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# Introduction

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

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

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

# Overview

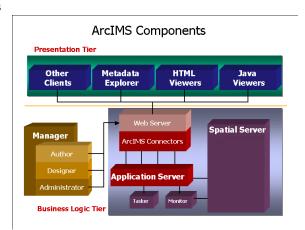
# What's included with ArcIMS 4.0?

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

# **ArcIMS components**

ArcIMS is made up of:

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



Each component is described in the following paragraphs.

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

### **ArcIMS Manager**

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

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

ArcIMS Manager is supported only on Windows<sup>®</sup> using Internet Explorer. It is not supported on HP<sup>®</sup>-UX<sup>®</sup>, IBM<sup>®</sup> AIX<sup>®</sup>, Linux<sup>®</sup> Red Hat<sup>®</sup>, or Sun<sup>™</sup> Solaris<sup>™</sup>, and it is not supported on Windows using Netscape

Communicator<sup>™</sup>. This is because Netscape Communicator does not currently support scripting of applets—a feature that is critical for ArcIMS Manager.

# **ArcIMS Manager Applications**

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

# **ArcIMS Service Administrator**

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

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

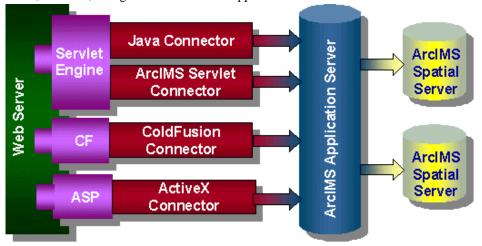
See Using ArcIMS, 'Using ArcIMS Service Administrator,' for details on using ArcIMS Service Administrator.

### **ArcIMS Application Server**

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

### **ArcIMS Application Server Connectors**

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



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

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

ColdFusion<sup>®</sup> 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. For more information on these custom connectors, see the *Customizing ArcIMS* series.

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

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

## **ArcIMS Spatial Servers**

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

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

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

### **ArcIMS Viewers**

ArcIMS provides client-side viewers:

- 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.
- 4. Configure your Web server.
- 5. Configure ArcIMS.

These steps are outlined below.

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

# What you need to get ArcIMS running

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

### Hardware configuration

- Memory requirements
- Disk space

### **System software**

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

## **Step 2: Determine your ArcIMS site configuration**

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

### **Step 3: Install ArcIMS**

## Step 4: Configure your Web server

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

# **Step 5: Configure ArcIMS**

■ Set environment parameters.

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

# Questions, Feedback, and Information

# Questions and feedback

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

Phone: 909-793-3774Fax: 909-792-0960

• E-mail: support@esri.com

• Hours: 6:00 a.m to 6:00 p.m. Pacific time, Monday through Friday, except ESRI holidays. If you are outside the United States, please contact your local ESRI distributor.

# **ArcIMS Knowledge Base**

The ArcIMS Knowledge Base is a database that contains:

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

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

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

# Using ArcIMS Help

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

# Visit the ESRI home page on the Internet

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

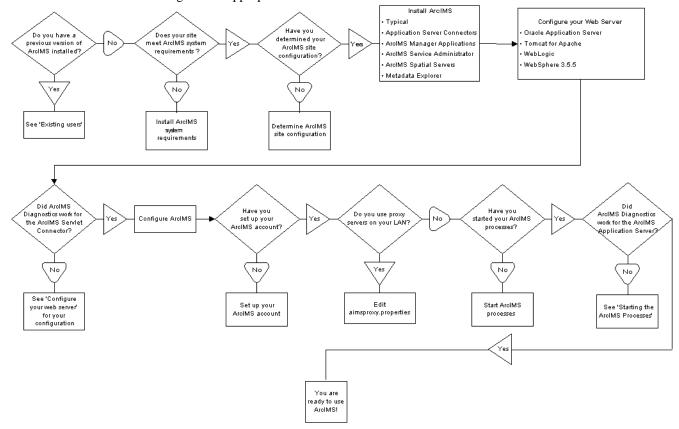
Visit the ArcIMS home page at www.esri.com/software/arcims for the latest information about ArcIMS including a showcase of ArcIMS-enabled Web sites.

## **ESRI** education solutions

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# **Installation flowchart**

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



# **Existing users**

You need to do the following if your system has ArcIMS 3.1 installed:

- ArcIMS 4.0 creates a new directory named aims40exe when installed. It is possible to have both ArcIMS 3.1 and ArcIMS 4.0 on the same system. However, there are many areas that can cause problems, and it is recommended that you run only one version of ArcIMS on your computer. See Uninstalling ArcIMS 3.1 for details.
- The ArcIMS 3.1 files EsriMapCatalog.ser (configuration file for saved services) and EsriMapCookies.ser contain your ArcIMS preferences. The ArcIMS 4.0 installation program installs a converter that converts these files to files called ArcIMSSite.sez and ArcIMSFolders.sez. To run the converter, see ArcIMS Site Information Conversion.
- JRE 1.3 or higher is required for ArcIMS 4.0.
- See Supported Software Environments for Web servers and servlet engines supported for ArcIMS 4.0.

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

# **Uninstalling ArcIMS 3.1**

You must remove the following items to uninstall ArcIMS:

- 1. The ArcIMS 3.1 files EsriMapCatalog.ser (configuration file for saved services) and EsriMapCookies.ser contain your ArcIMS preferences. These files are located at <ArcIMS Installation Directory>/Middleware/Application\_Server. Back up these files prior to ArcIMS 4.0 installation, so you can run the Site Starter Conversion utility after ArcIMS 4.0 installation.
- 2. Remove <ArcIMS Installation Directory>/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 Site Information Conversion**

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

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

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

- 1. Stop the ArcIMS Tasker, ArcIMS Monitor, and ArcIMS Application Server processes in that order:
  - ./aimstasker stop
  - ./aimsmonitor stop
  - ./aimsappsrvr stop
- 2. Edit the SerConverter.properties file. In a text editor, open the

\$AIMSHOME/Middleware/SerConverter.properties file and change the line

workingDirectory=/<ArcIMS Installation</pre>

Directory>/Middleware/SerConverter to the full path to the location of your ArcIMS 4.0 SerConverter folder.

