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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 and install the features that have been preselected, referred to as a typical installation. A typical installation is when your Web site uses the resources of one computer; Web server software and ArcIMS are installed on the same computer. 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 4.0.1?

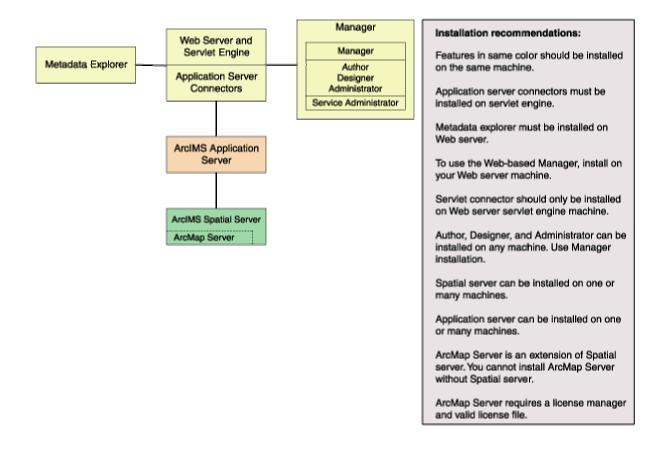
- The installation CD with ArcIMS software. See Using ArcIMS for details on working with ArcIMS. To find out about ArcIMS customization, see Customizing ArcIMS, a five-book documentation series you can install with the software. The ArcXML Programmer's Reference Guide, a programming guide for customizing map configuration files, is also included with the software. For a printable version of Installing ArcIMS, see ArcIMS Online at http://support.esri.com for a PDF for your platform.
- Documentation for ArcIMS is included on the ArcIMS CD in the Documentation folder. Documentation is also installed
 with ArcIMS under <ArcIMS Installation Directory>/Documentation. Additional documentation, Customizing ArcIMS
 and the ArcXML Programmer's Reference Guide, are also available for installation.
- ArcExplorer[™]—Java[™] Edition is included with ArcIMS and is documented in Using ArcExplorer—Java Edition.
- ServletExec 4.1.1 is included on the ArcIMS CD under the ServletExec folder. See the ServletExec readme and the ServletExec installation guide, located in this folder, for more information on installing ServletExec.
- 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.

Note: The digital books included with ArcIMS are in PDF (portable document format). To view and print PDF files, you will need to install the Adobe Acrobat Reader. Visit the Adobe Web page to download Adobe Acrobat Reader.

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.

ArcIMS Manager is supported only on Windows® using Internet Explorer. It is not supported on HP®-UX®, IBM® AIX®, Linux® Red Hat®, SGI® IRIX®, 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 or Sun Solaris, a custom installation of the optional ArcSDE Services Monitor component on the ArcSDE Server is required; on other UNIX platforms, 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 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.

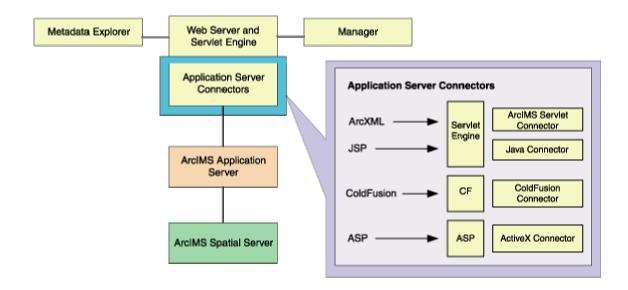
See Using ArcIMS, 'Using ArcIMS Service Administrator,' for details on using ArcIMS Service Administrator.

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®/Linux). 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 Open GIS 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:

- ColdFusion® Connector
- ActiveX[®] Connector
- 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.

The ArcIMS Java Connector runs on Windows and UNIX/Linux, the ColdFusion Connector runs on Windows and Solaris, and the ActiveX Connector runs on Windows only.

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. ArcIMS Spatial Servers run on a Windows NT® Server, Windows NT Workstation, Windows 2000, Windows XP, or UNIX/Linux. A graphics card is not required.

For ArcIMS Metadata Service, ArcGIS[™] and ArcSDE are required.

For ArcMap™ Server, ArcGIS and ArcObjects™ run-time files are required; ArcMap Server only runs on Windows platforms.

Note: ArcMap Server cannot reside on the same computer as ArcGIS Desktop and/or ArcInfo Workstation.

ArcIMS Viewers

ArcIMS provides clientside viewers:

- ArcIMS HTML Viewer
- ArcIMS Java Viewer
- 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. This includes the installation and post installation setup.
- 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 at http://support.esri.com.

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
- Web browser
- Java 2 Platform Standard Edition (J2SE) Software Development Kit (SDK) only if using Metadata Explorer or Services Administrator

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.

- Complete the installation for the features you select.
- Complete the post installation setup for the features you installed.

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 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://support.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 for up-to-date information on ESRI software and services. It is an invaluable resource in helping you expand your understanding of GIS technology and Internet mapping.

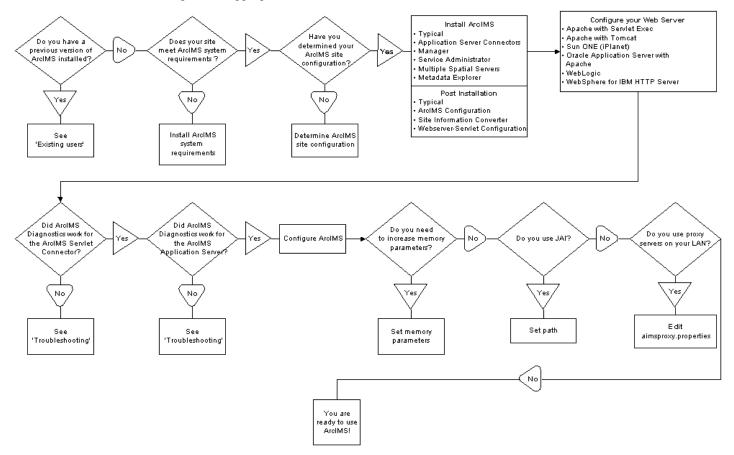
Visit the ArcIMS home page at www.esri.com/software/arcims for the latest information about ArcIMS including a showcase of ArcIMS software-enabled Web sites.

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.

Installation flowchart

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



Existing users

ArcIMS 3.1 users

ArcIMS 3.1 users should be aware of the following:

- ArcIMS 4.0.1 creates a new directory named ArcIMS when installed. It is possible to have both ArcIMS 3.1 and ArcIMS 4.0.1 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 4.0.1 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 Converter in the post installation section.
- J2SE JRE version 1.4 is installed with ArcIMS 4.0.1. The JRE installation location is <ArcIMS installation directory>/ArcIMS/jre.
- See ArcIMS System Requirements at http://arconline.esri.com/arconline/sysreqs.cfm?PID=6 for Web servers and Servlet Engines supported for ArcIMS 4.0.1.

See 'What's new with ArcIMS' in ArcIMS Help for information on the differences between ArcIMS 3.1 and ArcIMS 4.0.1.

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 4.0.1 installation, so you can run the Site Starter Conversion utility after ArcIMS 4.0.1 installation. See Site Information Converter for details.
- 2. Remove <ArcIMS Installation Directory>/aims31exe.
- 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 4 users

ArcIMS 4 users should be aware of the following:

ArcIMS 4.0.1 creates a new directory named ArcIMS when installed. It is possible to have both ArcIMS 4 and ArcIMS 4.0.1 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 4 for details.

- Java 2 Platform Standard Edition Java Runtime Environment version 1.4 is installed with ArcIMS 4.0.1. The JRE installation location is <ArcIMS installation directory>/ArcIMS/jre.
- See ArcIMS System Requirements at http://arconline.esri.com/arconline/sysreqs.cfm?PID=6 for Web servers and servlet engines supported for ArcIMS 4.0.1.

See 'What's new with ArcIMS' in ArcIMS Help for information on the differences between ArcIMS 4 and ArcIMS 4.0.1.

Uninstalling ArcIMS 4

You must remove the following items to uninstall ArcIMS:

- 1. The ArcIMS 4 files ArcIMSSite.sez (configuration file for saved services) and ArcIMSFolders.sez contain your ArcIMS preferences. These files are located at <ArcIMS Installation Directory>/Middleware/Application_Server. It is recommended that you back up these files prior to ArcIMS 4.0.1 installation.
- 2. Remove <ArcIMS Installation Directory>/aims40exe.
- 3. Remove the following from the appropriate Web server location:
 - com directory
 - Esrimap_prop
 - ServletConnector Res.properties
 - ServletConnector_Res_en_US.properties
 - WMSEsrimap prop
- 4. Remove the following files from your \$HOME directory:
 - aimsdefaults.properties
 - aimsproxy.properties

Upgrading Metadata from ArcIMS 4 to 4.0.1

Your Metadata Service utilizes 10 tables in your relational database to store all metadata documents published to your service. At ArcIMS 4.0.1, the schema of some of these tables has changed to improve searching performance. Because of this change, you'll need to update the metadata tables in the database before starting your Metadata Service in ArcIMS 4.0.1. Performing this update will not delete any metadata documents published to your metadata database.

Follow the steps below to upgrade the tables.

- 1. Uninstall ArcIMS 4.
- 2. In ArcCatalog, connect to your database using the same connection information specified in your Metadata Service configuration file (e.g., MetadataService.axl).
- 3. Locate and delete the following four tables in the database. Deleting these tables will not delete any metadata documents published to your Metadata Service.
 - ImsmetadataTags
 - ImsmetadataValues
 - ImsmetadataWords
 - ImsmetadataWordindex

If you changed the table name prefix in your Metadata Service configuration file from the default value of Imsmetadata, your table names will be slightly different. Your tables will be named with your prefix instead of Imsmetadata, for example, Tags. Values and so on.

- 4. Install ArcIMS 4.0.1.
- 5. Start your Metadata Service. Your Metadata Service will start automatically if it was previously created and saved in the site startup file (ArcIMSSite.sez).
- 6. Run the indexing command, aimsmetaindx, with the indexAll option. This command is located in ArcIMS Installation Directory>/Metadata/Commands. For information on how to run this command, see the section titled 'Indexing metadata documents' in Chapter 3 of *Creating and Using Metadata Services*.

Note: If you've already installed ArcIMS 4.0.1 but didn't delete the four database tables in step 2 and 3 above, your existing Metadata Service will not start. Simply follow steps 2 through 6 above and skip step 4.

Upgrading the Gazetteer data from ArcIMS 4 to 4.0.1

The Gazetteer data distributed for use with Metadata Explorer has been upgraded for use with ArcIMS 4.0.1. If you had previously installed the Gazetteer data and imported the data into ArcSDE, you will need to delete the Gazetteer data from your database and reload it. The Gazetteer data has not changed except to implement the new database schema required for any Metadata Service.

If you attempt to start your Gazetteer Service at ArcIMS 4.0.1 and have not reloaded the new Gazetteer data, the service will not start. Follow the steps below to remove the Gazetteer data from your database.

- 1. Uninstall ArcIMS 4.
- 2. In ArcCatalog, connect to your database using the same connection information specified in your Gazetteer configuration file (e.g., Gazetteer.axl).
- 3. Locate and delete the following 10 tables in the database:

Gazetteer

GazetteerDeleted

GazetteerDeletedRel

GazetteerRelationships

Gazetteer Thumbnails

GazetteerTags

GazetteerUsers

GazetteerValues

GazetteerWords

GazetteerWordIndex

- 4. Install ArcIMS 4.0.1.
- 5. Load the Gazetteer data using the import scripts. See the topic called 'Loading the Gazetteer data' in Appendix A of *Creating and Using Metadata Services*.
- 6. Start your Metadata Service based on the Gazetteer data.

Note: If you've already installed ArcIMS 4.0.1 but didn't delete the Gazetteer data in step 2 and 3 above, your existing Gazetteer Service will not start. Simply follow steps 2 through 6 above and skip step 4.

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

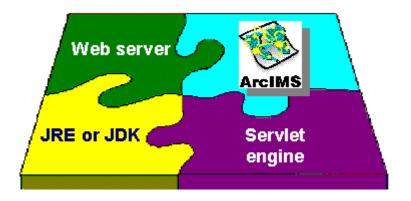
Disk space

The disk space requirement for all ArcIMS components is 760 MB. The disk space requirement for a typical installation of ArcIMS is 420 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.
- Solaris 9 is supported with Apache with Tomcat, and Sun ONE 6.0 (iPlanet) only.

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.

Note: The X Windows environment must be installed to use ArcIMS. X Windows is usually installed by default with the operating system.

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.

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)
- Apache Web server for Solaris with ServletExecTM as its servlet engine
- Sun ONE (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 J2SE JRE or Java 2 Software Development Kit (JDK) 1.3 or higher.

See ArcIMS System Requirements at http://arconline.esri.com/arconline/sysreqs.cfm?PID=6 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://sunsolve.sun.com.

Java Runtime Environment

J2SE JRE version 1.4 is installed with ArcIMS 4.0.1. J2SE JRE 1.4 will be installed in <ArcIMS installation directory>/ArcIMS/jre.

Note: J2SE JRE version 1.4.0 and higher are not supported for use in a multibyte locale. Users running ArcIMS with a multibyte locale should use a supported version of J2SE JRE 1.3.1 instead.

Additional system requirements

ArcIMS Service Administrator requirements

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

• J2SE SDK 1.3 or higher. The J2SE SDK is available from http://java.sun.com/j2se. Refer to your Web server documentation for supported J2SE SDK versions.

Note: J2SE SDK 1.3.1_03, J2SE SDK 1.3.1_04, and J2SE SDK 1.4.0_01 are *not* recommended for use with ArcIMS 4.0.1.

Metadata Service requirements

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

- ArcGIS 8.3 or higher
- ArcSDE 8.3 or higher

Metadata Explorer requirements

The following software is required to use the Metadata Explorer:

 J2SE SDK 1.3 or higher. The J2SE SDK is available from http://java.sun.com/j2se. Refer to your Web server documentation for supported J2SE SDK versions.

Note: J2SE SDK 1.3.1 03, J2SE SDK 1.3.1 04, and J2SE SDK 1.4.0 01 are *not* recommended for use with ArcIMS 4.0.1.

Web browser for ArcIMS Viewers

■ HTML Viewer: Netscape Communicator 4.61, 4.7, 4.75, or 4.76

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

• Java Standard Viewer: Netscape Communicator 4.61, 4.7, 4.75, or 4.76

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

Note: See ArcOnline at http://support.esri.com for the latest support information.

Note: All Web pages created on Sun Solaris can be viewed on Windows. See the ArcIMS install guide for Windows 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: ArcIMS will not function properly unless the fonts are installed.

