ArcIMS Viewer. See the instructions for 'Configuring your iPlanet Web server for ArcIMS Viewer.'

Once you have set up the ArcIMS Host computer, the next step is to install JRE 1.3 on a remote Sun Solaris computer.

### Installing JRE 1.3 on a remote Sun Solaris computer

#### Internet clients only

When a remote Solaris computer tries to access an ArcIMS Java Standard Web site, the application automatically detects whether the JRE and the Plug-in are installed. If not, the browser is redirected to the Sun Web site to download JRE 1.3. If you have already installed JRE 1.3 but still receive the redirect message, the Plug-in may not be configured properly. Skip to Step 4 below for instructions on configuring JRE 1.3 and the Plug-in.

**Note:** If you use JRE 1.3.1, you need to install the required Sun OS patches listed on the java.sun.com Web site for Solaris: <http://java.sun.com/j2se/1.3/install-solaris-patches.html>.

#### Internet and Intranet clients

The URL for the Sun JRE 1.3 download is <http://java.sun.com/j2se/1.3/jre/>.

1. Register and follow the instructions to download and install JRE.
2. ESRI recommends that you increase the Java VM memory parameters. Open the Java Plug-in Control Panel and set the required memory parameters in the field named Java Run Time parameters to  
-Xms10m -Xmx256m  
and click Apply.

The Java Plug-in Control Panel is located at <JRE Installation Directory>/bin/ControlPanel.

3. Execute the JRE script for Solaris.  
**Note:** Be sure to check the Solaris patch requirements for the JPI and JRE prior to installing these components.
4. Configure JRE 1.3:
  - a. Make sure the correct JRE is being used. Add the following to your .cshrc file:

```
setenv JAVA_HOME <JRE Installation Directory>
set path = ( $JAVA_HOME/bin $path)
```
  - b. For Netscape to use the correct Plug-in, add the following variables to your .cshrc file:

```
setenv NPX_PLUGIN_PATH <JRE Installation Directory>/plugin/sparc/ns4
setenv NPX_JRE_PATH <JRE Installation Directory>
```
  - c. Source the .cshrc file:

```
source .cshrc
```

Once you have JRE 1.3 installed, the next step is to install ArcIMS Viewer.

### Installing ArcIMS Viewer on a remote Sun Solaris computer

#### Internet clients only

1. Once you have installed JRE and configured JPI, close your browser to clear the cache and reopen it.
2. Type the URL to the ArcIMS Web site:  
`http://<hostname>/Website/<name>/default.htm`
3. At the ESRI ArcIMS Viewer screen, click Download installer for Unix.
4. In the Save As window, select a location to save the Viewer installer: AEJava.bin. Click OK.
5. Make sure that AEJava.bin has execute permissions. If not, type:  
`chmod 755 AEJava.bin`
6. Execute the Viewer installer:  
`./AEJava.bin`
7. At the language screen, choose a language and click OK.
8. At the Location of JRE screen, choose the location where you installed JRE 1.3. This should be the same as what your \$NPX\_JRE\_PATH variable is set to in Step 4 of Installing JRE 1.3 on a remote Solaris computer. Click Next.  
**Note:** You must have write access to the lib and bin/sparc directories in JRE.
9. At the Introduction screen, click Next.
10. At the Installation Directory screen, choose the installation directory and click Install. The installer creates a directory called AEJava4.0 at this location.  
**Note:** The Viewer JAR files and libraries are installed directly into the JRE directory that you selected in Step 8. See the install.log file located in AEJava/UninstallerData for a list of where each file is copied.
11. At the Install Complete screen, click Done.
12. Close the browser to clear the cache, and reopen it.

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX computer.

#### Intranet clients only

Check with your ArcIMS system administrator if you do not know what \$AEJHOME should be set to.

1. Copy the Viewer \*.jar files to your JRE ext directory:  
`cp $AEJHOME/lib/*.jar $NPX_JRE_PATH/lib/ext`
2. Add \$AEJHOME/lib to your LD\_LIBRARY\_PATH in your .cshrc file:  
`setenv LD_LIBRARY_PATH $AEJHOME/lib:$LD_LIBRARY_PATH`

You are now ready to view ArcIMS Web pages created using the Java Standard Viewer. Proceed to Setting up ArcExplorer—Java Edition on a remote UNIX computer.

### Setting up ArcExplorer—Java Edition on a remote UNIX computer

#### Intranet and Internet clients

Check with your ArcIMS system administrator if you do not know what \$AEJHOME should be set to.

1. To enable ArcExplorer—Java Edition, set the following variable in your .cshrc file:  
`setenv AEJHOME <ArcExplorer Installation Directory>/aej40exe`
2. In your .cshrc file, add \$AEJHOME/bin to your \$PATH variable or set an alias to the startup script:  
`set path = ( $path $AEJHOME/bin )`  
or  
`alias aejava $AEJHOME/bin/aejava`
3. To enable ArcExplorer—Java Edition Help, copy the aimsclient.properties file from <ArcExplorer Installation Directory>/Xenv to your \$HOME directory, open the file in a text editor, and edit the values for:  
`WebBrowser=<Netscape Installation Directory>/netscape`  
`AEJavaHelp=<ArcIMS Installation Directory>/Help/aejava_help.htm`

## Installing ArcIMS 4.0 on Sun Solaris

4. Save and close the file.
5. Source your .cshrc file:  
`source .cshrc`
6. To start ArcExplorer—Java Edition, type:  
`aejava`

You can now use ArcExplorer—Java Edition to view local data and ArcIMS services.

**Note:** If your remote IBM AIX computer accesses an ArcIMS Web site created using the Java Standard Viewer on Windows or Solaris, then you will encounter the following warning message: 'You need a font named Arial to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Standard Viewer.

**Note:** If your remote Windows computer accesses an ArcIMS Web site created using the Java Custom Viewer on IRIX, then you will encounter the following warning message: 'You need a font named Helvetica to view data from this server.' Click OK. This is just a warning message, and it should not affect the functionality of the Java Custom Viewer.

## Configuring iPlanet for ArcIMS Viewer

The following instructions are for iPlanet only.

If you use iPlanet, you need to make a change in the configuration of the MIME type property. The MIME type file tells the Web server what to do when an incoming request is looking for a particular file extension.

1. Start iPlanet Administration Server from the Start menu or from your Web browser.
2. Type your user name and password and click OK.
3. Select your Server from the dropdown list and click Manage.
4. In the left sidebar, click Mime Types.
5. Click Edit and click OK.
6. On the Global Mime Types list, find Content-Type: application/octet-stream File Suffix: bin
7. Click Edit and add , exe to the File Suffix.
8. Click Change MIME Type and OK to update the record.
9. Scroll down and find Content-Type: magnus-internal/cgi File Suffix: cgi , exe , bat
10. Click Edit and Remove exe , from the File Suffix.
11. Click Change MIME Type and OK to update the record.
12. Close your Web browser.