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

\$AIMSHOME/bin/aimsserc.

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

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

- 8. Start the ArcIMS Application Server, ArcIMS Monitor, and the ArcIMS Tasker processes:
  - ./aimsappsrvr start &
  - ./aimsmonitor start &
  - ./aimstasker start &

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

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

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

# Hardware configuration

# **Memory requirements**

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

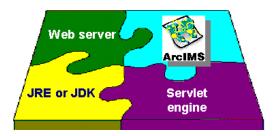
- Manager Applications: 64 MB of RAM recommended
- ArcIMS Application Server: 256 MB of RAM recommended
- ArcIMS Spatial Server: 256 MB of RAM recommended per CPU
- HTML Viewers: 64 MB of RAM recommended
- Java Viewers and ArcExplorer—Java Edition: 128 MB of RAM recommended
- All components: 256 MB of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

## Disk space

The disk space requirements for all ArcIMS components are 481 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**

• AIX 4.3.3 Maintenance Level 2 (4330-02) with X11.fnt.ucs.ttf file set

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

#### Web server

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

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 using Jakarta-Tomcat as its servlet engine (hereafter referred to as Tomcat)
- IBM HTTP Server using WebSphere® as its servlet engine
- Oracle® Application Server
- WebLogic®

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

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

### **Java Runtime Environment**

Java Runtime Environment 1.3 is a prerequisite for installing ArcIMS. JRE 1.3 is included on the ArcIMS CD. You must have JRE to install ArcIMS.

1. Extract the "jre13.tar" tar file included on the CD. This file includes the Java plug-in. You should get the following directory and files after you extract the tar file:

```
/jre
COPYRIGHT
License.txt
```

**Note:** Make sure your computer runs on a supported level of AIX (AIX 4.3.3.0 plus fixes, or above). See the README.JRE130 file on the ArcIMS CD for more information.

2. Create an environment variable for the JRE. Add the following line to your .login or .cshrc file: setenv JAVA\_HOME <JRE Installation Directory>

Make sure the \$JAVA\_HOME/bin is in the PATH.

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

```
java -version
For example, IBM AIX should return the following:
java version "1.3.0"
   Java (TM) 2 Runtime Environment, Standard Edition (build 1.3.0)
Classic VM build 1.3.0, J2RE 1.3.0 IBM build ca130-20010330
```

# **ArcIMS Service Administrator requirements**

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

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

## **Metadata Service requirements**

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

- ArcGIS 8.2
- ArcSDE 8.2

# **Metadata Explorer requirements**

The following software is required to use the Metadata Explorer:

• Java 2 Software Development Kit from http://java.sun.com

### Web browser for ArcIMS Viewers

• HTML Viewer: Netscape Communicator 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 4.75 or 4.76

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

**Note:** See Supported Software Environments for the latest support information.

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

### **Font requirement**

ArcIMS components other than the Application Server and Connectors require a TrueType® font package that comes with the AIX Software installation CD.

**Note:** This is required. ArcIMS will not function properly unless the TrueType font fileset is installed.

To verify that the TrueType font is installed, type:

lslpp -l | grep X11.fnt.ucs.ttf

If you see the following:

X11.fnt.ucs.ttf 4.3.3.0 COMMITTED AIXwindows Unicode TrueType

You have the required TrueType fonts on your system.

If not, add them from your AIX Software installation CD:

- 1. Put the AIX Software installation CD (Volume 1 of 4) into your CD–ROM drive.
- 2. As super user, type:
  - # smit
- 3. Under System Management, select Software Installation and Maintenance.
- 4. Choose Install and Update Software.
- 5. Choose Install and Update from ALL Available Software.
- 6. To choose your INPUT device/directory for software, click List to display a list of available input devices. Select the /dev/cd0 (SCSI Multimedia CD–ROM Drive). Click OK.
- 7. To choose your SOFTWARE to install click List to display a list of items available to install. Click Find and to search for this font fileset type:

```
X11.fnt.ucs.ttf
```

Click OK.

- 8. Choose the X11.fnt.ucs.ttf fileset and make sure that it is highlighted. Click OK.
- 9. Make all the other selections as necessary. Click OK to install the font set.

## **Application Server Connectors**

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

### Java Connector

Java 2 Software Development Kit

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

#### **ArcSDE**

The following versions of ArcSDE are supported by ArcIMS:

### Metadata users only

• ArcSDE 8.2

### Other users

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

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

# **Step 2: Determine your ArcIMS site configuration**

# Choosing an ArcIMS configuration for your system

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

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

Configurations will vary depending on the available computing resources and the mapping services provided. For ArcIMS Spatial Servers, processing speed and the ability to handle the load are important. Will the ArcIMS Services perform process-intensive functions or create basic map displays? How many services will be running at one time? Will the Web server computer be dedicated to the Web site or used for other purposes as well? Answers to these questions will assist in ArcIMS site configuration planning. Configure an ArcIMS Web site based on the anticipated number of users visiting the site and the number of maps generated each day. For example, a Web site with very few anticipated users, averaging 100 to 1,000 maps per day, could run from one computer. A high-volume Web site, with 100,000 to 1,000,000 maps per day, should be distributed to multiple ArcIMS Spatial Server computers.

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

The advantages of these different installation options are listed below.

Advantages of Different ArcIMS Installation Options		
Typical	Limited computer resources.	
(ArcIMS on one computer)	<ul> <li>Quick and easy way to learn ArcIMS.</li> </ul>	
	<ul> <li>Light Web site usage.</li> </ul>	
	<ul> <li>Remotely access ArcIMS Manager using Microsoft Internet Explorer Web browser (Windows only).</li> </ul>	
Multiple ArcIMS Spatial	Expand configuration.	
Servers	<ul> <li>Add processing capabilities.</li> </ul>	
	<ul> <li>Heavy Web site usage.</li> </ul>	
ArcIMS Manager Applications	<ul> <li>Access ArcIMS functions without needing Internet Explorer Web browser.</li> </ul>	
	<ul> <li>Solution for environments where Internet Explorer isn't available and for advanced users.</li> </ul>	
<b>Application Server Connectors</b>	Customize Web pages using JSP.	
Metadata Explorer	View metadata from an ArcIMS Metadata Service.	