To verify that the font is installed, type:

```
pkginfo | grep SUNWi1of
```

If you see the following:

```
system SUNWi1of 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 SUNWi1of

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

Note: To install Chinese HKSCS font, see To install Chinese HKSCS font topic.

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 Platform Standard Edition Software Development Kit 1.3 or higher. The J2SE SDK is available from http://java.sun.com/j2se. Refer to your Web server documentation for supported J2SE SDK versions.

Note: J2SE SDK 1.3.1 03, J2SE SDK 1.3.1 04, and J2SE SDK 1.4.0 01 are not recommended for use with ArcIMS 4.0.1.

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

ArcSDE

Metadata users only

■ ArcSDE 8.3 or higher

Other users

- ArcSDE 3.0.2, ArcSDE 8.0.2, 8.1, 8.2, or ArcSDE 8.3 or higher
- ArcSDE for Coverages 8.0.2, 8.1, 8.2, or ArcSDE for Coverages 8.3 or higher

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

To install Chinese HKSCS font

ESRI includes ZYSongHKSCS TrueType font on the ArcIMS 4.0.1 CD. This font contains Traditional Chinese (which are regular Traditional Chinese and HKSCS characters) and Simplified Chinese characters.

Font installation procedure:

- 1. Copy ZYSongHKSCS5.ttf from \$AIMSHOME/fonts into the following font path for Sun Solaris :/usr/openwin/lib/X11/fonts/TrueType.
- 2. Modify font.properties file for this ZYSongHKSCS font that located at <JREHOME/lib or <JAVA_HOME>/lib by following the instructions from this link: http://java.sun.com/j2se/1.3/docs/guide/intl/fontprop.html.

Step 2: Planning an ArcIMS configuration for your site

Manager Installation recommendations: Web Server and Manager Servlet Engine Features in same color should be installed Metadata Explorer Author on the same machine. Application Server Designer Connectors Administrator Application server connectors must be Service Administrator installed on servlet engine. Metadata explorer must be installed on Web server. ArcIMS Application Server To use the Web-based Manager, install on your Web server machine. Servlet connector should only be installed on Web server servlet engine machine. ArcIMS Spatial Server Author, Designer, and Administrator can be ArcMap Server installed on any machine. Use Manager installation. Spatial server can be installed on one or many machines. Application server can be installed on one or many machines. ArcMap Server is an extension of Spatial server. You cannot install ArcMap Server without Spatial server. ArcMap Server requires a license manager and valid license file.

Installation Configuration Diagram

Overview

The ArcIMS 4.0x architecture and functionality has been engineered specifically to serve geographic data and services on the Internet. The software is designed so that it is easy to create maps, develop Web pages that communicate with the maps, and administer the ArcIMS site. The software is also designed for distribution across a network and for scalability as the demand for maps increase.

An ArcIMS site consists of one or more computers where the ArcIMS host (ArcIMS Manager [includes Manager, Manager Applications, and Service Administrator]), Application Server Connectors, and ArcIMS Application Server), ArcIMS Spatial Servers, and data reside. The Application Server Connectors, ArcIMS Application Server, and ArcIMS Spatial Server are the components needed to create and manage services that process requests and responses. The ArcIMS framework also requires a Web server, J2SE JRE, and servlet engine. For more information on these components, see the Overview topic of the Install Guide Introduction.

The ArcIMS site management applications (Manager; Author, Designer, and Administrator; and Service Administrator) provide access to ArcIMS components for authoring maps, administering ArcIMS Services and Spatial Servers, and designing Web sites. If you want to use the Web-based Manager, it is strongly recommended that Manager be installed on your Web server machine. The Manager Applications (Author, Designer, and Administrator) can be used on any machine. A Manager installation will install Manager, Manager Applications (Author, Designer, and Administrator), and Service Administrator.

There are many possible ArcIMS site configurations. Some sites run all ArcIMS components on a single computer, while other sites are comprised of multiple computers. Configurations will vary depending on the available computer 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 created at one

time? Will the Web server computer be dedicated to the Web site or used for other purposes as well? Answers to these types of questions will assist in planning an ArcIMS site configuration.

Configure an ArcIMS site based on the anticipated number of simultaneous 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 Servers.

When planning your ArcIMS site configuration, there are some installation recommendations to take into account. The installation configuration diagram above illustrates ArcIMS installation features and some of the installation recommendations.

- The ArcIMS features in the installation configuration diagram, illustrated in the same color, should be installed on the same machine.
 - The Application Server Connectors must be installed on your Web server machine.
 - Metadata Explorer must be installed on your Web server machine.
 - If using Manager (the Web-based application used to author, design, and administer), it is recommended that Manager be installed on your Web server machine.
- The ArcIMS Servlet Connector should only be installed on the Web server machine.
- The Manager Applications (Author, Designer, and Administrator) can be installed on any machine. To install these applications, perform a Manager installation. A Manager installation will install Manager; Author, Designer, and Administrator; and Service Administrator.
- Spatial Server can be installed on one machine or many machines. Each Spatial Server installation needs to know the name of the machine where the Application Server is installed. The post installation will prompt you for the name of the Application Server and edit the monitor properties file accordingly. One Spatial Server cannot support multiple Application Servers, but one Application Server can support multiple Spatial Servers.
- Application Server can be installed on one machine or many machines. Each Application Server installation needs to know the name of the Web server. The post installation will prompt you for the name of the Web server and edit the site preferences and diagnostics property files.
- ArcMap Server is an extension of Spatial Server. You cannot install ArcMap Server without installing Spatial Server. A license manager and valid license file are required to install ArcMap Server. The license manager can be installed during the post installation of ArcMap Server, or you can use an existing license manager on your network.
- ArcSDE Services Monitor can exist on any machine where ArcSDE is installed.

ArcIMS background processes

There are three background processes (Windows services/UNIX daemons) associated with ArcIMS:

- ArcIMS Application Server 4.0.1. The Application Server service is installed with the ArcIMS Application Server.
- ArcIMS Monitor 4.0.1. The Monitor service is installed with Spatial Server and ArcSDE Services Monitor.
- ArcIMS Tasker 4.0.1. The Tasker service is installed with the ArcIMS Application Server.

Common site configuration scenarios

This section presents a series of common configuration scenarios that illustrate how to distribute various installation components across various computer platforms.

- ArcIMS site on one machine
- Multiple ArcIMS Spatial Servers
- Dedicated Web server machine

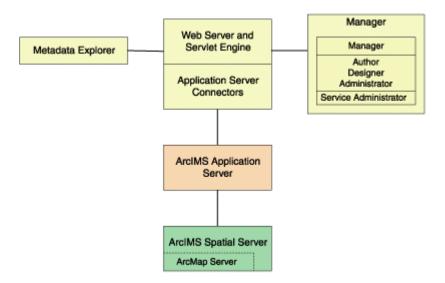
Multiple Application Servers

ArcIMS site on one machine

The ArcIMS site must have a Web server configured and communicating with a servlet engine before installing ArcIMS.

The entire ArcIMS site on one machine is referred to as a typical installation. This installation consists of the ArcIMS host (ArcIMS Manager, Application Server Connectors, and ArcIMS Application Server) and ArcIMS Spatial Server installed on the Web server machine. A typical installation of ArcIMS will install Manager, the ArcIMS Application Server, the default ArcIMS Application Server Connector (the Servlet Connector), and the ArcIMS Spatial Server. In addition, a typical ArcIMS installation will install Metadata Explorer and some selected samples and documentation.

This site configuration is useful for those with limited resources or light server loads. If you are new to ArcIMS, start with this site configuration.



See Performing a typical installation for steps on installing these ArcIMS components on the same computer. To include ArcMap Server, leave all installation features checked and, in addition, check the box to install ArcMap Server.

Multiple ArcIMS Spatial Servers

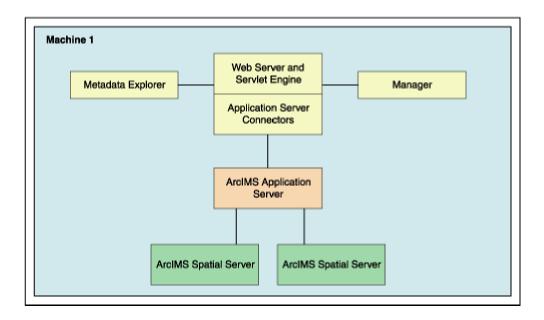
Additional ArcIMS Spatial Servers can be added to the ArcIMS site configuration as the number of requests increases if redundancy needs to be built in or to optimize performance.

There is no one formula for determining how many ArcIMS Spatial Servers are needed. The Spatial Server configuration will vary among ArcIMS sites depending on the number and size of services, time required to process requests, number of requests, Web and network traffic, and other factors specific to the site.

Since it is possible to have multiple ArcIMS Spatial Servers on multiple machines, a mechanism is needed to manage these Spatial Servers and the services running on them. ArcIMS uses a Virtual Server concept to manage services on multiple ArcIMS Spatial Servers. See the ArcIMS technical paper, ArcIMS 4 Architecture and Functionality, located on http://support.esri.com and the Using ArcIMS book for more information on managing Spatial Servers and Virtual Servers.

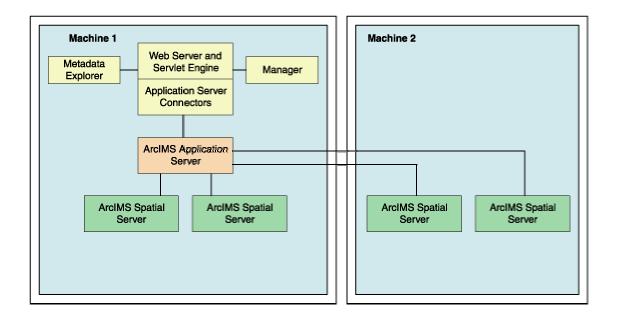
Spatial Servers can be distributed across an ArcIMS site in several ways as illustrated below.

• This configuration illustrates two ArcIMS Spatial Server on the same machine.



To have more than one ArcIMS Spatial Server on the same machine, see the Managing ArcIMS Spatial Servers section in the *Using ArcIMS* book.

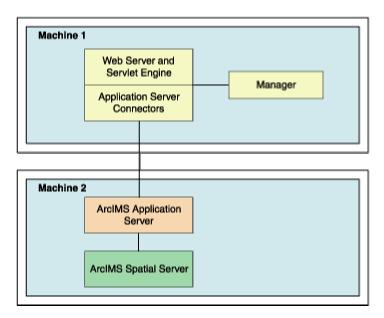
• This configuration illustrates two ArcIMS Spatial Servers on multiple machines.



To install multiple ArcIMS Spatial Servers on additional machines, see the topic Installing multiple ArcIMS Spatial Servers.

Dedicated Web server machine

Your site may require your Web server to be on one machine while the ArcIMS components reside on a different machine. In this configuration, the Application Server Connectors must reside on the same machine as the Web server.



If your Application Server is on a different machine from your Application Server Connector, some additional configuration of the Application Server Connector is required. If you are using the Servlet Connector, the Web server–servlet engine configuration available in the post installation will automatically edit your esrimap_prop file with the Application Server name you provide. If you are using the ColdFusion Connector, see the CustomizingColdFusion.pdf for details on the servername attribute value for any action. For the Java Connector see the CustomizingJavaConnector.pdf for information on the ConnectionProxy object or the tcpConnection.tag. To install the Customizing documentation, select a Custom ArcIMS installation, expand the Documentation feature, and select all documents to install.

If you will be using Manager, Service Administrator, and/or Metadata Explorer, it is also recommended that Manager and/or Metadata Explorer be installed on the Web server machine. If you will be using Metadata Explorer and/or Service Administrator, J2SE JDK 1.3.1 or higher is required on this machine. See the topic Verify your system requirements for system requirement information.

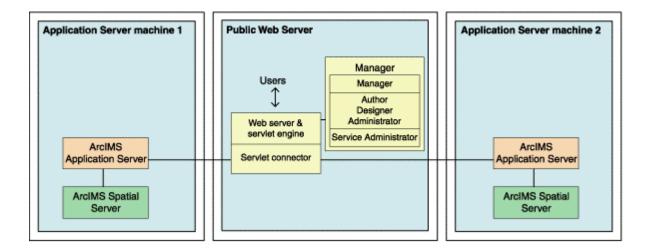
Multiple ArcIMS Application Servers

The ArcIMS Application Server runs as a background process (Windows service/UNIX daemon) and handles the load distribution of incoming requests. The Application Server also catalogs which services are running on which ArcIMS Spatial Servers. Using this information, the Application Server dispatches an incoming request to the appropriate Spatial Server.

Installing multiple ArcIMS Application Servers on different machines can improve load distribution of incoming requests and help create redundancy (failover). Installing the ArcIMS Application Server on a different machine to other ArcIMS components is common in a secure network environment where the Web server is located in the DMZ. The DMZ is established by an outside firewall. See the technical articles for ArcIMS located at http://support.esri.com for more information on system design strategies.

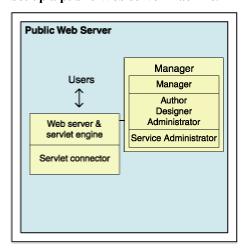
For high-volume implementations of ArcIMS, it is possible to have a single Web server communicate with several Application Servers in round-robin or failover configuration. If used for round-robin, the Application Server will rotate requests among the specified Application Servers. If used for failover, the back-up Application Server will serve maps when the primary Application Server machine is inaccessible. To support multiple Application Servers, the Application Server names and ports must be added to the esrimap_prop file, located in your Web server's servlet directory. If more than one Application Server is specified in the esrimap_prop file, you cannot administer multiple Application Servers with Administrator. To administer multiple Application Servers, you can use the Service Administrator (installed with the Manager installation feature).

Below is an example of a multiple Application Server setup:



Steps to set up this scenario:

1. Set up a public Web server machine.

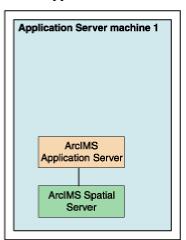


This machine will serve the Web sites to users.

- 1. Verify you meet system requirements, including that your Web server and servlet engine are running and communicating. For information on setting up your Web server and Servlet Engine, visit http://support.esri.com/search/ KbDocument.asp?dbid=23450. IMPORTANT: You will be using Service Administrator to administer the Application Servers. Service Administrator will be installed on this machine by the Manager feature. J2SE SDK is required to use Service Administrator. J2SE SDK 1.3.1._02 or 1.4.0 are supported for use with ArcIMS 4.0.1. The document linked above includes instructions on installing J2SE SDK for your Web server and servlet engine configuration.
- 2. Run the ArcIMS setup. Choose to install the following (uncheck all other ArcIMS installation features so these features will not be installed):
 - Expand the Application Server Connectors feature, select to install the Servlet Connector only.
 - Select to install Manager.
- 3. Follow the installation directions on the screen.
- 4. During the post installation setup you will be required to provide the following information:

- The location of your Web site and Output directories. In this scenario the Web site and Output directories will be created on this machine, as this machine will be used to serve the Web sites. Choose the default directory, or change the location and create these directories on a different local drive.
- Select to share your Output and Web site directories by checking the box on the create Web site and Output dialog box. Your Application Server machine will need to be able to access these directories (discussed in detail when setting up Application Server machines).
- The location of your AXL directory. In this scenario the AXL directories will be created on this machine, as this machine will be used to serve the Web sites. Choose the default directory, or change the location and create these directories on a different local drive.
- The name of your Web server. Enter this machine's Web server host name. By default the host name of this machine will be provided.
- The Application Server name and ports. In this scenario you will have two Application Servers; for now enter the machine name where one of these Application Servers will be installed. By default the host name of this machine will be provided; change this to the host name of one of your Application Server machines.
- Your Web server and servlet engine information. If you are using a Web server and servlet engine that are automatically configured for you, configuration will be performed by the post installation setup.
- 5. At the end of the post installation setup you will be required to stop and restart your Web server to apply configuration changes.
- 6. Share the directory containing the data you will be using (if it is local data and not ArcSDE data). Each Spatial Server machine must be able to access the data for map services created. The AXL files must be accessible by the Application Server.

2. Create Application Server machine 1

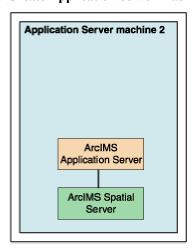


This will be the main Application Server machine. This machine will host the ArcIMS Application Server and the ArcIMS Spatial Server. The Service Administrator will be used to administer this ArcIMS Application Server. We will also create an identical setup on another machine, which will be the backup machine for failover.

- 1. Verify you meet system requirements.
- 2. Install the following ArcIMS features (uncheck all other ArcIMS installation features so these features will not be installed):
 - Application Server
 - Spatial Server only
- 3. Follow the installation directions on the screen.

- 4. During the post installation setup you will be required to provide the following information:
 - The location of your Web site and Output directories. In this scenario browse to the Web site and Output directories located on your public Web server machine (for example, UNC pathname \publicwebserver\ArcIMS). Your public Web server machine will be used to serve the Web sites.
 - The location of your AXL directory. Browse to your public Web server machine (for example, UNC pathname \publicwebserver\ArcIMS). Your AXL directory will be created by default under C:\ArcIMS on your public Web server machine. All Application Servers accessing the AXL files will share the files at this location.
 - The name of your Web server. Enter this machine's Web server host name. By default the host name of this machine will be provided.
 - The Application Server name and registry and connector ports. Enter this machine name, where this Application Server has been installed. By default the host name of this machine will be provided.
 - Your system domain, username, and password to administer ArcIMS background processes. Enter the domain, username, and password of the ArcIMS installation account. This account must have administrator privileges.
- 5. Each AXL file references the path to the data used. Verify that the path to the data is accessible by the Spatial Servers that are registered with the Application Servers, on Application Server machine 1, and on Application Server machine 2. In general, the path to the data must be valid from the perspective of any Spatial Server. It is recommended that the path used be a UNC pathname.

3. Create Application Server machine 2



This machine will be identical to Application Server machine 1. If used for round-robin, it will rotate requests between the two Application Servers. If used for failover, it will serve maps when Application Server machine 1 is inaccessible. This machine, like Application Server machine 1, will host ArcIMS Application Server and ArcIMS Spatial Server. Service Administrator will be used to administer the Application Server.

Follow the same steps above to set up Application Server machine 2, as you did to set up Application Server machine 1.

4. Configure the public Web server machine for multiple Application Servers

1. Find and open in a text editor the esrimap_prop file located on your public Web server machine in the Web server servlets directory.

The following lists common default servlet directories for specific Web server and servlet engine combinations:

- **Apache with Tomcat:** C:\Jakarta-tomcat-3.2.3\Webapps\ROOT\WEB-INF\classes
- Apache with ServletExec: C:\Program Files\New Atlanta\ServletExec AS\se-<instance name>\Servlets

- IBM HTTP Server with WebSphere:
 - C:\Websphere\AppServer\installedApps\sampleApp.ear\default app.war\WEB-INF\classes
- Sun ONE 6.0 (iPlanet): C:\iplanet\servers\docs\servlet
- Microsoft IIS with JRun: C:\Program Files\Allaire\Jrun\servlets
- Microsoft IIS with ServletExec: C:\Program Files\New Atlanta\ServletExec ISAPI\Servlets
- Microsoft IIS with Tomcat: C:\Jakarta-tomcat-3.2.3\Webapps\ROOT\WEB-INF\classes
- Oracle Application Server: C:\Oracle\iAS\Apache\Jserv\servlets
- WebLogic: C:\bea\wlserver6.1\config\<mydomain>\applications\DefaultWebApp\WEB-INF\classes
- 2. Edit the AppServerMachine parameter in the esrimap_prop file with the names of the Application Servers you installed (the names of Application Server machine 1 and Application Server machine 2, for example, appservermachine 1, appservermachine 2).

```
### The name of the machine or machines on which the ArcIMS Application Server is running.
### If multiple appServerMachines are specified then multiple appServerClientPort must
### also be specified.
### Example:
### appServerMachine=129.103.35.97,123.151.62.57
appServerMachine=appservermachine1, appservermachine2
```

3. Edit the AppServerClientPort parameter in the esrimap_prop file with the registry port numbers of the Application Servers you installed (for example, 5300,5300).

```
### The port on which the ArcIMS Servlet Connector communicates with the ArcIMS Application
### Server. If multiple appServerMachines are specified,
### multiple appServerClientPorts must also be specified.
### Example:
### appServerClientPort=5300,5350
appServerClientPort=5300,5300
```

4. For round-robin, leave the failover parameter in the esrimap_prop file set to false.

```
### Set this to True if you want all requests to be sent to the first
### appServerMachine until it fails to return a response. Then requests will
### be sent to the second machine in the appServerMachine list. If failover is
### set to False, the appServerMachines will be used in a round robin manner.
### This property only works with ArcExplorer, Java Viewers, and HTML Viewers.
failover=False
```

5. For failover, set the failover parameter in the esrimap_prop file to true. This will specify that requests should be sent to the first Application Server machine listed until it fails to return a response, then requests will be sent to the next Application Server listed.

```
### Set this to True if you want all requests to be sent to the first
### appServerMachine until it fails to return a response. Then requests will
### be sent to the second machine in the appServerMachine list. If failover is
### set to False, the appServerMachines will be used in a round robin manner.
### This property only works with ArcExplorer, Java Viewers, and HTML Viewers.
failover=False
```

6. After editing the esrimap_prop file, save changes and stop and restart your Web server.

5. Create your map services for both Application Servers

The Service Administrator will be used to administer the ArcIMS Application Servers. If you met all system requirements and you used the post installation setup to configure your Web server, the Service Administrator will have been set up. If you manually configured your Web server, you must manually configure your Web server for Service Administrator (see Configure your Web server for Service Administrator).

To access Service Administrator open your browser (on any machine) and type: http://<Web server machine name>/esriadmin

For example: http://publicwebserver/esriadmin

By default the login page for Application Server 1 will be displayed. The Application Server specified in the esriadmin.properties file determines the default login page displayed. Provide the username and password to log in to administer Application Server 1.

To administer Application Server 2, adapt the URL as follows:

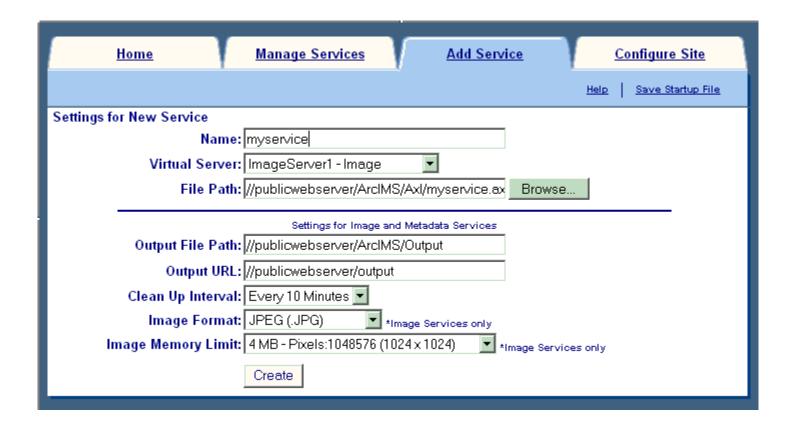
http://<Web server machine name>/esriadmin/logincheck.jsp?host=<Application Server Machine 2>&port=<appservermachine2port>

For example:

http://publicwebserver/esriadmin/logincheck.jsp?host=appservermachine2&port=5300

For more information on using Service Administrator, see the Using ArcIMS Service Administrator section of the *Using ArcIMS* book.

Services created on each Application Server should be completely identical. The image below illustrates the parameters used in this scenario to create new services on Application Server machine 1 and Application Server machine 2. The public Web server machine serves the Web sites to the users, so the output files should be stored on this machine. The server output locations were manually changed to point to the public Web server machine (in this example, "publicwebserver" will be the host name of your public Web server machine). In this example, the AXL file used is also stored on the public Web server machine; the UNC pathname to the AXL file is provided in the File Path field.



Step 3a: Installing ArcIMS

Overview

The ArcIMS 4.0.1 install consists of two parts, the installation and the post installation.

- The installation is the setup process in which you determine what installation features you would like to install. The setup program will install the files required for these features.
- The post installation is the setup process that completes your ArcIMS installation. In the post installation setup, depending on what features were installed, you will be able to configure ArcIMS, set up the Site Information Converter, and configure your Web server—servlet engine. See the post installation setup section for more information.

To successfully install ArcIMS 4.0.1, both the installation and post installation must be completed.

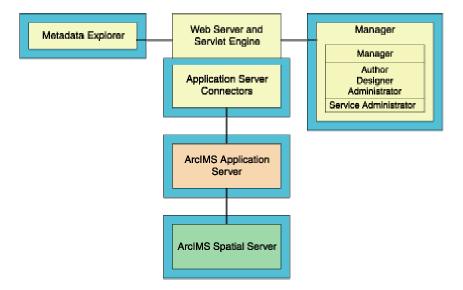
To install ArcIMS 4.0.1

Choose the installation steps for your configuration:

- Performing 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

Performing 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.



Installing ArcIMS 4.0.1

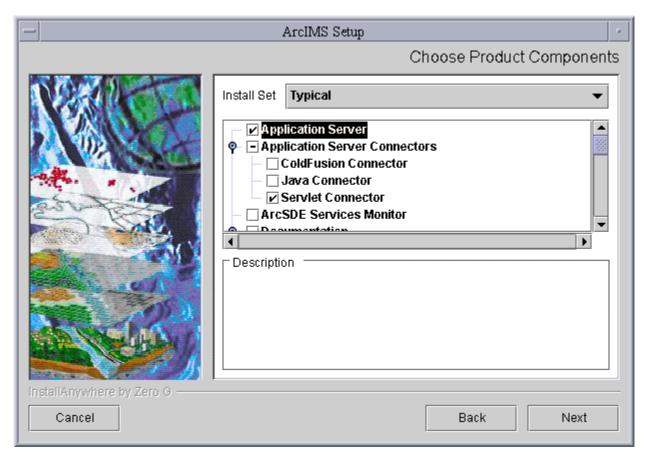
The ArcIMS typical installation procedure includes the following steps:

- 1. Start the setup program. Follow these steps:
 - 1. Verify that your site meets the system requirements. For system requirements see Step 1: Verify system requirements.
 - 2. 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.**
 - 3. Execute the SetupArcIMS script located on the ArcIMS CD.

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

During the installation you will be asked to read the license agreement and accept it, or exit if you don't agree with the terms.

The ArcIMS install allows you to select the features you would like to install.



For the feature set Typical, the features most commonly installed on one machine are selected by default. For more information on these features see the Overview topic. To install other features see Installing ArcIMS overview.

To complete the installation, follow the directions on the screen.

2. Complete the post installation setup

After completing the ArcIMS installation, you will be provided with the opportunity to begin the post installation setup. The following post installation features are required to successfully complete a typical ArcIMS installation:

- ArcIMS Configuration
- Web server—servlet engine configuration

If you select the typical post installation these post installation options are automatically selected. See the Post installation topic for information on the post installation setup.

Before you begin ArcIMS, if you did not choose to automatically configure your Web server—servlet engine in the post installation, you must complete Step 4: Configure your Web server, either manually or by running the post installation setup again.

Note: The Spatial Server uses TrueType fonts located in:

/usr/openwin/lib/X11/fonts/TrueType. ArcIMS Author and ArcExplorer—Java use fonts from the font.properties file located at: <JREHOME>/lib or <\$JAVA HOME>/lib.

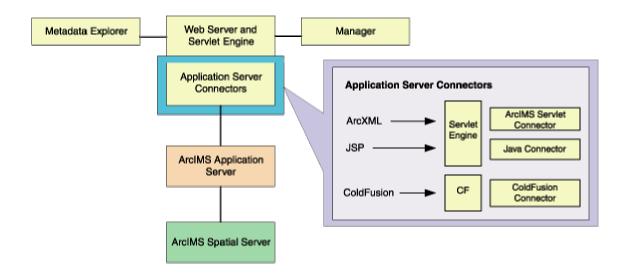
You can modify the font property file for your own font by following the instructions from this link:

http://java.sun.com/j2se/1.3/docs/guide/intl/fontprop.html

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 Verify your system requirements for ColdFusion Connector requirements.

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

To install ArcIMS Application Server Connectors

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

1. Start the setup program

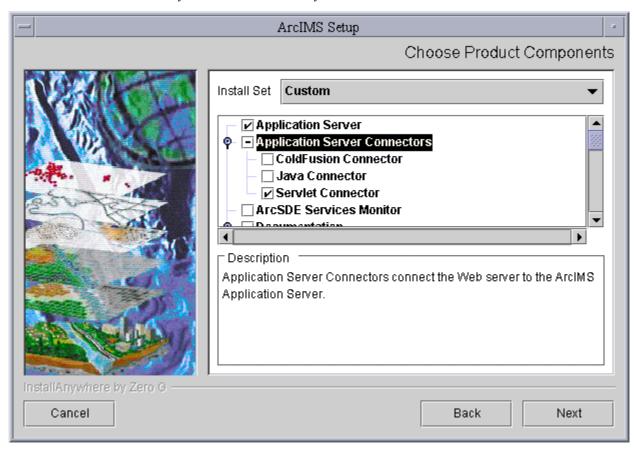
Follow these steps:

- 1. Verify that your site meets the system requirements. For system requirements see Step 1: Verify system requirements
- 2. 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.
- 3. Execute the SetupArcIMS script located on the ArcIMS CD.

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

During the installation you will be asked to read the license agreement and accept it, or exit if you don't agree with the terms.

The ArcIMS install allows you to select the features you would like to install.



At the Choose Product Components dialog, from the Feature Set dropdown list, select Custom. By default, the features installed by a typical installation are selected. Unselect all the features you do not wish to install. The Application Server Connectors feature contains the ColdFusion Connector, Java Connector, and Servlet Connector. Select the custom Application Server Connector you would like to install.

There are also Application Server Connector Documentation and Samples available to install. Select the Samples and Documentation you would like to install.

To complete the installation, follow the directions on the screen.

2. Complete the post installation setup

The following ArcIMS post installation options are required to successfully install custom Application Server Connectors:

- ArcIMS Configuration
- Web server–servlet engine configuration (required only if the ArcIMS Servlet Connector was installed)

If you select a typical post installation these post installation options are automatically selected. See the Post installation topic for information on the post installation setup.

Before you begin using ArcIMS, if you did not choose to automatically configure your Web server—servlet engine in the post installation, you must complete Step 4: Configure your Web server, either manually or by running the post installation setup again.

3. Additional configuration steps for custom Application Server Connectors

Before the installation is complete, configure the connector you installed:

- ArcIMS ColdFusion Connector
- ArcIMS Java Connector
- ArcIMS Servlet Connector
- WMS

Note: To install the Z39.50 Connector see Installing Metadata Explorer.

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>/ArcIMS/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>/ArcIMS/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 configure your Web server and servlet engine. Your Web server and servlet engine can be configured automatically using the post installation setup, or manually.

To automatically configure your Web server and servlet engine, use the post installation setup. See the Web server—servlet engine configuration option in the post installation section for information on the following automated Web server—servlet engine configurations:

- Tomcat for Apache
- ServletExec 4.1.1 for Apache
- Sun ONE 6.0 (iPlanet) Web server (with its native Java servlet engine)
- WebLogic 6.1
- WebSphere 4.0.2
- Oracle Application Server 9i

To manually configure your Web server and servlet engine for ArcIMS see Step 4: Configure your Web server.

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 SevletExec: <ServletExec Installation Directory>/NewAtlanta/ServletExecAS/se-<instance-name>/Servlets

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

IBM HTTP Server with WebSphere 4.0.2: <WebSphere Installation

Directory>/AppServer/installedApps/servlet.ear/arcimsservletconnector.war/WEB-INF/classes

Sun ONE 6.0 (iPlanet): <iPlanet Installation Directory>/servers/docs/servlet

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 verify that it has been set to the name of the computer where the ArcIMS Application Server is installed.
- 4. Find appServerClientPort and verify that it has been set 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 logfile 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 reaspect 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.
- 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:

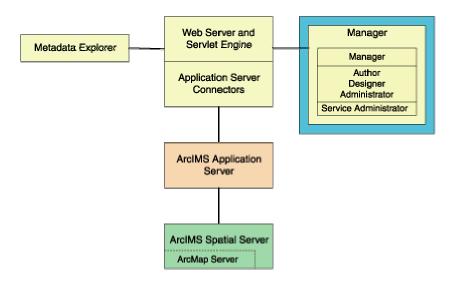
http://<localhost>:<port#>/servlet/com.esri.wms.Esrimap?Cmd=ping

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 installation of ArcIMS Manager Applications only. To install ArcIMS Spatial Server, ArcIMS Application Server, and Application Server Connectors, refer to Performing a typical installation.

Installing ArcIMS Manager Applications

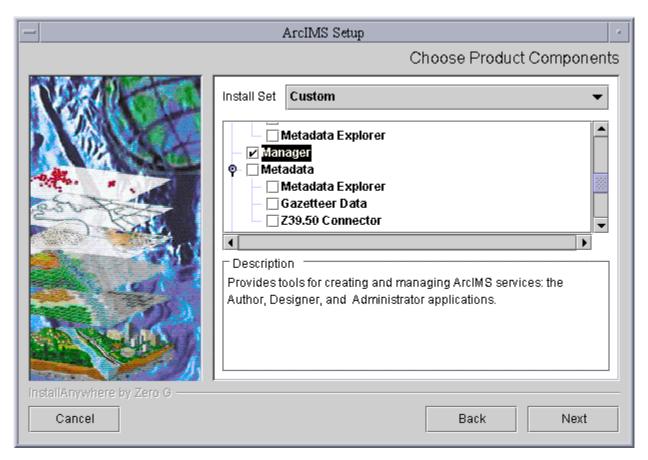
Perform the following steps on the computer where you want to install ArcIMS Manager Applications:

- 1. Start the setup program. Follow these steps:
 - 1. Verify that your site meets the system requirements. For system requirements see Step 1: Verify system requirements
 - 2. 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.
 - 3. Execute the SetupArcIMS script located on the ArcIMS CD.

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

During the installation you will be asked to read the license agreement and accept it, or exit if you don't agree with the terms.

The ArcIMS install allows you to select the features you would like to install.



At the Choose Product Components dialog, from the Feature Set dropdown list, select Custom. By default, the features installed by a typical installation are selected. Unselect all the features you do not wish to install. Select Manager to install the Manager Applications.

To complete the installation, follow the directions on the screen.

2. Complete the post installation setup

After completing the ArcIMS installation, you will be provided with the opportunity to begin the post installation setup. The following post installation features are required to successfully complete an ArcIMS Manager Applications installation:

• ArcIMS Configuration

If you select a typical post installation these post installation options are automatically selected. See the Post installation topic for information on the post installation setup.

Note: ArcIMS Author and ArcExplorer—Java use fonts from the font.properties file located at: <JREHOME>/lib or <\$JAVA HOME>/lib

You can modify the font property file for your own font by following the instructions from this link:

http://java.sun.com/j2se/1.3/docs/guide/intl/fontprop.html

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 tag libraries and the Java API of the ArcIMS Java Connector. 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. See Installing ArcIMS Manager Applications.
 - 2. Configure ArcIMS Service Administrator for your Web server. See 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. See Installing ArcIMS Manager Applications.
 - 2. Configure ArcIMS Service Administrator for your Web server. See Configure ArcIMS Service Administrator for your Web server.
 - 3. Install and set up the optional ArcSDE Administrator component on the ArcIMS Spatial Server computer. See Setting up ArcSDE UNIX and Linux Servers for ArcIMS Service Administrator.

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.

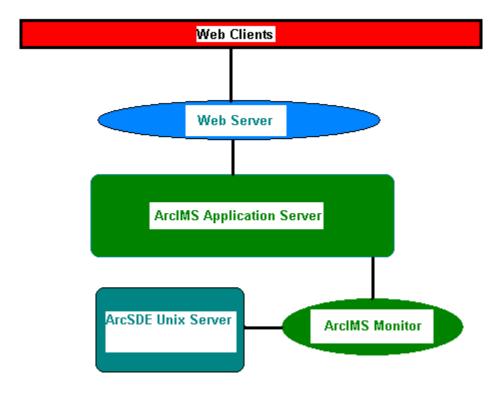
To use an ArcSDE Server with ArcIMS Service Administrator, you should already have installed ArcIMS Service Administrator and configured your Web server for ArcIMS Service Administrator. See the ArcIMS Service Administrator instructions for your platform: HP-UX, IBM AIX, Linux Red Hat, or Sun Solaris.

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.
- List, terminate, 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 that are sent through the Application Server to an ArcIMS monitor. The ArcIMS monitor then generates ArcSDE instance management requests.



Setting up the ArcSDE Server

- 1. 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.
- 2. You must also have the jsde82_sdk.jar and the jsde82_sdkres.jar files in your CLASSPATH. These Java Archive (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 J2SE SDK or J2SE JRE installation directory under the lib/ext folder.
- 3. Install ArcSDE Services monitor onto your ArcSDE Server machine.

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

Note: If you installed Spatial Server this would have installed ArcIMS monitor, which can be configured as per steps 4–9 below for monitoring ArcSDE.

Start the setup program

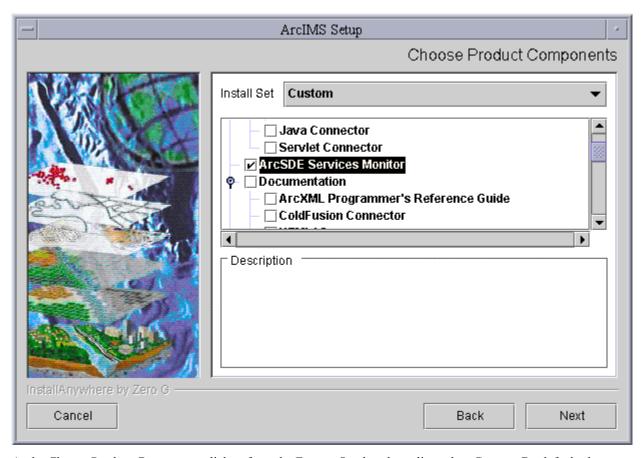
Follow these steps:

- 1. Verify that your site meets the system requirements. For system requirements see Step 1: Verify system requirements.
- 2. 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.
- 3. Execute the SetupArcIMS script located on the ArcIMS CD.

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

During the installation you will be asked to read the license agreement and accept it, or exit if you don't agree with the terms.

The ArcIMS install allows you to select the features you would like to install.



At the Choose Product Components dialog, from the Feature Set dropdown list, select Custom. By default, the features installed by a typical installation are selected. Unselect all the features you do not wish to install. Select ArcSDE Services Monitor to install the ArcSDE Services monitor on this machine.

To complete the installation, follow the directions on the screen.

- 4. Once the software is installed:
 - 1. Type: cd <ArcIMS Installation Directory>/ArcIMS/Monitor
 - 2. Open the Monitor.properties file in a text editor
 - 3. Change the registryHost setting from localhost to your ArcIMS Application Server: registryHost=<servername>.<domain>.com
 - 4. Uncomment the sdePropertiesFilename parameter: sdePropertiesFilename=Sde.properties
 - 5. Save and close the file.
- 5. Open the Sde.Properties file in that same directory in a text editor:
 - 1. Uncomment the instanceNames property and set it equal to your ArcSDE service name: instanceNames=esri_sde
 - 2. Uncomment the portNumbers property and set it equal to your ArcSDE server port number: portNumbers=5151
 - 3. Uncomment the sdehomes property and set it equal to your \$SDEHOME path: sdehomes=/<servername>/sde82
- 6. Open the aimsmonitor script in the <ArcIMS install location>/Xenv directory in a text editor:

- 1. Uncomment the AIMSHOME property and set it to the path to your ArcIMS Installation Directory: AIMSHOME=/<server name>/ArcIMS; export AIMSHOME
- 2. Uncomment the JAVA_HOME property and set it to the path to your Java or J2SE JRE installation: JAVA_HOME=/usr/java/jre1.3.1_02
- 3. **Note:** For this utility, you must have J2SE SDK or J2SE JRE installed. You can install J2SE JRE from the ArcIMS installation CD.
- 7. Uncomment the \$LD_LIBRARY_PATH and \$LIBPATH properties accordingly. Append your existing \$LD_LIBRARY_PATH or \$LIBPATH to this entry as well.
- 8. Start the ArcIMS monitor in the \$AIMSHOME/Xenv directory: ./aimsmonitor start &
- 9. Open ArcIMS Service Administrator and log in. If you have set up the software correctly, you will see an ArcSDE option.

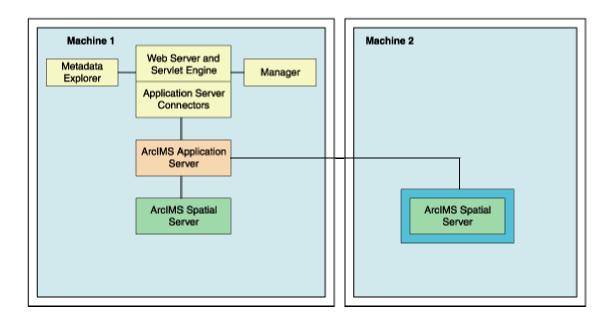
Note: For this utility, you must have J2SE SDK or J2SE JRE installed. You can install this from the ArcIMS installation CD.

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.

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 the installation of ArcIMS Spatial Server only. To install ArcIMS Manager Applications, ArcIMS Application Server, and Application Server Connectors, refer to Performing a typical installation.

Installing ArcIMS Spatial Server

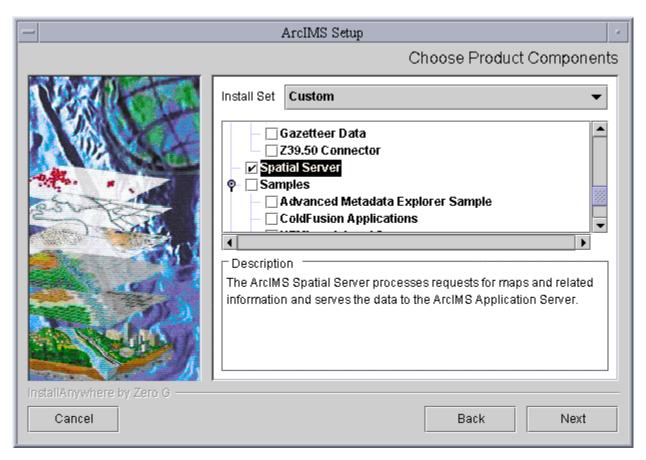
Perform the following steps on the computer where you want to install an ArcIMS Spatial Server:

- 1. Start the setup program. Follow these steps:
 - 1. Verify that your site meets the system requirements. For system requirements see Step 1: Verify system requirements
 - 2. 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.
 - 3. Execute the SetupArcIMS script located on the ArcIMS CD.

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

During the installation you will be asked to read the license agreement and accept it, or exit if you don't agree with the terms.

The ArcIMS install allows you to select the features you would like to install.



At the Choose Product Components dialog, from the Feature Set dropdown list, select Custom. By default, the features installed by a typical installation are selected. Unselect all the features you do not wish to install. Select Spatial Server to install ArcIMS Spatial Server on your machine.

To complete the installation, follow the directions on the screen.

2. Complete the post installation setup

After completing the ArcIMS installation, you will be provided with the opportunity to begin the post installation setup. The following post installation features are required to successfully complete an ArcIMS Spatial Server installation:

ArcIMS Configuration

If you select a typical post installation these post installation options are automatically selected. See the Post installation topic for information on the post installation setup.

3. Additional installation steps required for multiple Spatial Servers:

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

The server output directory that was established as a virtual directory on your Web server. The output directory would have been created during the Web server—servlet engine configuration in the post installation on your host machine, if selected, or during your manual configuration of the Web server as described in Step 4: Configuring your Web server.

All data directories are 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.

- 2. Verify that your ArcIMS monitor process is started.
 - To manually start ArcIMS monitor, navigate to the \$AIMSHOME/Xenv directory and type the following:./aimsmonitor start &
 - To start the ArcIMS Monitor process at system boot, refer to the instructions provided in the file \$AIMSHOME/Xenv/aimsmonitor.
- 3. 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.

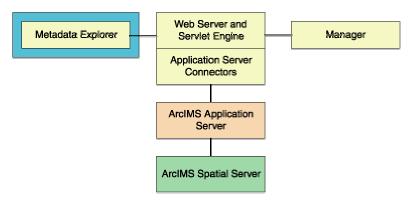
See ArcIMS Help for more information on configuring your Web site.

Note: When you install ArcIMS Spatial Servers on a system where you already have an existing ArcIMS 4.0.1 site configuration, you need to manually add a Metadata Server virtual server. See *Using ArcIMS* for details on configuring virtual servers for ArcIMS.

Note: The Spatial Server uses TrueType fonts located in: /usr/openwin/lib/X11/fonts/TrueType.

Installing Metadata Explorer

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



Note: These instructions describe the installation of Metadata Explorer and Gazetteer data only. To install the ArcIMS Manager, ArcIMS Application Server, ArcIMS Spatial Server, and Application Server Connectors, refer to Performing a typical installation.

To install ArcIMS Metadata Explorer

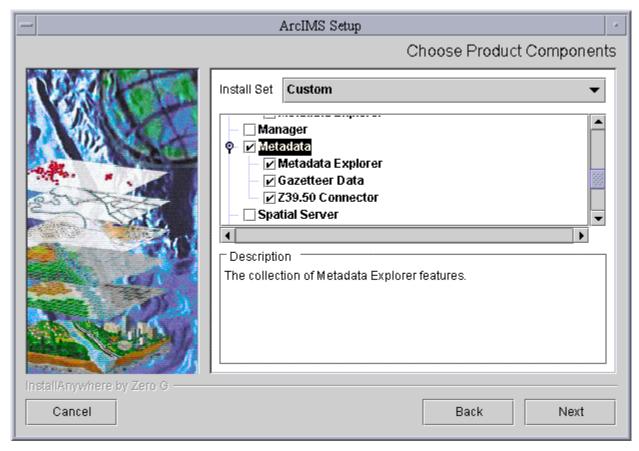
On the computer where you wish to install Metadata Explorer, perform the following steps:

- 1. Start the setup program. Follow these steps:
 - 1. Verify that your site meets the system requirements. For system requirements see Step 1: Verify system requirements.
 - 2. 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.
 - 3. Execute the SetupArcIMS script located on the ArcIMS CD.

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

During the installation you will be asked to read the license agreement and accept it, or exit if you don't agree with the terms.

The ArcIMS install allows you to select the features you would like to install.



At the Choose Product Components dialog, from the Feature Set dropdown list, select Custom. By default, the features installed by a typical installation are selected. Unselect all the features you do not wish to install. The Metadata feature contains Metadata Explorer, Gazetteer Data and the Z39.50 Connector. Select Metadata Explorer and other features you would like to install.

There is also Metadata Explorer Documentation available to install. Select the Metadata Explorer documentation to install it.

To complete the installation, follow the directions on the screen.

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

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

Note: If you choose to install the Z39.50 Connector, you will need to configure the connector before you can use it. See Configuring the Z39.50 connector.

Configuring the Z39.50 Connector

The Z39.50 Connector must be installed prior to configuring. For information on installing the Z39.50 Connector see Installing Metadata Explorer.

To configure ArcIMS with Z39.50, perform the following:

- 1. In a text editor, open z3950.properties.
 - <ArcIMS Installation Directory>\ArcIMS\Metadata\Z3950Connector\z3950.properties
- If necessary, change the port number the Z39.50 Connector will use. port=210

The default port number is 210 but it can be modified depending on your network configuration.

3. Edit defaultServiceName=MyMetadataService to match your Metadata Service name.

If you have not created your Metadata Service yet, accept the default value and edit the property as necessary at a later date.

See Creating and Using Metadata Services for details on creating the necessary Metadata Service.

4. The default connection type is HTTP. If utilizing TCP/IP connection protocols, proceed to Step 7 below.