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

# **Step 3: Install ArcIMS**

Choose the installation steps for your configuration:

Doing a typical installation

Installing ArcIMS custom Application Server Connectors

**Installing ArcIMS Manager Applications** 

Installing ArcIMS Service Administrator

**Installing ArcIMS Spatial Servers** 

Installing Metadata Explorer

# Doing a typical installation

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



# Accessing your license agreement file

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

arabic.pdf

brazilian.pdf

czech.pdf

english.pdf

french.pdf

simchinese.pdf (Simplified Chinese)

tradchinese.pdf (Traditional Chinese)

korean.pdf

german.pdf

hungarian.pdf

italian.pdf

japanese.pdf

latamerican.pdf (Latin American)

latvian.pdf

lithuanian.pdf

polish.pdf

portuguese.pdf

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

## **Installing ArcIMS**

**Note:** Make sure that the user account that installs ArcIMS has write permissions to the installation directory. The 'install' command has five options:

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

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

To install ArcIMS from the CD, become super user and put the ArcIMS CD into your CD drive:
 \$ su

You are prompted for your super user password. If you don't know this password, contact your system administrator. If a /cdrom directory doesn't exist, create one:

# mkdir /cdrom

Now mount the ArcIMS CD:

```
# mount -v 'cdrfs' -p'' -r'' /<dev> /cdrom (or use smit)
```

where <dev> stands for the CD-ROM device.

The ArcIMS CD is mounted. Before installing ArcIMS, exit super user mode:

# exit

**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.

- 2. To start ArcIMS installation, type the following command from anywhere on your system:
  - % /cdrom/ArcIMS4.0/install -load

This starts the menu-driven dialog for ArcIMS software installation. Default selections are in brackets []. To obtain a list of options or online help, type "?" at any prompt. You can quit the installation procedure at any time by typing "q". To return to a previous question, type the caret, "^".

- 3. At the Enter CD–ROM mount point: [/cdrom/ArcIMS4.0] prompt, type the location and press <Return>.
- 4. At the Enter pathname to install directory prompt, type the path to where you want ArcIMS installed on your system. The ArcIMS version and date display.
- 5. At the ArcIMS Application Server Package numbers to load: [all] prompt, press <Return> to accept the default and install all packages.
- 6. At the ArcIMS Application Server Connectors Package numbers to load: [none] prompt, type "?" to display a list of available packages. Type the numbers of the packages you want to install separated by commas, type "all" to load all packages, or press <Return> to accept the default and load no packages.

**Note:** For ArcIMS to function, you need to install the Application Server and at least one connector.

- 7. At the ArcIMS Manager Applications Package numbers to load: [all] prompt, press <Return> to accept the default and install all packages.
  - Note: You must choose [all] to run ArcIMS Author, ArcIMS Administrator, and ArcIMS Designer.
- 8. At the ArcIMS Spatial Server Software Package numbers to load: [all] prompt, press <Return> to accept the default and install all packages.
- 9. At the ArcIMS Metadata Explorer / Gazetteer Data Package numbers to load: [all] prompt, press <Return> to accept the default and load all packages.
- 10. At the ArcIMS Sample Applications and Data Package numbers to load: [none] prompt, type "?" to display a list of available packages. Type the numbers of the packages you want to install separated by commas, type "all" to load all packages, or press <Return> to accept the default and load no packages.

**Note:** If you install any Sample packages, you need to install the Tutorial Data package. The Package selection complete prompt and the package you chose to install display.

11. At the Is this correct? [yes] prompt, press <Return> to accept the default and install ArcIMS. The size of the selected packages and available space display.

- 12. At the List file names while loading? [no] prompt, press <Return> to accept the default or type "yes" and press <Return>, if desired.
  - ArcIMS is installed, and the Finished loading package(s) message displays.
- 13. After installing ArcIMS, unmount the ArcIMS CD and take it out of the CD drive. As super user: # umount /<dev>

where <dev> stands for the CD–ROM device.

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

Configuring Oracle Application Server

Configuring Tomcat for Apache

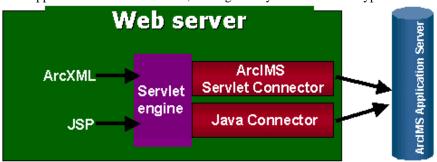
Configuring WebLogic

Configuring WebSphere 3.5.5

# **Installing ArcIMS custom Application Server Connectors**

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

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 administer Web pages or 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.

The Java Connector communicates with the ArcIMS Application Server and a JSP client.

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

### Accessing your license agreement file

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

arabic.pdf

brazilian.pdf

czech.pdf

english.pdf

french.pdf

simchinese.pdf (Simplified Chinese)

tradchinese.pdf (Traditional Chinese)

korean.pdf

german.pdf

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

## **Installing ArcIMS Application Server Connectors**

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

To install ArcIMS from the CD, become super user and put the ArcIMS CD into your CD drive:
 \* su

You are prompted for your super user password. If you don't know this password, contact your system administrator. If a /cdrom directory doesn't exist, create one:

# mkdir /cdrom

Now mount the ArcIMS CD:

# mount -v `cdrfs' -p'' -r'' /<dev> /cdrom (or use smit) where <dev> stands for the CD-ROM device.

The ArcIMS CD is mounted. Before installing ArcIMS, exit super user mode:

# exit

**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.

2. To start ArcIMS installation, type the following command from anywhere on your system: % /cdrom/ArcIMS4.0/install -load.

At each prompt that follows, you may press <Return> to take the default, "?" for help, "^" to return to the previous question, or "q" to quit.