```
connectionType=http
```

5. If browsing of the Metadata Service used in Step 3 is restricted by username and password, set these values. The username and password remain blank if browse access is unrestricted.

username=

password=

If you have not created your Metadata Service yet, accept the default blank values and edit the property as necessary at a later date.

See Creating and Using Metadata Services or ArcIMS Help for details on the methods used to restrict access to services.

Proceed to Step 7.

6. If connectionType=http in Step 4 above, proceed to Step 7.

```
connectionType=tcp,
```

- 7. Save and close the file.
- 8. On Windows NT, choose Start > Settings > Control Panel > Services;

On Windows 2000, choose Start > Settings > Control Panel > Administrative Tools > Component Services and click Services on the Tree tab;

On Windows XP, choose Start > Control Panel > Performance and Maintenance > Administrative Tools > Component Services and click Services on the Tree tab.

9. Start the ArcIMS Z3950 4.0 service listed in the Services window.

Installation of the Z39.50 Connector is complete. However, the connector is not functional until your have loaded the required Z39.50 specifications into your ArcSDE metadata tables. This step cannot be performed until you have created your Metadata Service. If you already have your Metadata Service created and in place, proceed to the next section, Loading the Z39.50 specifications. If not, see *Creating and Using Metadata Services* for details on setting up your Metadata Service and loading the Z39.50 specifications into your metadata tables.

Note: If you are using TCP/IP, the connector must also be configured for authentication of users. Detailed steps are provided in *Creating and Using Metadata Services*.

Loading the Z39.50 specifications

The following step cannot be performed until you have created your Metadata Service. If you have not created your service, see *Creating and Using Metadata Services* for details on creating your Metadata Service and loading the Z39.50 specifications into your metadata tables.

Execute the command-line utility that loads the necessary Z39.50 parameters into your SDE metadata tables. It's located at:

<ArcIMS Installation Directory>\ArcIMS\Metadata\ Commands\MDZCodeLoader.exe

Command usage:

mdzcodeloader.exe <input_file> <sde_server_machine> <sde_instance> <database> <username> <password> {table name prefix} {logfile}

- <input_file>: The information to load ArcSDE tables is defined in two files—GEO_mandatory.xml and GEO_expanded.xml. For setting up a basic configuration, use GEO_mandatory.xml as your input file. See *Creating and Using Metadata Services* for details on these files.
- <sde_server_machine>: The name of the ArcSDE host machine.
- <sde_instance>: The service or port number for ArcSDE.
- <database>: The ArcSDE database name. Use the same database name used in the <SDEWORKSPACE> element of your Metadata Service configuration file (*.axl). Use "" or # to accept the default value.
- <username>: The ArcSDE database username. Use the same username used in the <SDEWORKSPACE> element of vour Metadata Service configuration file (*.axl).
- <password>: The ArcSDE database password. Use the same password used in the <SDEWORKSPACE> element of
 your Metadata Service configuration file (*.axl).
- {table_name_prefix}: The prefix name for your metadata tables in ArcSDE. Use the same prefix used in the <TABLE_NAME> element of your Metadata Service configuration file (*.axl). The default prefix name for ArcIMS metadata tables, IMSMETADATA will be used if you don't specify a prefix name in your command.
- {logfile}: File name used to log any errors generated during the loading of the Z39.50 data. The default name, mdzcodeloader.log, will be used if you don't specify one in your command.

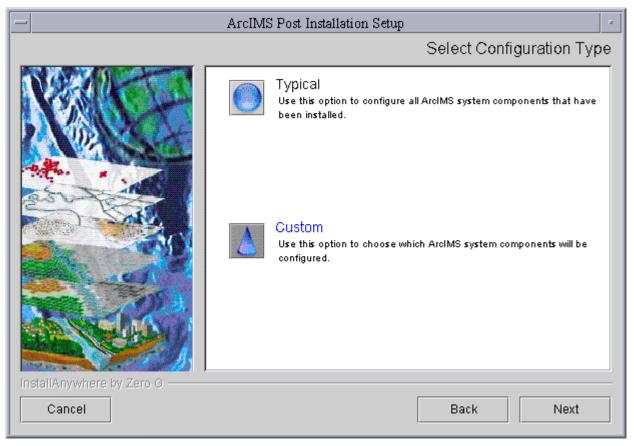
For example:

mdzcodeloader GEO mandatory.xml my.sde.machine 5151 "" user123 pass456 mymetadata

Step 3b: Post installation overview

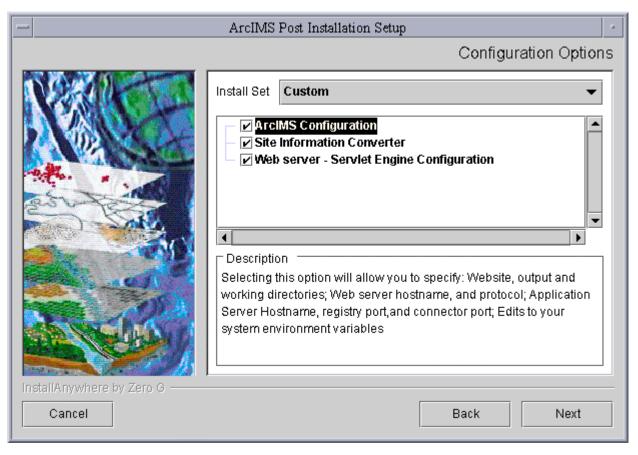
You must complete the ArcIMS post installation setup to successfully configure your ArcIMS installation for use. You can complete the post installation during the initial installation, or you can run the post installation setup at a later time by running the ArcIMS/tools/SetupArcIMS PostInstall script.

Choose a Typical or a Custom post installation setup.



A Typical post installation setup will guide you through the basic configurations for the features you installed. A Typical post installation setup will automatically choose the necessary post installation options required for your installation.

Select a Custom installation to choose from any of the available post installation setup options.



The available post installation setup options depend on what features were installed. If a post installation setup option is unavailable it will not be displayed.

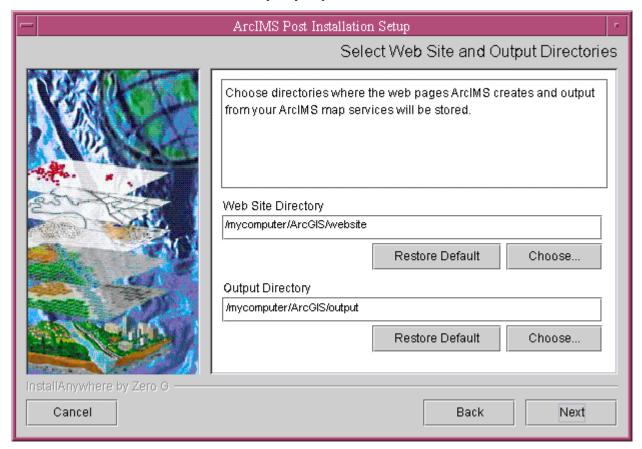
ArcIMS 4.0.1 offers the following post installation setup options:

- ArcIMS Configuration
- Site Information Converter
- Web server-servlet engine Configuration

ArcIMS Configuration

Selecting the ArcIMS Configuration post installation setup option will configure any of the following, depending on what features you installed:

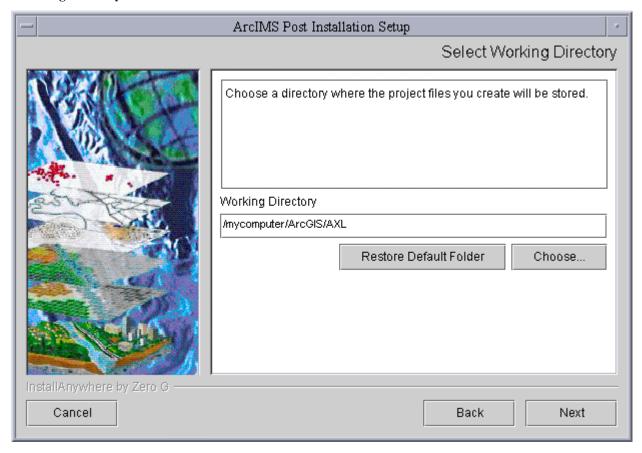
- Web site and output directories
- Working directory
- Netscape installation directory
- Web server host name and protocol
- Host name, registry port and connector port for Application Server communication
- System Environment variables
- Set a location to store ArcIMS Web sites and temporary output files



Your ArcIMS Web sites will be stored in the Web site directory. Provide a location to store your ArcIMS Web sites, or accept the default location. A Web site directory will be created in this location.

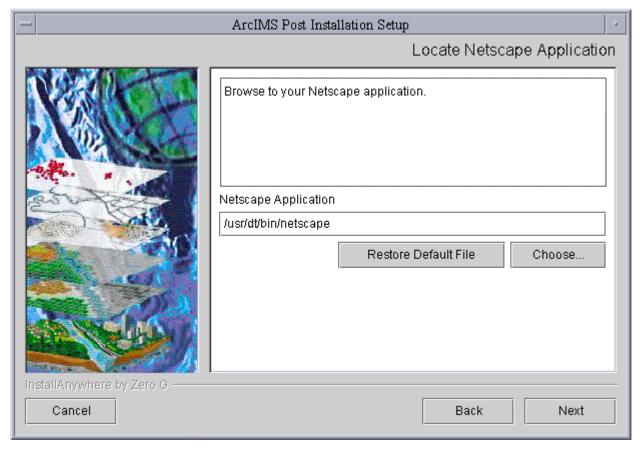
Your ArcIMS Web site output will be stored in the output directory. Provide a location to store your ArcIMS Web site output files, or accept the default location. An output directory will be created in this location.

Provide a working directory



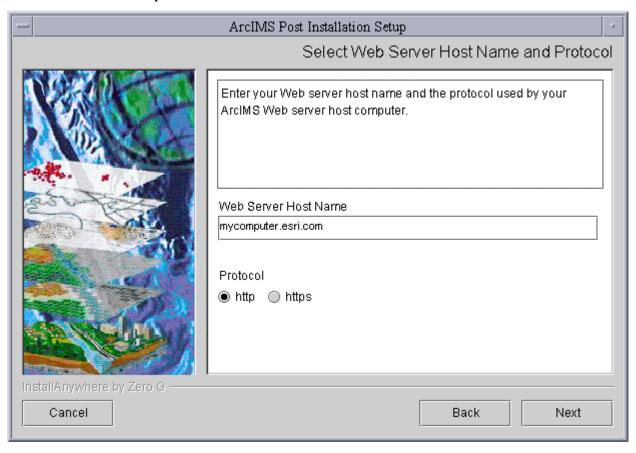
A working directory (AXL directory) is created where your ArcIMS project files will be stored.

Provide the Netscape application location



The location of your Netscape application is required if you choose to install Manager Applications. If Netscape was detected on your machine the path will be provided; you may accept this or browse to another location. If you have not installed Netscape, you may open another window and do so now.

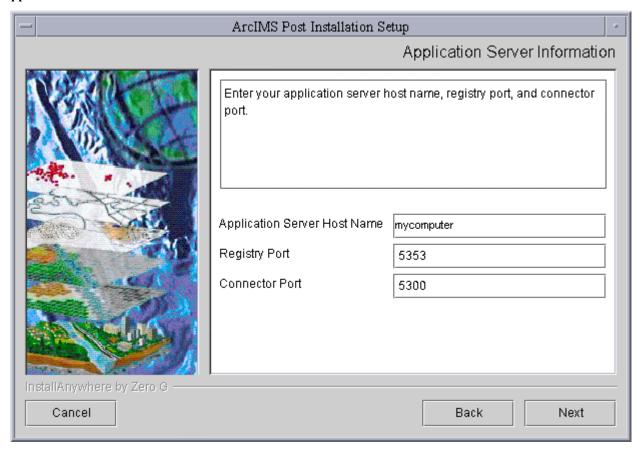
Provide Web server host name and protocol



Enter your Web server host name (this may be appended with your domain.com). By default your machine name, followed by esri.com, will be provided.

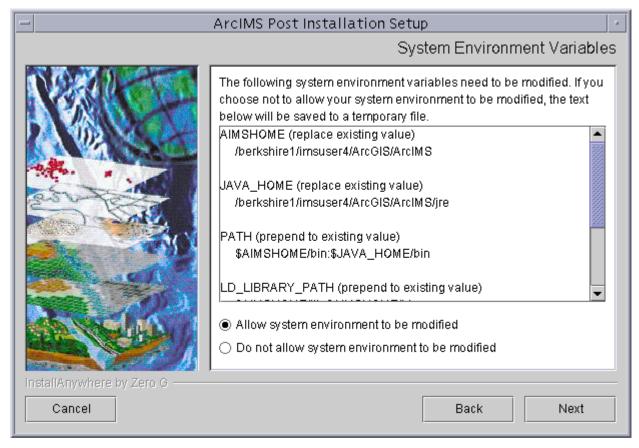
Select the protocol used by your Web server host computer. For Protocol, specify HTTP or HTTPS protocol.

Provide Application Server information



Enter the name of the machine where the Application Server is installed. Your machine name is provided as your Application Server host name by default. The Registry Port default is 5353. The ArcIMS Spatial Server, Monitor, and Tasker communicate with the ArcIMS Application Server via the Registry port. The Connector port default is 5300. The Servlet Connector and ArcIMS Application Server communicate via the Connector port.

System environment variables edited



A list of required edits is displayed. The post installation setup can make these changes to your system environment variables for you. If you do not allow the post installation setup to make these edits, to successfully complete your ArcIMS installation you must make the edits manually. A temporary file containing the necessary edits is created for you. The temporary file is located at: \$HOME/ArcIMS envVars.txt.

The following variables will be edited:

- AIMSHOME = <ArcIMS installation directory>/ArcIMS
- JAVA HOME = \$AIMSHOME/jre
- PATH = \$AIMSHOME/bin:\$JAVA HOME/bin
- LD LIBRARY PATH = \$AIMSHOME/lib:\$AIMSHOME/bin
- NPX PLUGIN PATH = \$JAVA HOME/plugin/sparc/ns4
- NPX JRE PATH = \$JAVA HOME

For additional information see Setting up your ArcIMS account.

Setting up your ArcIMS account

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

These steps will be completed for you when you install ArcIMS using the setup program, and use the post installation setup to edit your .cshrc file. If you are not using C shell, System Environment Variables are edited in the post installation section.

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

```
setenv AIMSHOME <ArcIMS Installation Directory>/ArcIMS
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>/ArcIMS/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
```

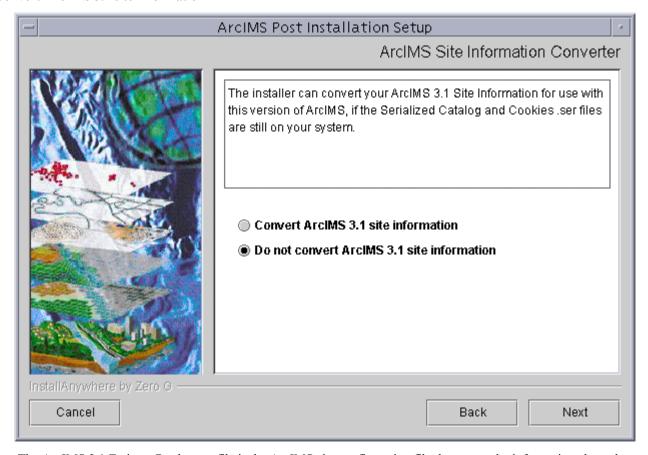
g. Update the value of the following variable to point to the location of the Web site where created sites are output:

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

ArcIMS Site Information Converter

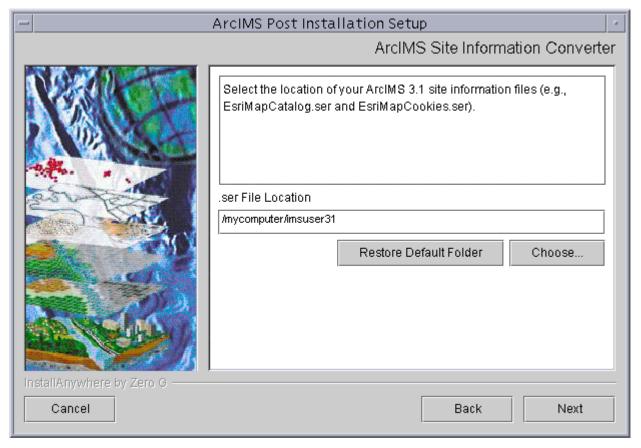
The Site Information Converter can be used to convert existing ArcIMS 3.1 Site Information for use with ArcIMS 4.0.1. The serialized EsrimapCatalog.ser and EsrimapCookies.ser files will be replaced by ArcIMSSite.sez and ArcIMSFolders.sez, respectively.

Select Convert ArcIMS 3.1 site information



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. Starting at ArcIMS 4, 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.

Browse to the location of your ArcIMS 3.1 serialized files



The ArcIMS 4.0.1 post installation setup will prompt you for the location of the EsrimapCatalog.ser and EsrimapCookies.ser files and will convert them to ArcIMSSite.sez and ArcIMSfolders.sez files. The newly created *.sez files will contain ArcIMS 3.1 site information that can be used by the ArcIMS 4.0.1 Application Server. Note that the existing EsrimapCatalog.ser and EsrimapCookies.ser files will not be deleted.

If you choose not to convert the files at this time, you can select this option of the post installation setup at a later time by rerunning the post installation setup using the ArcIMS/tools/SetupArcIMS_PostInstall script.

If you choose not to convert the files in the post installation, you can manually convert *.ser files using the SerConverter utility. The ArcIMS 4.0.1 installation program installs a SerConverter utility with a typical installation and where ArcIMS Application Server or ArcIMS Spatial Server is installed.

After completing the ArcIMS 4.0.1 installation, you can manually convert the *.ser files to *.sez files using the SerConverter utility as follows:

- 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 4.0.1 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>/ArcIMS/Middleware/Application_Server to the full path of the location of your ArcIMS
 4.0.1 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 4.0.1 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 4.0.1 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.

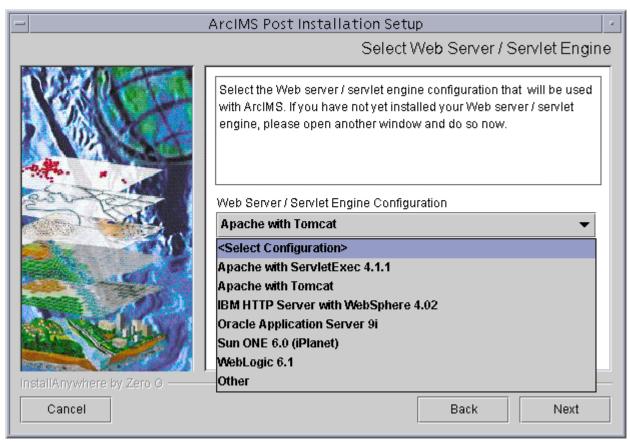
Web Server-servlet engine configuration

You must have a Web server and servlet engine installed and operational before you can configure them for ArcIMS. For supported Web servers and servlet engines, see Step 1: Verify system requirements. After you have installed your Web server and servlet engine you must verify that they are communicating with each other. If your Web server and servlet engine do not appear to be successfully communicating with each other, see your servlet engine's Web site for further information.

Automated Web server–servlet engine configuration are provided for the following:

- Apache with Tomcat
- Apache with ServletExec 4.1.1
- Sun ONE (iPlanet) 6.0 Web server (with its native Java servlet engine)
- Oracle Application Server 9*i*
- IBM HTTP Server with WebSphere 4.0.2
- WebLogic 6.1

1. Select the Web server—servlet engine configuration that you installed



If your Web server-servlet engine configuration is not listed, select Other. If you select Other you will need to manually configure your Web server before using ArcIMS. See Step 4: Configure your Web server for steps on manually configuring your Web server.

2. Provide information on your Web server-servlet engine

You will be required to provide some information on the Web server and servlet engine you are configuring. The information required will vary depending on your Web server-servlet engine configuration.

For Apache with Tomcat

You will be required to provide the following information:

- Apache installation directory (for example, /disk1/apache 1.3.20)
- Tomcat installtion directory (for example, /disk1/tomcat3.2.2)

For Apache with ServletExec

You will be required to provide the following information:

- Apache installation directory (for example, /disk1/apache 1.3.20)
- ServletExec installation directory (for example, /disk1/NewAtlanta/ServletExecAS)
- The ServletExec instance name you will be using for ArcIMS

For Sun ONE 6.0 (iPlanet)

You will be required to provide the following information:

• Sun ONE (iPlanet) installation directory (for example, /disk1/iplanet6.0/servers)

For Oracle Application Server 9i

You will be required to provide the following information:

• Oracle Application Server installation directory (for example, /disk1/Oracle9iAS)

For IBM HTTP Server with WebSphere 4.0

You will be required to provide the following information:

- IBM HTTP server installation directory (for example, /disk1/opt/IBMHTTPD)
- WebSphere installation directory (for example, /disk1/WebSphere4.0.2)

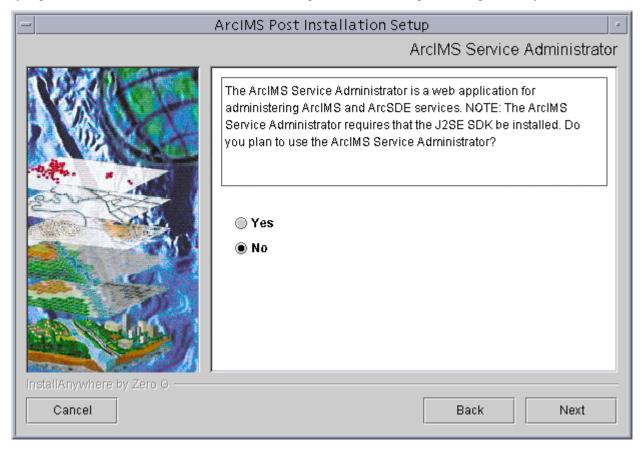
For WebLogic 6.1

You will be required to provide the following information:

• WebLogic installation directory (for example, /disk1/WebLogic6.1)

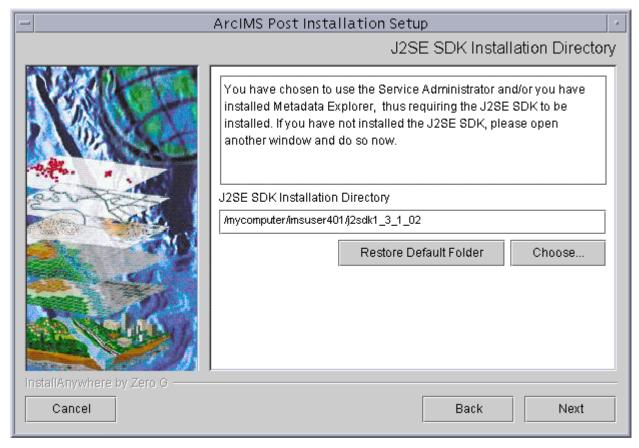
3. ArcIMS Service Administrator configuration

The ArcIMS Service Administrator is a remote site administration tool that allows you to administer ArcIMS and ArcSDE services. If you plan to use the ArcIMS Service Administrator the post installation setup can configure it for you.



The ArcIMS Service Administrator requires the Java 2 Platform Standard Edition Software Development Kit. If you choose to use the ArcIMS Service Administrator you will be required to provide your J2SE SDK installation directory.

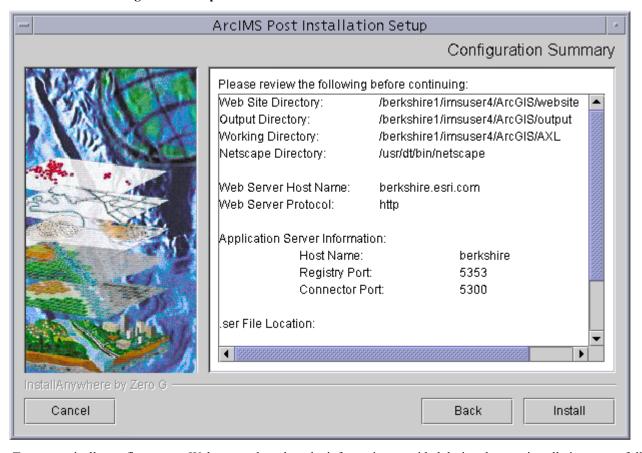
4. Provide your JDK installation directory



If you are using the ArcIMS Service Administrator, and/or you installed Metadata Explorer, you will be required to provide your Java 2 Platform Standard Edition Software Development Kit installation directory. If you have not installed the J2SE SDK you can open another window and do so now.

Note for Oracle Application Server users: If you installed Metadata Explorer and/or are using the ArcIMS Service Administrator, then Oracle9*i*AS Containers for J2EE are required. The post installation setup will prompt you to provide the Oracle9*i*AS Containers for J2EE installation location (for example, /disk1/Oracle9*i*As/j2ee).

5. Run the Web server configuration setup



To automatically configure your Web server, based on the information provided during the post installation setup, follow these steps:

- Open another window
- Log on as "root"
- Run the command provided on the Web server configuration screen (for example <ArcIMS installation location>/ArcIMS/tools/SetupArcIMS WebConfig
- Follow the directions on your screen
- If you do not want to automatically configure your Web server for ArcIMS the configuration must be completed manually. To manually configure your Web server for ArcIMS, see Step 4: Configure your Web server.

If you chose to use the ArcIMS Services Administrator, and/or you installed Metadata Explorer, the ArcIMS Web server Configuration Setup will automatically configure these for use.

Note: During the ArcIMS Web server Configuration Setup, Web services will be stopped and restarted. If you do not want your Web services stopped at this time, exit the setup and run the Web server Configuration Setup at a later time.

When the ArcIMS Web server configuration setup is complete, you are provided with directions to use the ArcIMS Diagnostics tool to test your ArcIMS installation.

Step 4: Configure your Web server

You must have a Web server and servlet engine installed and operational before they can be configured for ArcIMS. For supported Web servers and servlet engines, see Step 1: Verify system requirements. After you have installed your Web server and servlet engine you must verify that they are communicating with each other. If your Web server and servlet engine do not appear to be successfully communicating with each other, see your servlet engines Web site for further information.

Your Web server and servlet engine can be configured automatically using the post installation setup or manually.

To automatically configure your Web server and servlet engine use the post installation setup. See the Web server-servlet engine configuration option for information on the following automated Web server servlet engine configurations:

- Tomcat for Apache
- ServletExec 4.1.1 for Apache
- Sun ONE 6.0 (iPlanet) Web server (with its native Java servlet engine)
- WebLogic 6.1
- WebSphere 4.0.2
- Oracle Application Server 9i

If you have Metadata Explorer installed, and/or are using ArcIMS Service Administrator, the post installation setup will also configure your Web server to work with these applications.

To manually configure your Web server and servlet engine for ArcIMS use these steps:

Choose the steps for your Web server and servlet engine:

- Configuring Sun ONE (iPlanet)
- Configuring Oracle Application Server
- Configuring ServletExec for Apache
- Configuring Tomcat 3.2.x for Apache 1.3.26
- Configuring WebLogic
- Configuring WebSphere 4.0.2

If you manually configured your Web server and servlet engine, and you will be using Metadata Explorer or the ArcIMS Services Administrator, you will also need to manually configure your Web server for use with these features using the additional steps for your chosen Web server.

Configuring Sun ONE 6.0 (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.sun.com/software for information on problems with Sun ONE 6.0 (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 <Sun ONE 6.0 (iPlanet) Installation Directory>/servers/docs/servlet
```

- 2. Copy the following from <arcIMS Installation Directory>/ArcIMS/Middleware/servlet_connector to <Sun ONE 6.0 (iPlanet) Installation Directory>/servers/docs/servlet:
 - com directory
 - Esrimap_prop
 - ServletConnector Res.properties
 - ServletConnector Res en US.properties
 - WMSEsrimap prop
- 3. Open the Esrimap prop file in a text editor.
- 4. Change the value of appServerMachine to the name of your Application Server computer. For example:

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

- 5. Save and close the file.
- 6. 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.

- 7. Type your username and password and click OK. The iPlanet Web server Administration Server screen displays.
- 8. Select the server from the dropdown list and click Manage. The Server On/Off screen displays. Make sure the server is on.
- 9. Click Java in the navigation bar along the top.
- 10. The Enable/Disable Servlets/JSP screen displays. Make sure the Enable Java Globally and Enable Java for class defaultclass options are checked. Click OK.
- 11. Click Class Manager in the upper right corner of the screen. The Manage Virtual Servers screen displays.
- 12. Click Content Management in the navigation bar along the top.
- 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.