- 3. At the Enter CD–ROM mount point: [/cdrom/ArcIMS4.0] prompt, type the location and press <Return>.
- 4. At the Enter pathname to install directory prompt, type the path to where you want ArcIMS Application Server Connectors installed on your system.
  - The ArcIMS version and date display.
- 5. At the ArcIMS Application Server Package numbers to load: [all] prompt, type "none" and press <Return>.
- 6. At the ArcIMS Application Server Connectors Package numbers to load: [none] prompt, type "?" to display a list of available packages. Type the numbers of the packages you are installing separated by commas, type "all" to load all packages, or press <Return> to accept the default and load no packages.
  - **Note:** For ArcIMS to function, you need to install the Application Server and at least one connector.
- 7. At the ArcIMS Manager Applications Package numbers to load: [all] prompt, type "none" and press <Return>.
- 8. At the ArcIMS Spatial Server Software Package numbers to load: [all] prompt, type "none" and press <Return>.
- 9. At the ArcIMS Metadata Explorer / Gazetteer Data Package numbers to load: [all] prompt, type "none" and press <Return>.
- 10. At the ArcIMS Sample Applications and Data Package numbers to load: [none] prompt, type "?" to display a list of available packages. Type the numbers of the packages you are installing separated by

commas, type "all" to load all packages, or press <Return> to accept the default and load no packages.

**Note:** If you install any Sample packages, you need to install the Tutorial Data package. The Package selection complete message and a list of the packages you chose to install display.

11. At the Is this correct? [yes] prompt, press <Return> to accept the default and install the ArcIMS Application Server and custom Connector packages.

The size of the selected packages and available space display.

12. At the List file names while loading? [no] prompt, press <Return> to accept the default or type "yes" and press <Return>, if desired.

ArcIMS Application Server and custom Connector are installed, and the Finished loading package(s) message displays.

13. After installing ArcIMS, unmount the ArcIMS CD and take it out of the CD drive. As super user: # umount /<dev>

where <dev> stands for the CD-ROM device.

Configure the connector you installed:

ArcIMS Java Connector

ArcIMS Servlet Connector

**WMS** 

### **ArcIMS Java Connector**

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

#### **ArcIMS Servlet Connector**

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

Configuring Oracle Application Server

Configuring Tomcat for Apache

Configuring WebLogic

Configuring WebSphere 3.5.5

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

### **WMS**

To configure ArcIMS to use WMS perform the following:

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

**Apache with Tomcat:** <Tomcat Installation Directory>/webapps/ROOT/WEB-INF/classes **IBM HTTP Server with WebSphere 3.5.5:** <WebSphere Installation

Directory>/AppServer/servlets

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

**WebLogic:** <WebLogic Installation

Directory>/bea/wlserver6.1/config/mydomain/applications/DefaultWebApp/WEB-INF/classes

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

- 2. Find enable and change it to enable=true.
- 3. Find appServerMachine and set it to the name of the computer where the ArcIMS Application Server is installed.
- 4. Find appServerClientPort and set it to the name of the port on which the Application Server is running (default is 5300).
- 5. Find capabilitiesDir and provide the path to the capabilities directory, for example, capabilitiesDir=/disk1/ArcIMS/capabilities
- 6. Find debug and set it to debug=true if you want detailed debug information. If you set it to true, the log file will be created inside the working directory.

- 7. Find workingDirectory and provide the path to the working directory, for example, workingDirectory=/disk1/ArcIMS/workingdir
- 8. Find reaspect and set it to true if you want to re-aspect the generated map images.
- 9. Find defaultService and set it to a default ArcIMS Service name. If the WMS client doesn't specify the Service, then this default Service will be used.
- 10. Save and close the file.
- 11. Stop and start your Web server:

#### **Apache and Tomcat:**

### IBM HTTP Server with WebSphere:

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

## Oracle Application Server:

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

### WebLogic:

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

<WebLogic Installation

Directory>/bea/wlserver6.1/config/mydomain/startWebLogic.sh

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

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

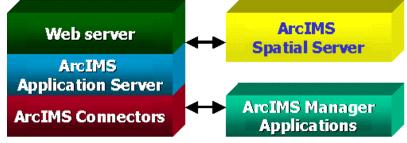
**Note:** If your Web server port is not set to the default port (port 80), then type the following: http://<localhost>:<port#>/servlet/com.esri.wms.Esrimap?Cmd=ping

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

For information on WMS, see ArcIMS Help.

# **Installing ArcIMS Manager Applications**

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



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

## Accessing your license agreement file

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

arabic.pdf brazilian.pdf

czech.pdf

english.pdf

french.pdf

simchinese.pdf (Simplified Chinese)

tradchinese.pdf (Traditional Chinese)

korean.pdf

german.pdf

hungarian.pdf

italian.pdf

japanese.pdf

latamerican.pdf (Latin American)

latvian.pdf

lithuanian.pdf

polish.pdf

portuguese.pdf

russian.pdf

spanish.pdf

swedish.pdf

ukranian.pdf

### **Installing ArcIMS Manager Applications**

On the computer where you wish to install ArcIMS Manager Applications, perform the following steps:

1. To install ArcIMS from the CD, become super user and put the ArcIMS CD into your CD drive:

```
🖁 su
```

You are prompted for your super user password. If you don't know this password, contact your system administrator. If a /cdrom directory doesn't exist, create one:

```
# mkdir /cdrom
```

Now mount the ArcIMS CD:

```
# mount -v 'cdrfs' -p'' -r'' /<dev> /cdrom (or use smit)
```

where <dev> stands for the CD-ROM device.

The ArcIMS CD is mounted. Before installing ArcIMS, exit super user mode:

# exit

**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.

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

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

At each prompt that follows, you may press <Return> to take the default, "?" for help, "^" to return to the previous question, or "q" to quit.

- 3. At the Enter CD–ROM mount point: [/cdrom/ArcIMS4.0] prompt, type the location and press <Return>.
- 4. At the Enter pathname to install directory prompt, type the path to where you want ArcIMS Manager Applications installed on your system.

The ArcIMS version and date display.

- 5. At the ArcIMS Application Server Package numbers to load: [all] prompt, type "none" and press <Return>.
- 6. At the ArcIMS Application Server Connectors Package numbers to load: [none] prompt, press <Return> to accept the default and install no packages.
- 7. At the ArcIMS Manager Applications Package numbers to load: [all] prompt, press <Return> to accept the default and install all packages.
- 8. At the ArcIMS Spatial Server Software Package numbers to load: [all] prompt, type "none" and press <Return>.
- 9. At the ArcIMS Metadata Explorer / Gazetteer Data Package numbers to load: [all] prompt, type "none" and press <Return>.
  - The Package selection complete prompt and the package you chose to install display.
- 10. At the ArcIMS Sample Applications and Data Package numbers to load: [none] prompt, type "?" to display a list of available packages. Type the numbers of the packages you are installing separated by commas, type "all" to load all packages, or press <Return> to accept the default and load no packages.
  - **Note:** If you install any Sample packages, you need to install the Tutorial Data package. The Package selection complete prompt and a list of the packages you chose to install display.
- 11. At the Is this correct? [yes] prompt, press <Return> to accept the default and install the ArcIMS Manager Applications packages.
  - The size of the selected packages and available space display.
- 12. At the List file names while loading? [no] prompt, press <Return> to accept the default or type "yes" and press <Return>, if desired.
  - ArcIMS Manager Applications are installed, and the Finished loading package(s) message displays.
- 13. After installing ArcIMS, unmount the ArcIMS CD and take it out of the CD drive. As super user: # umount /<dev>
  - where <dev> stands for the CD-ROM device.

You are ready to use ArcIMS Manager Applications.

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

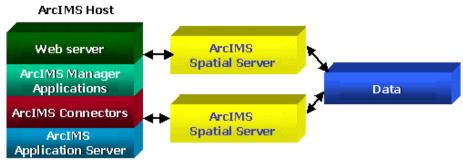
# **Installing ArcIMS Service Administrator**

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

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

# **Installing multiple ArcIMS Spatial Servers**

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



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

# Accessing your license agreement file

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

arabic.pdf

brazilian.pdf

czech.pdf

english.pdf

french.pdf

simchinese.pdf (Simplified Chinese)

tradchinese.pdf (Traditional Chinese)

korean.pdf

german.pdf

hungarian.pdf

italian.pdf

japanese.pdf

latamerican.pdf (Latin American)

latvian.pdf

lithuanian.pdf

polish.pdf

portuguese.pdf

russian.pdf

spanish.pdf

swedish.pdf

ukranian.pdf

## **Installing ArcIMS Spatial Server**

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

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

1. To install ArcIMS from the CD, become super user and put the ArcIMS CD into your CD drive:

You are prompted for your super user password. If you don't know this password, contact your system administrator. If a /cdrom directory doesn't exist, create one:

# mkdir /cdrom

Now mount the ArcIMS CD:

# mount -v 'cdrfs' -p'' -r'' /<dev> /cdrom (or use smit)

where <dev> stands for the CD-ROM device.

The ArcIMS CD is mounted. Before installing ArcIMS, exit super user mode:

# exit

**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.

- 2. To start ArcIMS installation, type the following command from anywhere on your system:
  - % /cdrom/ArcIMS4.0/install -load

This starts the menu-driven dialog for ArcIMS software installation. Default selections are in brackets []. To obtain a list of options or online help, type "?" at any prompt. You can quit the installation procedure at any time by typing "q". To return to a previous question, type the caret, "^".

- 3. At the Enter CD–ROM mount point: [/cdrom/ArcIMS4.0] prompt, type the location and press <Return>.
- 4. At the Enter pathname to install directory prompt, type the path to where you want ArcIMS Spatial Servers installed on your system. The ArcIMS version and date display.
- 5. At the ArcIMS Application Server Package numbers to load: [all] prompt, type "none" and press <Return>.
- 6. At the AcIMS Application Server Connectors Package numbers to load: [none] prompt, press <Return> to accept the default and install no packages.
- 7. At the ArcIMS Manager Applications Package numbers to load: [all] prompt, type "none" and press <Return>.
- 8. At the ArcIMS Spatial Server Software Package numbers to load: [all] prompt, press <Return> to install the Spatial Server software. The Package selection complete prompt and the package you chose to install display.
- 9. At the ArcIMS Metadata Explorer / Gazetteer Data Package numbers to load: [all] prompt, type "none" and press <Return>.
- 10. At the ArcIMS Sample Applications and Data Package numbers to load: [none] prompt, type "?" to display a list of available packages. Type the numbers of the packages you are installing separated by commas, type "all" to load all packages, or press <Return> to accept the default and load no packages.

**Note:** If you install any Sample packages, you need to install the Tutorial Data package. The Package selection complete prompt and a list of the packages you chose to install display.

- 11. At the Is this correct? [yes] prompt, press <Return> to accept the default and install the ArcIMS Spatial Server packages. The size of the selected packages and available space display.
- 12. At the List file names while loading? [no] prompt, press <Return> to accept the default or type "yes" and press <Return>, if desired. ArcIMS Spatial Server is installed, and the Finished loading package(s) message displays.
- 13. After installing ArcIMS, unmount the ArcIMS CD and take it out of the CD drive. As super user: # umount /<dev>
  - where <dev> stands for the CD-ROM device.
- 14. In your environment, set the AIMSHOME variable to the location where you installed the spatial server component:

setenv AIMSHOME <ArcIMS Spatial Server Installation
 Directory>/aims40exe

15. Modify the startup parameters for the ArcIMS Monitor process located in the file:

\$AIMSHOME/Xenv/aimsmonitor. Search for the section:

"OPTIONALLY MODIFY THE VALUES OF THESE VARIABLES".

- a. Set the value of AIMSHOME to the same location as in Step 14 above.
- b. Set the value of JAVA HOME to the location of your JRE.

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

- 16. Make sure that the following directories are mounted and visible on this computer:
  - a. The server output directory that was established as a virtual directory on your Web server. (See Step 4: Configure your Web server for your configuration.)
  - b. All data directories referenced in all your map configuration files.

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

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

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

registryHost = <server name>.esri.com

18. Start the ArcIMS Monitor process.

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

- a. To start the ArcIMS Monitor process at system boot, refer to the instructions provided in the file \$AIMSHOME/Xenv/aimsmonitor.
- b. To start ArcIMS Monitor manually, navigate to the \$AIMSHOME/Xenv directory and type the following:
  - ./aimsmonitor start &
- 19. Start ArcIMS Administrator on the Web server computer (or do a Site Refresh in Administrator if it is already running) to see the new Spatial Server listed under Servers.