Creating virtual directories

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

- 15. Click Content Mgmt in the navigation bar along the top.
- 16. Click Additional Document Directories in the sidebar.
- 17. Create a directory named output for the URL prefix and map it to the location where ArcIMS Spatial Server output will be stored.
- 18. Web site files can be stored under <Sun ONE 6.0 (iPlanet) Installation Directory>/servers/docs.

You can specify that location when asked to provide a Web site 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 Web site and map it to the desired location.

- 19. Click OK, then click Apply in the upper right corner of the screen. Click Apply Changes to save all changes.
- 20. Close Sun ONE 6.0 (iPlanet) Web server Administration Server.

Using the Diagnostics tool to test your ArcIMS installation

21. 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
```

- 22. Open <ArcIMS Installation Directory>/Xenv/ArcIMS_Diagnostics/ArcIMS_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.
- 23. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
- 24. 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 display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See Configuring Sun ONE 6.0 (iPlanet) for ArcIMS Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring Sun ONE 6.0 (iPlanet) for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configuring 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 for information on problems with OAS.

- 1. Copy the following from ArcIMS/Middleware/servlet_connector to <OAS Installation Directory/Apache/Jserv/servlets:
 - com directory
 - 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 Web site. A virtual directory is a mapped location on the Web server to a physical path.

- 5. Open the file <OAS Installation Directory>/Apache/Apache/conf/httpd.conf.
- 6. 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>
```

7. 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

8. Save and close the file.

Using the Diagnostics tool to test your ArcIMS installation

9. Start Oracle Application Server by typing:

```
setenv JAVA_HOME <J2SE SDK Installation Directory>
setenv PATH $JAVA_HOME/bin:$PATH
```

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

- 10. Open <arcIMS Installation Directory>/ArcIMS/Xenv/ArcIMS_Diagnostics/ArcIMS_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.
- 11. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is
- 12. 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 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 ServletExec for 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.newatlanta.com for information on problems with ServletExec.

- 1. Stop Apache and Servlet Exec.
- - com directory
 - Esrimap prop
 - ServletConnector Res.properties
 - ServletConnector Res en US.properties
 - WMSEsrimap_prop
- 3. Open the Esrimap prop file in a text editor.
- 4. Change the value of appServerMachine to the name of your Application Server computer. For example: appServerMachine=<server name>.esri.com
- 5. Save and close the file.

Creating virtual directories

- 6. After installing ArcIMS, you must create virtual directories for output and Web site. A virtual directory is a mapped location on the Web server to a physical path.
- 7. Open the file <Apache Installation Directory>/conf/httpd.conf.
- 8. 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>
```

9. 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

10. Save and close the file.

Using the Diagnostics tool to test your ArcIMS installation

- 11. Start the Apache and ServletExec services.
- 12. Open <ArcIMS Installation Directory>/ArcIMS/Xenv/ArcIMS_Diagnostics/ArcIMS_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.
- 13. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
- 14. 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 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 ServletExec for Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring ServletExec 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 3.2.x for Apache 1.3.26

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 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>/ArcIMS/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 Web site. A virtual directory is a mapped location on the Web server to a physical path.

- 8. Open the file <Apache Installation Directory>/conf/httpd.conf.
- 9. 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>
```

10. 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

11. Save and close the file.

Using the Diagnostics tool to test your ArcIMS installation

12. Start the Tomcat and Apache services by typing:

```
setenv JAVA_HOME <J2SE SDK Installation Directory>
<Tomcat Installation Directory>/bin/startup.sh
<Apache Installation Directory>/bin/apachectl start
```

- 13. Open <ArcIMS Installation Directory>/ArcIMS/Xenv/ArcIMS_Diagnostics/ArcIMS_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.
- 14. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
- 15. 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 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 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.
- - com directory
 - Esrimap prop
 - 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-list>
</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.

Using the Diagnostics tool to test your ArcIMS installation

18. Start WebLogic by typing:

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

19. Open < ArcIMS Installation

Directory>/ArcIMS/Xenv/ArcIMS_Diagnostics/ArcIMS_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.

- 20. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
- 21. 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 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 4.0.2 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 for information on problems with WebSphere.

Creating virtual directories

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

- 1. Open the file <IBM HTTP 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>
- 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.

Configuring ArcIMS Servlet Connector

- 5. Start IBM HTTP servers by navigating to <IBM HTTP Server Installation Directory>/bin and typing:
 - ./adminctl start
 - ./apachectl start
- 6. Make sure IBM WebSphere Application server is running. If not, start the server by navigating to <WebSphere Installation Directory>/AppServer/bin and typing:

```
./startupServer.sh
```

- 7. Start the WebSphere Advanced Administrative Console by navigating to <WebSphere Installation Directory>/AppServer/bin and typing:
 - ./adminclient.sh
- 8. On the left side panel, expand the WebSphere Administrative Domain, Nodes, computer name, and Application Server to make sure that the "Default Server" is running. If not, right-click on it and click Start.
- 9. On the toolbar, click on Wizards and select Install Enterprise Application. This opens the Install Enterprise Application Wizard.
- 10. Select Install standalone module (*.war, *.jar). For Path, Browse and navigate to <ArcIMS Installation Directory>/Middleware/servlet_connector/arcimsservletconnector.war.
- 11. For Application Name, type: servlet

- 12. For Context root for Web module, type: /servlet
- 13. Click Next and accept all the defaults until you reach the Completing the Application Installation Wizard page. Click Finish. This deploys the application.
- 14. The ArcIMS Servlet Connector is installed under installed Apps inside the IBM WebSphere installation directory.
- 15. Open the Esrimap_prop file located at <WebSphere Installation Directory>/AppServer/installedApps/servlet.ear/arcimsservletconnector.war/WEB-INF/classes
- 16. Change the value of appServerMachine to the name of your Application Server computer. For example: AppServerMachine=<server name>.esri.com
- 17. Save and close the file.
- 18. In WebSphere Advanced Administrative Console, right-click "Default Server" under Nodes, your computer name, Application Servers. Click Stop. Restart it by clicking Start.
- 19. Close the WebSphere Administrative Console.

Using the Diagnostics tool to test your ArcIMS installation

- 20. Open <ArcIMS Installation Directory>/Xenv/ArcIMS_Diagnostics/ArcIMS_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.
- 21. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
- 22. 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 display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See Configuring WebSphere 4.0.2 for ArcIMS Service Administrator for information on configuring ArcIMS Service Administrator.

See Configuring WebSphere 4.0.2 for Metadata Explorer for information on configuring Metadata Explorer.

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

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 SevletExec: ServletExec Installation Directory/NewAtlanta/ServletExecAS/se-<instance-name</pre>/Servlets

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

IBM HTTP Server with WebSphere 4.0.2: <WebSphere Installation

Directory>/AppServer/installedApps/servlet.ear/arcimsservletconnector.war/WEB-INF/classes

Sun ONE 6.0 (iPlanet): <iPlanet Installation Directory>/servers/docs/servlet

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 verify that it has been set to the name of the computer where the ArcIMS Application Server is installed.
- 4. Find appServerClientPort and verify that it has been set 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 reaspect 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.
- 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.

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 display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

Configuring your Web server for ArcIMS Service Administrator

If you did not configure your Web server servlet engine using the post installation setup and you wish to use ArcIMS Service Administrator to remotely administer ArcIMS services, you must configure your Web server manually. Steps to configure your Web server for ArcIMS Service Administrator are provided for the following:

- Configuring Sun ONE 6.0 (iPlanet)
- Configuring Oracle Application Server 9i
- Configuring ServletExec 4.1.1 for Apache
- Configuring Tomcat 3.2.x for Apache 1.3.26
- Configuring WebLogic 6.1
- Configuring WebSphere 4.0.2

To configure your Web server servlet engine using the post installation setup, select the Web server servlet engine configuration option in the post installation setup and see Web server—servlet engine configuration for more information.

Configuring Sun ONE (iPlanet) 6.0 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>/ArcIMS/Middleware/Application Server/AppServer.properties.
- 2. Find preferenceFile= and edit it to point to the sitePreferences.properties file: preferenceFile=<ArcIMS Installation

Directory>/ArcIMS/Middleware/Application Server/sitePreferences.properties

- 3. Save and close the file.
- 4. 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.

- 5. Type your username and password and click OK.
- 6. Click the Global Settings tab.
- 7. Click Configure JRE/JDK Paths on the left sidebar.
- Click JDK.
- 9. For path, type the J2SE SDK Path, for example, <J2SE SDK Installation Directory>/jdk1.3.1. The Libpath and Classpath can be left blank.
- 10. Click OK and exit iPlanet.
- 11. In a text editor, open <iPlanet Installation Directory>/https-<localhost>.<domain>.com/config/web-apps.xml.
- 12. Scroll to the end of the file and add the following lines before </vs>.

```
<web-app uri="/esriadmin" dir="<ArcIMS Installation
Directory>/ArcIMS/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.

- 13. Save and close the file.
- 14. Stop and Start the iPlanet Web server:

```
setenv JAVA_HOME <J2SE SDK 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 Sun ONE (iPlanet) for Metadata Explorer for information on configuring Metadata Explorer.

See Step 5: Configuring 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:

1. 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 Application Server 9*i*. If you don't have the oc4j.zip file, you can install it from your Oracle Application Server 9*i* installation CD or you can download it from Oracle's Web site at www.oracle.com.

To install OC4J, unzip the oc4j.zip file in the Oracle installation directory and follow the instructions in the README.TXT file.

2. 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>/ArcIMS/Administrator/esriadmin" />
```

- 3. Save and close the file.
- 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>/arcIMS/Middleware/Application Server/AppServer.properties.
- 10. Find preferenceFile= and edit it to point to the sitePreferences.properties file: preferenceFile=<ArcIMS Installation
 - Directory>/ArcIMS/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: Configuring ArcIMS for the final step required to get ArcIMS running.

Configuring ServletExec 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. Start the Apache and ServletExec services.
- 2. In your Web browser, type http://<localhost>/servlet/admin to open ServletExec Admin.
- 3. On the left sidebar under Servlets, click manage and verify that JSP10Servlet has been loaded.
- 4. On the left sidebar under Servlets, click aliases and verify that there is an entry for *.jsp that points to JSP10Servlet.
- 5. In the left sidebar under Web Applications, click manage.
- 6. Click Add Web Application.
- 7. For Application Name, type: esriadmin
- 8. For URL Context Path, type: /esriadmin
 This is the name you will use to run ArcIMS Service Administrator.

Note: The context path you specify is case sensitive. The context path you specify is case sensitive. You might want to create more than one Web Application with path names like ESRIadmin or ESRIADMIN pointing to the ArcIMS Service Administrator.

- 9. For Location, type: <ArcIMS Installation Directory>/Administrator/esriadmin
- 10. Click Submit and close ServletExec Admin.
- 11. Open the file <Apache Installation Directory>/conf/httpd.conf.
- 12. Add the following to the bottom of the httpd.conf
 AddHandler servlet-exec jsp
 ServletExecApplications <localhost> /esriadmin
 <Location /esriadmin>
 SetHandler servlet-exec
 </Location>
- 13. Stop and Start Apache Web server and ServletExec and close the Services window.

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

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

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

Configuring Tomcat 3.2.x for Apache 1.3.26 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>/ArcIMS/Administrator and copy the esriadmin directory to <Tomcat Installation Directory>/webapps.
- 2. In a text editor, open <arcIMS Installation Directory>/arcIMS/Middleware/Application Server/AppServer.properties.
- 3. Find the preferenceFile parameter and edit it to point to the sitePreferences.properties file: preferenceFile=<ArcIMS Installation
 Directory>/ArcIMS/Middleware/Application_Server/sitePreferences.properties
- 4. Save and close the file.
- 5. Start the Tomcat and Apache services by typing:

```
setenv JAVA_HOME <J2SE SDK 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. 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 Web Applications.
- 4. Click Configure a new Web Application.
- 5. For the Name, type: esriadmin
- 6. For Path URI, type: <ArcIMS Installation Directory>/ArcIMS/Administrator/esriadmin
- 7. Click Create.
- 8. Click the Targets tab.
- 9. In Servers, move <WebLogic Server Name> from Available to Chosen.
- 10. Click Apply.
- 11. On the left sidebar, click Servers.
- 12. Right-click WebLogic, select Stop this server, and click Yes.
- 13. Close the console.
- 14. Restart WebLogic.

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

Configuring WebSphere 4.0.2 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 <a color by a colo
- 2. Find the preferenceFile parameter and edit it to point to the sitePreferences.properties file: preferenceFile=<ArcIMS Installation Directory>/Middleware/Application Server/sitePreferences.properties
- 3. Save and close the file.
- 4. Start IBM HTTP server by navigating to <IBM HTTP Server Installation Directory>/bin and typing:

```
./adminctl start
```

```
./apachectl start
```

5. Make sure IBM WebSphere Application server is running. If not, start the server by navigating to <WebSphere Installation Directory>/AppServer/bin and typing:

```
./startupServer.sh
```

6. Start the WebSphere Advanced Administrative Console by navigating to <WebSphere Installation Directory>/AppServer/bin and typing:

```
./adminclient.sh
```

- 7. On the left sidebar, expand the WebSphere Administrative Domain, Nodes, computer name, and Application Server to make sure that the "Default Server" is running. If not, right-click it and click Start.
- 8. On the tool panel, click Wizards and select Install Enterprise Application. This opens the Install Enterprise Application Wizard.
- 9. Select Install standalone module (*.war, *.jar). For Path, Browse and navigate to <ArcIMS Installation Directory>/Administrator/esriadmin.war.
- 10. For Application Name, type: esriadmin
- 11. For Context root for Web module, type: /esriadmin
- 12. Click Next and accept all the defaults until you reach the Completing the Application Installation Wizard page. Click Finish. This deploys the application.
- 13. The ArcIMS Service Administrator is installed under installed Apps inside the IBM WebSphere installation directory.
- 14. Open the websphereplugin-cfg.xml file located under <WebSphere Installation Directory>/AppServer/config Create an esri UriGroup if you don't have one:

```
<UriGroup Name="esri">
</UriGroup>
Add the following to Route ServerGroup session if you don't have one.
<Route ServerGroup="<server name>/Default Server" UriGroup="esri"
VirtualHostGroup="default_host" />
Add <Uri Name="/esriadmin/*" /> to the esri UriGroup session:
<UriGroup Name="esri">
<Uri Name="/esriadmin/*" />
</UriGroup>
```

- 15. Save and close the file.
- 16. Stop and restart the Default Server.

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

See Configuring WebSphere 4.0.2 for Metadata Explorer for information on configuring Metadata Explorer.

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

Configuring your Web server for ArcIMS Metadata Explorer

If you did not configure your Web server servlet engine using the post installation setup and you wish to use ArcIMS Metadata Explorer, you must configure your Web server manually. Steps to configure your Web server for ArcIMS Metadata Explorer are provided for the following:

- Configuring Sun ONE 6.0 (iPlanet)
- Configuring Oracle Application Server 9i
- Configuring ServletExec 4.1.1 for Apache
- Configuring Tomcat 3.2.x for Apache 1.3.26
- Configuring WebLogic 6.1
- Configuring WebSphere 4.0.2

To configure your Web-server servlet engine using the post installation setup, select the Web server servlet engine configuration option in the post installation setup and see Web server-servlet engine configuration for more information.

Configuring Sun ONE 6.0 (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 J2SE JRE/J2SE 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.com in a text editor and read the http://<localhost.domain.com>:<serveradminport> there.

- 2. Type your username 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 J2SE SDK Path, for example, <J2SE SDK Installation Directory>/jdk1.3.1. The Libpath and Classpath can be left blank.
- 7. Click OK and exit iPlanet.
- 8. In a text editor, open <iPlanet Installation Directory>/https-<localhost>.<domain>.com/config/web-apps.xml.
- 9. Scroll to the end of the file and add the following lines before </vs>.

```
<web-app uri="/metadataexplorer" dir="<ArcIMS Installation
Directory>/ArcIMS/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 like MetadataExplorer or METADATAEXPLORER pointing to ArcIMS Metadata Explorer.

- 10. Save and close the file.
- 11. Stop and start the iPlanet Web server:

```
setenv JAVA_HOME <J2SE SDK 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 Sun ONE (iPlanet) 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 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 Oracle9*i*AS Containers for ArcIMS Service Administrator.

1. 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 Application Server 9i. 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 at www.oracle.com.

To install OC4J, unzip the oc4j.zip file in the OAS installation directory and follow the instructions in the README.TXT file.

2. 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>/ArcIMS/Metadata/metadataexplorer" />
```

- 3. Save and close the file.
- 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="metatdataexplorer" root="/metadataexplorer"
/>
```

- 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 /metadataexplorer http://hostname:8888/metadataexplorer 
ProxyPassReverse /metadataexplorer http://hostname:8888/metadataexplorer
```

- 8. Save and close the file.
- 9. 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.

See Configuring Oracle Application Server 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 ServletExec for Apache for Metadata Explorer

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

- 1. Start the Apache and ServletExec services.
- 2. In your Web browser, type http://<localhost>/servlet/admin to open ServletExec Admin.
- 3. On the left sidebar under Servlets, click manage and verify that JSP10Servlet has been loaded.
- 4. On the left sidebar under Servlets, click aliases and verify that there is an entry for *.jsp that points to JSP10Servlet.
- 5. In the left sidebar under Web Applications, click manage.
- 6. Click Add Web Application.
- 7. For Application Name, type: metadataexplorer
- 8. For URL Context Path, type: /metadataexplorer This is the name you will use to run Metadata Explorer.

Note: The context path you specify is case sensitive. You might want to create more than one Web Application with path names like MetadataExplorer or METADATAEXPLORER pointing to the ArcIMS Metadata Explorer.

- 9. For Location, type: <ArcIMS Installation Directory>/Metadata/metadataexplorer
- 10. Click Submit and close ServletExec Admin.
- 11. Open the file <Apache Installation Directory>/conf/httpd.conf.
- 12. Add the following to the bottom of the httpd.conf
 AddHandler servlet-exec jsp
 ServletExecApplications <localhost> /metadataexplorer
 <Location /metadataexplorer>
 SetHandler servlet-exec
 </Location>
- 13. Stop and Start Apache Web server and ServletExec and close the Services window.

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

See Configuring ServletExec for Service Administrator for information on configuring Service Administrator.

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

Configuring Tomcat 3.2.x for Apache 1.3.26 for Metadata Explorer

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

- 1. Navigate to <ArcIMS Installation Directory>/ArcIMS/Metadata and copy the MetadataExplorer directory to <Tomcat Installation Directory>/webapps.
- 2. Start the Tomcat and Apache services by typing:

```
setenv JAVA_HOME <J2SE SDK 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:

- 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 Web Applications.
- 4. Click Configure a new Web Application.
- 5. For the name, type: metadataexplorer
- 6. For Path URI, type: <ArcIMS Installation Directory>/ArcIMS/Metadata/metadataexplorer
- 7. Click Create.
- 8. Click the Targets tab.
- 9. In Servers, move <WebLogic Server Name> from Available to Chosen.
- 10. Click Apply.
- 11. On the left sidebar, click Servers.
- 12. Right-click WebLogic, select Stop this server, and click Yes.
- 13. Close the console.
- 14. Restart WebLogic.