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

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

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

# **Installing Metadata Explorer**

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

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

## Accessing your license agreement file

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

arabic.pdf

brazilian.pdf

czech.pdf

english.pdf

french.pdf

simchinese.pdf (Simplified Chinese)

tradchinese.pdf (Traditional Chinese)

korean.pdf

german.pdf

hungarian.pdf

italian.pdf

japanese.pdf

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

## **Installing Metadata Explorer**

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

1. To install ArcIMS from the CD, become super user and put the ArcIMS CD into your CD drive:

% su

You are prompted for your super user password. If you don't know this password, contact your system administrator. If a /cdrom directory doesn't exist, create one:

# mkdir /cdrom

Now mount the ArcIMS CD:

# mount -v 'cdrfs' -p'' -r'' /<dev> /cdrom (or use smit) where <dev> stands for the CD-ROM device. The ArcIMS CD is mounted. Before installing ArcIMS, exit super user mode:

# exit

**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.

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

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

At each prompt that follows, you may press <Return> to take the default, "?" for help, "^" to return to the previous question, or "q" to quit.

- 3. At the Enter CD–ROM mount point: [/cdrom/ArcIMS4.0] prompt, type the location and press <Return>.
- 4. At the Enter pathname to install directory prompt, type the path to where you want Metadata Explorer installed. The ArcIMS version and date display.
- 5. At the ArcIMS Application Server Package numbers to load: [all] prompt, type "none" and press <Return>.
- 6. At the ArcIMS Application Server Connectors Package numbers to load: [none] prompt, press <Return> to accept the default and install no packages.
- 7. At the ArcIMS Manager Applications Package numbers to load: [all] prompt, type "none" and press <Return>.
- 8. At the ArcIMS Spatial Server Software Package numbers to load: [all] prompt, type "none" and press <Return>.
- 9. At the ArcIMS Metadata Explorer / Gazetteer Data Package numbers to load: [all] prompt, press <Return> to accept the default and load all packages.
- 10. At the ArcIMS Sample Applications and Data Package numbers to load: [none] prompt, type "?" to display a list of available packages. Type the numbers of the packages you are installing separated by commas, type "all" to load all packages, or press <Return> to accept the default and load no packages.

**Note:** If you install any Sample packages, you need to install the Tutorial Data package. The Package selection complete prompt and a list of the packages you chose to install display.

- 11. At the Is this correct? [yes] prompt, press <Return> to accept the default and install the ArcIMS Manager Applications packages. The size of the selected packages and available space display.
- 12. At the List file names while loading? [no] prompt, press <Return> to accept the default or type "yes" and press <Return>, if desired. ArcIMS Metadata Explorer is installed, and the Finished loading package(s) message displays.

13. After installing ArcIMS, unmount the ArcIMS CD and take it out of the CD drive. As super user: # umount /<dev>

where <dev> stands for the CD-ROM device.

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

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

# **Step 4: Configure your Web server**

Choose the steps for your Web server and servlet engine: Configuring Oracle Application Server Configuring Tomcat for Apache Configuring WebLogic Configuring WebSphere 3.5.5

# **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.

- Copy the following from <ArcIMS Installation
   <p>Directory>/aims40exe/Middleware/Servlet\_Connector to <OAS Installation
   <p>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 Website. A virtual directory is a mapped location on the Web server to a physical path.

- 1. Open the file <OAS Installation Directory>/Apache/Apache/conf/httpd.conf.
- 2. In the Alias section, add the following for Web site and server output:

```
Alias /output "<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.

## Making ArcIMS files available to Web users

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

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

For more information, see Installing ArcIMS Viewer.

## Using the Diagnostics tool to test your ArcIMS installation

1. Start Oracle Application Server by typing:

```
setenv JAVA_HOME <JDK Installation Directory>
setenv PATH $JAVA_HOME/bin:$PATH
  <OAS Installation Directory>/Apache/Apache/bin/apachectl restart
```

2. Open <ArcIMS Installation

Directory>/aims40exe/Xenv/ArcIMS\_Diagnostics/ArcIMS\_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.

- 3. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
- 4. Click 1 to test the ArcIMS Servlet Connector.

If this test is successful, your ArcIMS Servlet Connector is configured correctly. If you receive an error message, select the error number in the dropdown list and click View. The error number and a description then display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See WMS for information on configuring for WMS.

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

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

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

# **Configuring Tomcat for Apache Web Server**

After installing ArcIMS on your system, you must configure the Apache Web Server and Tomcat for ArcIMS. These instructions assume Apache and Tomcat are already running properly. If your Web server and servlet engine are not operational, contact your system administrator before you proceed. See www.apache.org 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 tomcatapache.conf file is declared as an include in the httpd.conf file. If it is not declared, add the following at the bottom of the httpd.conf file:
  - include <Tomcat Installation Directory>/conf/tomcat-apache.conf
- 2. Verify that the line ApJServMount /servlet /ROOT is included in the tomcat-apache.conf file. If it is not listed, add it to the end of the file.
- 3. Save and close the file.
- 4. Copy the following from <ArcIMS Installation

Directory>/aims40exe/Middleware/Servlet\_Connector to <Tomcat Installation Directory>/webapps/ROOT/WEB-INF/classes:

- com directory
- Esrimap\_prop
- ServletConnector\_Res.properties
- ServletConnector\_Res\_en\_US.properties
- WMSEsrimap\_prop

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

## **Creating virtual directories**

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

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

```
Alias /output "/<Path to output directory>/output"

<Directory "/<Path to output directory>/output">

Options Indexes MultiViews
AllowOverride None
Order allow,deny
Allow from all

</Directory>
Alias /website "/<Path to website directory>/website"

<Directory "/<Path to website directory>/website">

Options Indexes MultiViews
AllowOverride None
Order allow,deny
Allow from all

</Directory>
```

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

DirectoryIndex index.html default.htm

4. Save and close the file.

# Making ArcIMS files available to Web users

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

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

For more information, see Installing ArcIMS Viewer.

## Using the Diagnostics tool to test your ArcIMS installation

1. Start the Tomcat and Apache services by typing:

```
setenv JAVA_HOME <JDK Installation Directory>
setenv PATH $JAVA_HOME/bin:$PATH
<Tomcat Installation Directory>/bin/startup.sh
<Apache Installation Directory>/bin/apachectl start
```

- 2. Open <ArcIMS Installation
  - Directory>/aims40exe/Xenv/ArcIMS\_Diagnostics/ArcIMS\_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.
- 3. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
- 4. Click 1 to test the ArcIMS Servlet Connector.

If this test is successful, your ArcIMS Servlet Connector is configured correctly. If you receive an error message, select the error number in the dropdown list and click View. The error number and a description then display. Follow the instructions in the description to fix the problem and try the Diagnostics tool again.

See WMS for information on configuring for WMS.

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

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

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

## **Configuring WebLogic**

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

1. In your Web browser, type:

http://<localhost.domain.com>:<serveradminport>/console, for example, http://arcims.esri.com:10000/console.

- 2. Type your password.
- 3. On the left sidebar, click Servers.
- 4. Right-click <WebLogic Server Name>, select Stop this server, and click Yes.
- 5. Copy the following items from <ArcIMS Installation

Directory>/aims40exe/Middleware/Servlet\_Connector to <WebLogic Installation Directory>/bea/wlserver6.1/config/mydomain/applications/DefaultWebApp/WEB-INF/classes:

- · com directory
- 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>default.htm</welcome-file>
</welcome-file-list>
```

- 11. Save and close the file.
- 12. Create a directory for ArcIMS image output:

```
mkdir <WebLogic Installation
```

 $\label{lem:decomp} \begin{tabular}{ll} Directory>/bea/wlserver6.1/config/mydomain/applications/DefaultWeb \\ App/output \end{tabular}$ 

**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/DefaultWe bApp/website

**Note:** Make sure you have write permission to this directory.

14. Start WebLogic by typing:

<WebLogic Installation

Directory>/bea/wlserver6.1/config/mydomain/startWebLogic.sh

- 15. In the WebLogic console, on the left sidebar, click Web Applications.
- 16. Click DefaultWebApp.
- 17. On the right panel, under the Files tab, check the box to enable Index Directories and click Apply.

## Making ArcIMS files available to Web users

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

cp -r <ArcIMS Installation</pre>

Directory>/aims40exe/ViewerDownLoad/install <Path to website
directory>

For more information, see Installing ArcIMS Viewer.

## Using the Diagnostics tool to test your ArcIMS installation

1. Start WebLogic by typing:

<WebLogic Installation

Directory>/bea/wlserver6.1/config/mydomain/startWebLogic.sh

2. Open <ArcIMS Installation

Directory>/aims40exe/Xenv/ArcIMS\_Diagnostics/ArcIMS\_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.

- 3. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
- 4. Click 1 to test the ArcIMS Servlet Connector.

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

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

See WMS for information on configuring for WMS.

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

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

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

## Configuring WebSphere 3.5.5 for IBM HTTP Server

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

1. Copy the following from <ArcIMS Installation

Directory>/aims40exe/Middleware/Servlet\_Connector to <WebSphere Installation Directory>/AppServer/servlets:

- com directory
- Esrimap\_prop
- ServletConnector Res.properties
- ServletConnector\_Res\_en\_US.properties files
- WMSEsrimap\_prop
- 2. Open the Esrimap\_prop file in a text editor.

3. Change the value of AppServerMachine to the name of your Application Server computer. For example:

AppServerMachine=<server name>.esri.com

4. Save and close the file.

## **Creating virtual directories**

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

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

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

DirectoryIndex index.html default.htm

4. Save and close the file.

## Making ArcIMS files available to Web users

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

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

For more information, please see Installing ArcIMS Viewer.

## Using the Diagnostics tool to test your ArcIMS installation

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

```
setenv JAVA_HOME <JDK Installation Directory>
setenv PATH $JAVA_HOME/bin:$PATH
./adminctl start
./apachectl start
```

2. Start the WebSphere Server:

<WebSphere Installation Directory>/bin/startServer.sh

- 3. Open <ArcIMS Installation
  - Directory>/aims40exe/Xenv/ArcIMS\_Diagnostics/ArcIMS\_Diagnostics.html in Netscape. The ArcIMS Diagnostics tool displays.
- 4. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
- 5. Click 1 to test the ArcIMS Servlet Connector.

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

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

See WMS for information on configuring for WMS.

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

See Configuring WebSphere 3.5.5 for Metadata Explorer for information on configuring Metadata Explorer. See Step 5: Configure ArcIMS for the final step required to get ArcIMS running.

## Configuring your Web server for ArcIMS Service Administrator

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

Configuring Oracle Application Server

Configuring Tomcat for Apache

Configuring WebLogic

Configuring WebSphere 3.5.5

## **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 9*i* Application Server. 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.

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>/aims40exe/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>/aims40exe/Middleware/Application\_Server/AppServer.properties.

- 10. Find preferenceFile= and edit it to point to the sitePreferences.properties file: preferenceFile=<ArcIMS Installation Directory>/aims40exe/Middleware/Application\_Server/sitePreferences.properties
- 11. Save and close the file.
- 12. Start Oracle Application Server by typing:

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

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

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

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

## Configuring Tomcat for Apache for ArcIMS Service Administrator

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

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

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

```
setenv JAVA_HOME <JDK Installation Directory>
setenv PATH $JAVA_HOME/bin:$PATH
<Tomcat Installation Directory>/bin/startup.sh
<Apache Installation Directory>/bin/apachectl start
```

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

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

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

## **Configuring WebLogic for ArcIMS Service Administrator**

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

1. Start WebLogic by typing:

```
<WebLogic Installation</pre>
```

Directory>/bea/wlserver6.1/config/mydomain/startWebLogic.sh

2. In your Web browser, type:

http://<localhost.domain.com>:<serveradminport>/console, for example, http://arcims.esri.com:10000/console.