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

See Configuring WebLogic 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 WebSphere 4.0.2 for Metadata Explorer

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

- Start IBM HTTP server by navigating to <IBM HTTP Server Installation Directory>/bin and typing: ./adminctl start
 ./apachectl start
- 2. Make sure IBM WebSphere Application server is running. If not, start the server by navigating to <WebSphere Installation Directory>/AppServer/bin and typing:

```
./startupServer.sh
```

3. Start the WebSphere Advanced Administrative Console by navigating to <WebSphere Installation Directory>/AppServer/bin and typing:

```
./adminclient.sh
```

- 4. On the left side panel, expand the WebSphere Administrative Domain, Nodes, computer name, and Application Server to make sure that the "Default Server" is running. If not, right-click it and click Start.
- 5. On the toolbar, click on Wizards and select Install Enterprise Application. This opens the Install Enterprise Application Wizard.
- 6. Select Install standalone module (*.war, *.jar). For Path, Browse and navigate to <ArcIMS Installation Directory>/Metadata/metadataexplorer.war.
- 7. For Application Name, type: metadataexplorer
- 8. For Context root for Web module, type: /metadataexplorer
- 9. Click Next and accept all the defaults until you reach the Completing the Application Installation Wizard page. Click Finish. This deploys the application.
- 10. The ArcIMS Metadatata Explorer is installed under installed Apps inside the IBM WebSphere installation directory.
- 11. Open the plugin-cfg.xml file located under <WebSphere Installation Directory>/AppServer/config Create an esri UriGroup if you don't have one:

```
<UriGroup Name="esri">
</UriGroup>
Add the following to Route ServerGroup session if you don't have one.
<Route ServerGroup="<server name>/Default Server" UriGroup="esri"
VirtualHostGroup="default_host" />
Add <Uri Name="/metadataexplorer/*"/> to the esri UriGroup session:
<UriGroup Name="esri">
<Uri Name="/metadataexplorer/*"/>
</UriGroup>
```

- 12. Save and close the file.
- 13. Stop and restart the Default Server.

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

See Configuring WebSphere 4.0.2 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.

Step 5: Configure ArcIMS

Perform the following activities to set up your ArcIMS environment:

- 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.

Using ArcIMS with a proxy server

Use the Proxy Server properties to specify whether your local area network (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 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/Xeny/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.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 should be edited prior to starting the aimsmonitor and aimstasker processes. The Monitor.properties and the Tasker.properties files were edited during the ArcIMS post installation setup to include the Application Server name.

- 1. To start the processes manually, navigate to the \$AIMSHOME/Xenv directory and start the services in the following order:
 - 1. ./aimsappsrvr start &
 - 2. ./aimsmonitor start &
 - ./aimstasker start &
- To test the processes, open /<ArcIMS Installation
 <p>Directory>/ArcIMS/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.
 - 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 display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.
- 3. To stop the processes manually, navigate to the \$AIMSHOME/Xenv directory and stop the services in the following order:
 - 1. ./aimstasker stop
 - 2. ./aimsmonitor stop
 - 3. ./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

Online Troubleshooting articles:

Troubleshooting ArcIMS Installation:

ArcIMS Viewer must be removed before installing ArcIMS - Article 23357 at http://support.esri.com/search/KbDocument.asp?dbid=23357

Post installation **setup - Web server servlet engine configuration completed with errors -** Article 23672 at http://support.esri.com/search/KbDocument.asp?dbid=23672

Error: Please enter a valid username on your domain - Article 23727 at http://support.esri.com/search/KbDocument.asp?dbid=23727

(Windows only) AdminSiteApplet is not found for Manager - Article 20394 at http://support.esri.com/search/KbDocument.asp?dbid=20394

Troubleshooting Web server and servlet engine:

Jakarta Tomcat service fails to start due to internal error - Article 22327 at http://support.esri.com/search/KbDocument.asp?dbid=22327

HowTo: Update ServletExec to use a new version of JRE - Article 20340 at http://support.esri.com/search/KbDocument.asp?dbid=20340

(Windows only) Tomcat service fails to start - Article 18766 at http://support.esri.com/search/KbDocument.asp?dbid=18766

Check out http://support.esri.com/search/KbDocument.asp?dbid=23450 for information on setting up your Web server and servlet engine.

Troubleshooting Application startup after installation:

Unable to log in to Administrator in ArcIMS - Article 23057 at http://support.esri.com/search/KbDocument.asp?dbid=23057

Add virtual server failed - Article 22055 at http://support.esri.com/search/KbDocument.asp?dbid=22055

(Linux only) Map service not available due to fonts missing - Article 22185 at http://support.esri.com/search/KbDocument.asp?dbid=22185

ArcIMS services or Tomcat stop immediately after starting - Article 20915 at http://support.esri.com/search/KbDocument.asp?dbid=20915

Reset ArcIMS so that Administrator prompts for new user information - Article 15442 at http://support.esri.com/search/KbDocument.asp?dbid=15442

HowTo: Create a scripts virtual directory in IIS - Article 23622 at http://support.esri.com/search/KbDocument.asp?dbid=23622

HowTo: View error messages generated by Administrator, Author, and ArcExplorer—Java while developing an ArcIMS site - Article 19439 at http://support.esri.com/search/KbDocument.asp?dbid=19439

HowTo: Enable Complete Logging for the ArcIMS Application Server and Spatial Server - Article 20844 at http://support.esri.com/search/KbDocument.asp?dbid=20844

Unable to add ArcMap Image Service because the ArcMap image server is not showing up - Article 22034 at http://support.esri.com/search/KbDocument.asp?dbid=22034

Unable to create an ArcMap Image Service – Article 22039 at http://support.esri.com/search/KbDocument.asp?dbid=22039

"Requested Map Service not available" error in HTML viewer – Article 21331 at http://support.esri.com/search/KbDocument.asp?dbid=21331

URL is invalid, or ArcIMS is not running in Administrator – Article 23444 at http://support.esri.com/search/KbDocument.asp?dbid=23444

Additional Troubleshooting articles:

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

You must remove the following items to uninstall ArcIMS:

- 1. Launch the Uninstall from <ArcIMS installation directory>/ArcIMS/tools/UninstallArcIMS. Follow the directions on your screen.
- 2. After the setup has successfully uninstalled ArcIMS, 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 ServletExec: ServletExec Installation Directory>/NewAtlanta/ServletExecAS/se-<instance-name>/Servlets

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

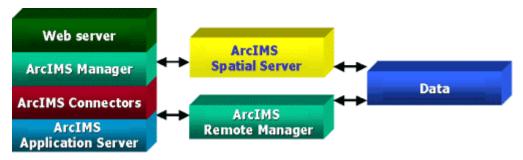
Oracle Application Server: <OAS Installation Directory>/Apache/Jserv/servlets

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

Note: If you are using Sun ONE 6.0 (iPlanet) with ArcIMS, before Sun ONE 6.0 (iPlanet) will restart you must remove all references to ArcIMS from the web-apps.xml file located in <Sun ONE 6.0 (iPlanet) Installation Directory>/servers/https-clocalhost>.<domain>.com/config

Installing ArcIMS Remote Manager

The Remote ArcIMS Manager installation allows you to run ArcIMS Manager on a computer other than where the Web server and ArcIMS Host (with ArcIMS Manager) reside. Because the ArcIMS Manager contains Java applets, it requires J2SE JRE. This installation installs J2SE JRE along with some additional files for ArcIMS Manager on your remote computer. If you plan to use Remote Manager, you need to make changes to your ArcIMS Host computer; after the installation, you need to make changes to your remote computer as described below.



Note: Remote Manager is supported on Windows only.

Note: You must uninstall previous versions of ArcIMS Manager and ArcExplorer—Java Edition before you install ArcIMS Manager.

Before you begin, you should identify the following locations. Typically, these are all on the ArcIMS Host, but they may be in other locations.

- Data directory
- AXL directory
- Web site directory

There are three parts to setting up a remote ArcIMS Manager configuration:

- 1. Setting up the ArcIMS Host computer
- 2. Installing ArcIMS Manager on the remote computer
- 3. Setting up ArcIMS Manager on the remote computer

Now you are ready to test the ArcIMS Remote Manager.

Also see Troubleshooting tips for ArcIMS Remote Manager

Setting up the ArcIMS Host computer for ArcIMS Remote Manager

You must also share the network drives to support the use of ArcIMS Remote Manager. See Sharing network drives for Remote ArcIMS Manager.

If you use the IIS or Sun ONE 6.0 (iPlanet) Web server, you also must make changes to your Web server. See:

- Configuring your IIS Web server for Remote ArcIMS Manager
- Configuring your Sun ONE 6.0 (iPlanet) Web server for ArcIMS Remote Manager

Sharing network drives for Remote ArcIMS Manager

In order for the remote ArcIMS Manager to access the output, Web site, and data directories from the ArcIMS Host, you need to share these directories and later establish a UNC connection to them from the remote computer.

The shared drives establish the following access:

- They permit the Remote Computer to access the data directory, output directory, and Web site directory.
- The map configuration file (*.axl) must contain the data directory accessible by the Web server. If the Web server cannot find the data, you will get an error when trying to create an ArcIMS Service from the map configuration file. If you want to author files on one computer and serve them from another, the data path needs to be accessible by both computers.

The following instructions take you through the steps on the ArcIMS Host computer. In this example, C:\ArcIMS is the directory that contains the AXL, Web site, and Output directories. Change this location as needed based on the working directories you set during installation on the ArcIMS Host. In this example, <drive>:\GISData is the data directory.

- 1. Click Start > Programs > Windows NT Explorer on Windows NT; Start > Programs > Accessories > Windows Explorer on Windows 2000; or Start > All Programs > Accessories > Windows Explorer on Windows XP.
- 2. Navigate to C:\ArcIMS.
- 3. Right-click the directory and click Sharing on Windows NT and Windows 2000 or Sharing and Security on Windows XP.
- Click Shared As and click OK on Windows NT or click Share this Folder and click OK on Windows 2000 and Windows XP.
- 5. Share your <drive>:\GISData directory in the same manner.

Now you may install ArcIMS Manager on a remote computer.

Configuring your IIS Web server for Remote ArcIMS Manager

The following instructions are for IIS only. If you are using another Web server, continue to the topic on Sharing network drives for Remote ArcIMS Manager.

If you use IIS, you need to make a change to the virtual directory properties for the Web site directory.

- 1. For IIS 4.0, click Start > Programs > Windows NT Option Pack > Microsoft Internet Information Server > Internet Service Manager.
 - For IIS 5.0, click Start > Settings > Control Panel > Administrative Tools > Internet Services Manager.
 - For IIS 5.1, click Start > Internet Information Services. Expand your local host folder and expand Web sites.
- 2. Right-click the Web site virtual directory and click Properties.
- 3. For IIS 4.0, click the Virtual Directory tab and for the Permissions setting click Script.
 - For IIS 5.0 and IIS 5.1, click the Virtual Directory tab and for the Execute Permissions setting click Script only.
 - **Note:** This setting should not be set to Execute.
- 4. Click OK and close the console window.

Configuring your Sun ONE 6.0 (iPlanet) Web server for ArcIMS Remote Manager

The following instructions are for Sun ONE 6.0 (iPlanet) only. If you are using another Web server, continue to the topic Sharing network drives for Remote ArcIMS Manager.

If you use Sun ONE 6.0 (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. The Remote ArcIMS Manager installation requests Manager.exe, and the MIME type for the .exe extension needs to be edited so the Web server can handle files with this extension correctly.

Note: If you configured your Web server using the Web server-servlet engine configuration option in the post installation setup, these steps have been automatically completed for you.

1. Start Sun ONE 6.0 (iPlanet) Administration Server from the Start menu or from your Web browser.

- 2. Type your username 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. Select the Edit option and click OK. Click OK again.
- 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. Click Apply in the upper right corner.
- 13. Select Apply Changes to stop and start the Web server.
- 14. Exit Sun ONE 6.0 (iPlanet).

Installing ArcIMS Manager on a remote computer

Now you are ready to install ArcIMS Manager on a computer remote from your ArcIMS Host.

Note: You must uninstall previously installed versions of ArcIMS Manager and ArcExplorer—Java Edition before you install ArcIMS Manager 4.0.1.

Perform the following steps on the remote computer:

1. Open your Internet Explorer Web browser and type the URL to ArcIMS Manager on the ArcIMS Host computer:

```
http://<ArcIMS Host>.<domain>.com/manager
```

This begins the installation of the ArcIMS Manager on the remote computer.

Note: Manager should be the same case as set on the ArcIMS Host.

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 InstallAnywhere Web Installer, click Yes.
- 3. At the Locale selection screen, choose a language and click Install.
- 4. At the Software License Agreement screen, click Yes.
- 5. At the Choose Destination screen, click Next.
- 6. At the Select Browser screen, make sure Internet Explorer is selected and click Next. J2SE JRE 1.3.1 is now installed on the computer.
- 7. At the Security Warning screen, click Grant this Session.
- 8. Click Start Installer for Windows.
- 9. At the language screen, choose a language and click OK.
- 10. At the Welcome screen, click Next.
- 11. At the J2SE JRE and Java Plug-in screen, click Next.

- 12. At the Installation Directory screen, click Next.
- 13. At the Choose Java Virtual Machine screen, click Install.
- 14. At the Protocol Information screen, click the button next to the protocol used by your ArcIMS Host. Click Next.
- 15. At the ArcIMS Host Information screen, enter your host information. This should be the same host name as the URL in the browser. Click Next.
- 16. At the Summary screen, click Next.
- 17. At the Install Complete screen, click Done.
- 18. Close the browser.

Now set up ArcIMS Manager on the remote computer.

Setting up ArcIMS Manager on the remote computer

Now you are ready to edit the files that allow the Remote Manager to find directories on the ArcIMS Host. This example assumes that you have the Data, Output, Web site, and AXL directories on the ArcIMS Host computer and that you shared the ArcIMS and GISData directories used in the example in Sharing network drives for Remote ArcIMS Manager.

The aimsdefaults.properties file contains all the pathnames that ArcIMS needs to create and view Web sites. This file needs to be edited to incorporate all of the newly mapped drives for your configuration.

- 1. Find the aimsdefaults.properties file. Typically it is in the users' Profiles directory.
- 2. Open the file in a text editor.
- 3. Verify that the following properties have each occurrence of <ArcIMS Host> replaced with the name of your ArcIMS Host computer, for example,

```
ImageURL=http\://<ArcIMS Host>.<domain>.com/output
HostALIAS=<ArcIMS Host>.com
HostURL=http\://<ArcIMS Host>.<domain>.com
HostName=<ArcIMS Host>.<domain>.com
```

4. For the following properties, change the path to include the UNC path to the shared directory. In this example, the Web site and AXL directories are subdirectories in the shared ArcIMS directory, for example,

```
WorkingDir=//<ArcIMS Host>/ArcIMS/axl
WebSiteDir=//<ArcIMS Host>/ArcIMS/website
```

Note: You may need to add the WebSiteDir property.

5. Save and close the file.

Note: If you wish to access the data, you must map a drive to the shared Data directory.

Note: To edit a map configuration file before adding it as an ArcIMS Service, map a drive to the shared ArcIMS\AXL directory on the ArcIMS Host computer.

Now you are ready to test ArcIMS Remote Manager.

Testing ArcIMS Remote Manager

To test ArcIMS Remote Manager:

1. Open your Internet Explorer Web browser and type the URL to ArcIMS Manager on the ArcIMS Host computer:

```
http://<ArcIMS Host>.<domain>.com/manager
```

Note: Manager should be the same case as set on the ArcIMS Host.

- 2. ArcIMS Manager should display. If not, close and open your Web browser to delete old files stored in the Internet cache.
- 3. You can now log in and start authoring and designing Web pages.

Testing ArcIMS Author

- 1. Open ArcIMS Manager.
- 2. Select Login to ArcIMS and type your username and password.
- 3. Select Author a Service.
- 4. Add a map file using data accessible to both the remote computer and the ArcIMS Host computer.
- Click Next.
- 6. Before adding this map file as a service, open the map configuration file in a text editor.
- 7. Replace the mapped drive with a UNC path to the data. For example: \\<ArcIMS Host>\<Shared resource name>.
- 8. Save the file and close the text editor.
- 9. In ArcIMS Remote Manager, type a name for the service and select a virtual server. Click Next and Save.

Note: If you receive an error stating 'Unable to add <name of map file>,' check to ensure that the data path within the map file has been modified to reflect a UNC path name.

10. Close ArcIMS Manager.

Testing ArcIMS Designer

- 1. Open ArcIMS Remote Manager.
- 2. Type your username and password.
- 3. Select Design Web site.
- 4. Follow the instructions in the Wizard to create a Web site.
- 5. Open a Browser to view the Web site.

Note: If you receive an error stating 'Unable to display map service. Image directory not found or writable,' check that the following property in the aimsdefaults.properties file points to the ArcIMS Host Output directory:

ImageURL=http\://<ArcIMS Host>.<domain>.com/output

Also see Troubleshooting tips for ArcIMS Remote Manager.

Troubleshooting tips for ArcIMS Remote Manager

■ When authoring an ArcIMS Service, data must be accessible from both locations through UNC. You must open each map configuration file in a text editor and change the data path to reflect UNC; then choose Administer the site and start the MapService. If you do not edit your map configuration files, you will get an error when you try to create the Services.

Note: In general, access to shapefiles is much faster if the shapefiles reside on the same computer as the ArcIMS Spatial Server.

■ When designing the Web site, the Create Web site panel defaults to the Web site directory established in Setting up ArcIMS Manager on the remote computer, step 4. This creates the Web pages on the ArcIMS Host.

If you decide to create map configuration files and Web pages on the remote computer, you need to change the directory on the Create Web site panel. In this case, you will later need to copy them to the ArcIMS Host and possibly update directories in the map configuration files.

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 ArcExplorer—Java Edition on your Windows computer before you install ArcIMS Viewer.

The items installed are:

- Java Plug-in 1.3 or higher (if needed)
- ESRI ArcIMS Viewer
- ArcExplorer—Java 4.0.1

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 SGI IRIX
- 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:

- J2SE JRE 1.3 (the Java Plug-in is included with JRE J2SE)
- ArcIMS Viewer

If the remote computer has ArcIMS Manager or ArcExplorer—Java Edition installed, the J2SE 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 J2SE 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/Linux

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:

For information on the ArcIMS Web site directory specific to the type of Web server you are using, see Configuring your Web server for HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris.

If you are using iPlanet Web server, you must make changes to support the use of ArcIMS Viewer. See the instructions for Configuring your Sun ONE 6.0 (iPlanet) Web server for ArcIMS Viewer.

Once you have set up the ArcIMS Host computer, the next step is to install J2SE JRE 1.3 or higher on a remote HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris computer.

Installing J2SE JRE 1.3 or higher 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 J2SE JRE and the Plug-in are installed. If not, the browser is redirected to the HP Web site at http://www.hp.com/ to download J2SE JRE 1.3. If you have already installed J2SE JRE 1.3 but still receive the redirect message, the Plug-in may not be configured properly.

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 <J2SE JRE Installation Directory>/bin/ControlPanel.

- 3. Configure J2SE JRE 1.3:
 - a. Make sure the correct J2SE JRE is being used. Add the following to your .cshrc file:

```
setenv JAVA_HOME <J2SE JRE Installation Directory>
set path = ( $JAVA HOME/bin $path)
```

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 <J2SE JRE Installation Directory>

b. Source the .cshrc file:

```
source .cshrc
```

Once you have J2SE 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 J2SE 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. The ArcIMS Viewer installer is automatically downloaded to your \$HOME directory. The Viewer installer AEJava.bin is saved under \$HOME/IA_Installers/ESRI_ArcIMS_Viewer directory. The Viewer installer is automatically executed.
- 5. At the language screen, choose a language and click OK.
- 6. At the Location of J2SE JRE screen, choose the location where you installed J2SE JRE 1.3. This should be the same as what your \$NPX_JRE _PATH variable is set to in Step 4 of Installing J2SE 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.

- 7. At the Introduction screen, click Next.
- 8. 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 J2SE JRE directory that you selected in Step 8. See the install.log file located in AEJava4.0/UninstallerData for a list of where each file is copied.

- 9. At the Install Complete screen, click Done.
- 10. 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/Linux 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 J2SE 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:

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/Linux computer.

Setting up ArcExplorer—Java Edition on a remote UNIX/Linux 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=<ArcExplorer Installation Directory>/aej40exe/Help/aejava_help.htm
```

Save and close the file.

4. Source your .cshrc file:

```
source .cshrc
```

5. 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 SGI 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.

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

- J2SE JRE 1.3 or higher (the Java Plug-in is included with JRE J2SE)
- ArcIMS Viewer

If the remote computer has ArcExplorer—Java Edition installed, the J2SE 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 on UNIX/Linux
- 2. Installing J2SE JRE 1.3 or higher on a remote IBM AIX computer
- 3. Installing ArcIMS Viewer on a remote IBM AIX computer
- 4. Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer

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

Setting up the ArcIMS Host computer on UNIX/Linux

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 Web site directory specific to the type of Web server you are using, see Configuring your Web server for HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris.

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 J2SE JRE 1.3 or higher on a remote HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris computer.

Installing J2SE JRE 1.3 or higher 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 J2SE JRE and Plug-in are installed. If it does not detect your JRE J2SE, you need to go to the following IBM Web site to download J2SE JRE 1.3 or higher: http://www.ibm.com/java/J2SE SDK.

If you have already installed J2SE JRE 1.3 or higher, but it is not detected, the Plug-in may not be configured properly. Skip to Step 4 below for instructions on configuring J2SE JRE 1.3 or higher and the Plug-in.

Internet and Intranet clients

The URL for the IBM J2SE JRE 1.3 or higher download is http://www.ibm.com/java/J2SE SDK.

1. Register and follow the instructions to download the JRE.

2. ESRI recommends that you increase the Java VM memory parameters. Open the Java Plug-in Control Panel located at <J2SE JRE Installation Directory>/bin/JavaPluginControlPanel. Set the required memory parameters in the field named Java Run Time Parameters:

```
-Xms10m -Xmx256m
```

Click Apply.

- 3. Make sure that you add \$JAVA HOME/bin to LIBPATH. See System requirements for more information.
- 4. Configure J2SE JRE 1.3 or higher:
 - a. Make sure the correct J2SE JRE is being used. Add the following to your .cshrc file: setenv JAVA_HOME <J2SE JRE Installation Directory> set path = (\$JAVA_HOME/bin \$path)
 - b. Source the .cshrc: source .cshrc
 - 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 <J2SE JRE Installation Directory>/bin/javaplugin.a <Netscape Installation
Directory>/plugins
```

5. Once you have J2SE JRE 1.3 or higher 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 Start Installer for AIX.
- 4. The ArcIMS Viewer installer is automatically downloaded to your \$HOME directory. The Viewer installer: AEJava.bin is saved under \$HOME/IA Installers/ESRI ArcIMS Viewer directory. The Viewer installer is automatically executed.
- 5. At the language screen, choose a language and click OK.
- 6. At the Location of J2SE JRE screen, choose the location where you installed J2SE JRE 1.3 or higher. This should be the same as what your \$JAVA_HOME variable is set to in step 3 of Installing J2SE JRE 1.3 or higher on a remote computer. Click Next.

Note: You must have write access to the lib and bin directories in JRE.

- 7. At the Introduction screen, click Next.
- 8. 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 J2SE JRE directory that you selected in Step 8. See the install.log file located in AEJava4.0/UninstallerData for a list of where each file is copied.

- 9. At the Install Complete screen, click Done.
- 10. 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/Linux 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 J2SE JRE ext directory:

```
cp $AEJHOME/lib/*.jar <J2SE 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/Linux computer.

Setting up ArcExplorer—Java Edition on a remote UNIX/Linux 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>/Xeny to your \$HOME directory, open the file in a text editor, and edit the values for:

```
WebBrowser=<Netscape Installation Directory>/netscape AEJavaHelp=<ArcExplorer Installation Directory>/aej40exe/Help/aejava_help.htm Save and close the file.
```

4. Source your .cshrc file:

```
source .cshrc
```

5. 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 SGI 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:

- J2SE JRE 1.3 or higher (the Java Plug-in is included with JRE J2SE)
- ArcIMS Viewer

If the remote computer has ArcIMS Manager or ArcExplorer—Java Edition installed, the J2SE 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 J2SE JRE 1.3 or higher 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/Linux

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 Web site directory specific to the type of Web server you are using, see Configuring your Web server for HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris.

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 J2SE JRE 1.3 or higher on a remote HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris computer.

Installing J2SE JRE 1.3 or higher 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 J2SE JRE and the Plug-in are installed. If not, the browser is redirected to the Sun Web site at http://java.sun.com/j2se/ to download J2SE JRE 1.3 or higher. If you have already installed J2SE JRE 1.3 or higher but still receive the redirect message, the Plug-in may not be configured properly. Skip to Step 4 below for instructions on configuring J2SE JRE 1.3 and the Plug-in.

Internet and Intranet clients

The URL for the Linux J2SE JRE 1.3 or higher download is http://java.sun.com/j2se/.

1. Register and follow the instructions to download and install JRE J2SE.

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 <J2SE JRE Installation Directory>/bin/ControlPanel.

- 3. Execute the J2SE JRE script for Linux.
- 4. Configure J2SE JRE 1.3 or higher:
 - a. Make sure the correct J2SE JRE is being used. Add the following to your .cshrc file:

```
setenv JAVA_HOME <J2SE JRE Installation Directory>
set path = ( $JAVA_HOME/bin $path)
```

For Netscape to use the correct Plug-in, add the following variables to your .cshrc file:

```
setenv NPX_PLUGIN_PATH <J2SE JRE Installation Directory>/plugin/i386/ns4
setenv NPX_JRE _PATH <J2SE JRE Installation Directory>
```

b. Source the .cshrc file:

```
source .cshrc
```

Once you have J2SE JRE 1.3 or higher 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 J2SE 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 Start installer for Linux.
- 4. The ArcIMS Viewer installer is automatically downloaded to your \$HOME directory. The Viewer installer AEJava.bin is saved under \$HOME/IA_Installers/ESRI_ArcIMS_Viewer directory. The Viewer installer is automatically executed.
- 5. At the language screen, choose a language and click OK.
- 6. At the Location of J2SE JRE screen, choose the location where you installed J2SE JRE 1.3 or higher. This should be the same as what your \$NPX_JRE _PATH variable is set to in Step 4 of Installing J2SE JRE 1.3 or higher on a remote Linux computer. Click Next.

Note: You must have write access to the lib and bin directories in JRE.

- 7. At the Introduction screen, click Next.
- 8. 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 J2SE 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.

- 9. At the Install Complete screen, click Done.
- 10. 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/Linux 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 J2SE 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:

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/Linux computer.

Setting up ArcExplorer—Java Edition on a remote UNIX/Linux 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=<ArcExplorer Installation Directory>/aej40exe/Help/aejava_help.htm
```

Save and close the file.

4. Source your .cshrc file:

```
source .cshrc
```

5. 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 SGI 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 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:

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 1.3.1, click Yes.
- 3. At the Locale selection screen, click Install.
- 4. At the Software License Agreement screen, click Yes.
- 5. At the Choose Destination Location screen, click Next. J2SE 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 Welcome screen, click Next.
- 12. At the J2SE JRE and Java Plug-in screen, click Next.
- 13. At the Installation Directory screen, click Next.
- 14. At the Location of J2SE JRE screen, highlight the correct path and click Install.
- 15. At the Summary screen, click Next.
- 16. At the Install Complete screen, click Done.
- 17. Close your browser to clear the cache and reopen it.
- 18. 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. Click Start > Settings > Control Panel and double-click Add/Remove Programs on Windows NT, or Change/Remove on Windows 2000; or click Start > Control Panel and double-click Add or Remove Programs on Windows XP.
- Click ArcGIS 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 1.3.1, 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. J2SE 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 Welcome screen, click Next.
- 12. At the J2SE JRE and Java Plug-in screen, click Next.
- 13. At the Installation Directory screen, click Next.
- 14. At the Location of J2SE JRE screen, highlight the correct path and click Install. If you do not highlight the path, the ArcIMS Viewer installation will not be complete.
- 15. At the Summary screen, click Next.
- 16. At the Install Complete screen, click Done.
- 17. Close your browser to clear the cache and reopen it.
- 18. 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. Click Start > Settings > Control Panel and double-click Add/Remove Programs on Windows NT, or Change/Remove on Windows 2000; or click Start > Control Panel and double-click Add or Remove Programs on Windows XP.
- Click ArcGIS ArcIMS Viewer and click Add/Remove on Windows NT or Change/Remove on Windows 2000 or Windows XP.

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. (If the you are not automatically prompted to download, click the download link for Windows on the Java 2 Runtime Page.)
- 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 Welcome screen, click Next.
- 10. At the J2SE JRE and Java Plug-in screen, click Next.
- 11. At the Installation Directory screen, click Next.
- 12. At the Summary screen, click Next.
- 13. At the Location of J2SE JRE screen, highlight the correct path and click Install.
- 14. At the Install Complete screen, click Done.
- 15. Close your browser to clear the cache and reopen it.
- 16. 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. Click Start > Settings > Control Panel and double-click Add/Remove Programs on Windows NT, or Change/Remove on Windows 2000; or click Start > Control Panel and double-click Add or Remove Programs on Windows XP.
- Click ArcGIS ArcIMS Viewer and click Add/Remove on Windows NT or Change/Remove on Windows 2000 or Windows XP.

Installing ArcIMS Viewer on SGI IRIX

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 IRIX remote computer.

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

- J2SE JRE 1.3.1 (the Java Plug-in is included with JRE)
- ArcIMS Viewer

If the remote computer has ArcExplorer—Java Edition installed, the J2SE 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 IRIX computer.

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

- 1. Setting up the ArcIMS Host computer on UNIX/Linux
- 2. Installing the J2SE JRE 1.3.1 on a remote SGI IRIX computer
- 3. Installing ArcIMS Viewer on a remote SGI IRIX computer
- 4. Setting up ArcExplorer—Java Edition on a remote UNIX/Linux computer

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

Setting up the ArcIMS Host computer on UNIX/Linux

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:

For information on the ArcIMS Web site directory specific to the type of Web server you are using, see Configuring your Web server for HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris.

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 J2SE JRE 1.3 or higher on a remote HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris computer.

Installing J2SE JRE 1.3.1 on a remote SGI IRIX computer

Internet clients only

When a remote computer tries to access an ArcIMS Java Standard Web site, the application automatically detects whether the Java Runtime Plug-in is installed. If it does not detect your Java Runtime Plug-in, you need to go to the SGI Web site at http://www.sgi.com/developers/devtools/languages/java.html to download Java Runtime Plug-in 1.3.1.

If you have already installed Java Runtime Plug-in 1.3.1, but it is not detected, the Plug-in may not be configured properly. Skip to Step 4 below for instructions on configuring Java Runtime Plug-in 1.3.1.

Internet and Intranet clients

The URL for the SGI Java Runtime Plug-in 1.3.1 download is http://www.sgi.com/developers/devtools/languages/java.html.

1. Register and follow the instructions to download the Java Runtime Plug-in.

2. ESRI recommends that you increase the Java VM memory parameters. Open the Java Plug-in Control Panel located at <Netscape Installation Directory>/javaplugin/java/ControlPanel.html. Set the required memory parameters in the field named Java Run Time Parameters:

```
-Xms10m -Xmx256m
Click Apply.
```

- 3. Make sure that you add \$JAVA_HOME/bin to LD_LIBRARY_PATH. See System requirements for more information.
- 4. Configure Java Runtime Plug-in 1.3.1:
 - a. Make sure the correct Java Runtime Plug-in is being used. Add the following to your .cshrc file:

```
setenv JAVA_HOME <J2SE JRE Installation Directory>
set path = ( $JAVA_HOME/bin $path)
Source the .cshrc:
```

b. If you have installed Netscape or the Plug-in in a nonstandard location, refer to the SGI Web site at http://www.sgi.com/developers/devtools/languages/java.html for more information.

Once you have Java Runtime Plug-in 1.3.1 installed, the next step is to install ArcIMS Viewer.

Setting up ArcExplorer—Java Edition on a remote UNIX/Linux 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=<ArcExplorer Installation Directory>/aej40exe/Help/aejava_help.htm Save and close the file.
```

4. Source your .cshrc file:

```
source .cshrc
```

5. 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 SGI 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 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:

- J2SE JRE 1.3 or higher (the Java Plug-in is included with JRE)
- ArcIMS Viewer

If the remote computer has ArcIMS Manager or ArcExplorer—Java Edition installed, the J2SE 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.

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

- 1. Setting up the ArcIMS Host computer
- 2. Installing J2SE 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/Linux

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:

For information on the ArcIMS Web site directory specific to the type of Web server you are using, see Configuring your Web server for HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris.

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 J2SE JRE 1.3 or higher on a remote HP-UX, IBM AIX, Linux Red Hat, SGI IRIX, or Sun Solaris computer.

Installing J2SE JRE 1.3 or higher 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 J2SE JRE and the Plug-in are installed. If not, the browser is redirected to the Sun Web site to download J2SE JRE 1.3. If you have already installed J2SE 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 J2SE JRE 1.3 and the Plug-in.

Note: If you use J2SE 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 J2SE JRE 1.3 download is http://java.sun.com/j2se/1.3/.

- 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 <J2SE JRE Installation Directory>/bin/ControlPanel.

3. Execute the J2SE JRE script for Solaris.

Note: Be sure to check the Solaris patch requirements for the JPI and J2SE JRE prior to installing these components.

- 4. Configure J2SE JRE 1.3:
 - a. Make sure the correct J2SE JRE is being used. Add the following to your .cshrc file:

```
setenv JAVA_HOME <J2SE JRE Installation Directory>
set path = ( $JAVA_HOME/bin $path)
```

For Netscape to use the correct Plug-in, add the following variables to your .cshrc file:

```
setenv NPX_PLUGIN_PATH <J2SE JRE Installation Directory>/plugin/sparc/ns4
setenv NPX_JRE _PATH <J2SE JRE Installation Directory>
```

b. Source the .cshrc file:

```
source .cshrc
```

Once you have J2SE 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 J2SE 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. The ArcIMS Viewer installer is automatically downloaded to your \$HOME directory. The Viewer installer AEJava.bin is saved under \$HOME/IA Installers/ESRI ArcIMS Viewer directory. The Viewer installer is automatically executed.
- 5. At the language screen, choose a language and click OK.
- 6. At the Location of J2SE JRE screen, choose the location where you installed J2SE JRE 1.3. This should be the same as what your \$NPX_JRE _PATH variable is set to in Step 4 of Installing J2SE JRE 1.3 or higher on a remote Solaris computer. Click Next.

Note: You must have write access to the lib and bin/sparc directories in JRE.

- 7. At the Introduction screen, click Next.
- 8. 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 J2SE 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.

9. At the Install Complete screen, click Done.

10. 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/Linux 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 J2SE 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:

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/Linux computer.

Setting up ArcExplorer—Java Edition on a remote UNIX/Linux 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=<ArcExplorer Installation Directory>/aej40exe/Help/aejava_help.htm
```

Save and close the file.

4. Source your .cshrc file:

```
source .cshrc
```

5. 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 SGI 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 Sun ONE 6.0 (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 username 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. Select the Edit option and click OK. Click OK again.
- 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. Click Apply in the upper right corner.
- 13. Select Apply changes to stop and start the Web server.
- 14. Exit Sun ONE 6.0 (iPlanet).