- 3. Type your password.
- 4. On the left sidebar, click Web Applications.
- 5. Click Configure a new Web Application.
- 6. For the Name, type: esriadmin
- 7. For Path URI, type: <ArcIMS Installation Directory>/aims40exe/Administrator/esriadmin
- 8. Click Create.
- 9. On the left sidebar, click Servers.
- 10. Click < WebLogic Server Name>.
- 11. Click Deployments.
- 12. Click Web Applications.
- 13. Click the right arrow to move esriadmin from Available to Chosen.
- 14. Click Apply.
- 15. Close the console.

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

See Configuring WebLogic for Metadata Explorer for information on configuring Metadata Explorer. See Step 5: Configuring ArcIMS for the final step required to get ArcIMS running.

## **Configuring WebSphere 3.5.5 for ArcIMS Service Administrator**

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

- 1. In a text editor, open <ArcIMS Installation Directory>/aims40exe/Middleware/Application\_Server/AppServer.properties.
- Find preferenceFile= and edit it to point to the sitePreferences.properties file: preferenceFile=<ArcIMS Installation Directory>/aims40exe/Middleware/Application\_Server/sitePreferences.properties
- 3. Save and close the file.
- 4. Start the Administrator and HTTP servers by navigating to <IBM HTTP Server Installation Directory>/bin and typing:
  - ./adminctl start
  - ./apachectl start
- 5. Start the WebSphere Server:
  - <WebSphere Installation Directory>/bin/startServer.sh
- 6. Start the WebSphere Administrative Client:
  - <WebSphere Installation Directory>/bin/adminclient.sh
    The WebSphere console displays.
- 7. Click Console, click Tasks, click Convert a War File.
- 8. On the left sidebar, expand Nodes, expand the computer name, then expand Default Server.
- 9. Select Default Servlet Engine.
- 10. Click Next.
- 11. Expand Virtual Hosts.
- 12. Select default\_host.
- 13. Click Next.
- 14. Browse to <ArcIMS Installation Directory>/aims40exe/Administrator/esriadmin.war.
- 15. Click Next.
- 16. Browse to your destination directory, usually under the default\_host directory at <WebSphere Installation Directory>/Appserver/hosts/default\_host.
- 17. Click Next
- 18. For Web Application Web Path, type: esriadmin
- 19. For Web Application Name, type: esriadmin
- 20. Click Finish.
  - After the Web application is deployed, you will see Command "warfile.convert" completed successfully Information dialog, click OK.
- 21. Expand the WebSphere Administrative Domain, expand the <hostname> node, expand Default server, then expand Default Servlet Engine.
- 22. Right-click on the esriadmin node and select Restart Web App.
  - You will see the Command esriadmin.setRefreshConfig completed successfully Information dialog, click OK.
- 23. Close the WebSphere Advanced Administrative Console.
- 24. Create a directory called lib under <WebSphere Installation Directory>/Appserver/hosts/default\_host/esriadmin/web/WEB-INF.
- 25. Navigate to <WebSphere Installation Directory>/Appserver/hosts/default\_host/esriadmin/servlets and copy the arcims\_taglib.tld and i18n.tld files to <WebSphere Installation Directory>/Appserver/hosts/default\_host/esriadmin/web/WEB-INF/lib.
- 26. Start the Administrator and HTTP servers by navigating to <IBM HTTP Server Installation Directory>/bin and typing:
  - ./adminctl start

- ./apachectl start
- 26. Start the WebSphere Server:

<WebSphere Installation Directory>/bin/startServer.sh

See Configuring WebSphere 3.5.5 for Metadata Explorer for information on configuring Metadata Explorer. See Step 5: Configuring ArcIMS for the final step required to get ArcIMS running.

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

### Introduction

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

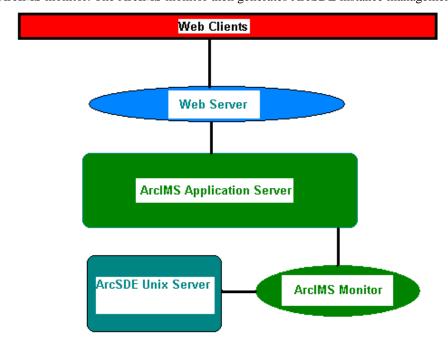
To use an ArcSDE Server with ArcIMS Service Administrator, you should already have installed ArcIMS Service Administrator and configured your Web server for ArcIMS Service Administrator. See the ArcIMS Service Administrator instructions for your platform: HP-UX, IBM AIX, Linux Red Hat, or Sun Solaris.

## **Background**

The ArcIMS Service Administrator is a JavaServer Pages (JSP) 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, or 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 which are sent through the application server to an ArcIMS monitor. The ArcIMS monitor then generates ArcSDE instance management requests.



## **Setting up the ArcSDE Server**

- 1. Install and configure ArcSDEYou 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 jar files can be installed from the ArcSDE installation CD. The easiest way to locate them in your CLASSPATH is to place them into your jdk or jre installation directory under the lib/ext folder.
- 3. Install ArcIMS Monitor for your platform onto your ArcSDE Server: HP-UX, IBM AIX, Linux Red Hat, or Sun Solaris.
  - You should run the install as the same user who owns the SDE binaries and directories. Most likely, this will be the SDE user.
- 4. Once the software is installed:
  - a. Type: cd <ArcIMS Installation Directory>/aims40exe/Monitor
  - b. Open the Monitor.properties file in a text editor:
  - c. Change the registryHost setting from localhost to your ArcIMS Application Server: registryHost=<server name>.<domain>.com
  - d. Uncomment the sdePropertiesFilename parameter: sdePropertiesFilename=Sde.properties
  - e. Save and close the file.
- 5. Open the Sde.Properties file in that same directory in a text editor:
  - a. Uncomment the instanceNames property and set it equal to your ArcSDE service name: instanceNames=esri sde
  - b. Uncomment the portNumbers property and set it equal to your ArcSDE server port number: portNumbers=5151
  - c. Uncomment the sdehomes property and set it equal to your \$SDEHOME path: sdehomes=/<server name>/sde82
- 6. Open the aimsmonitor script in the <ArcIMS install location>/Xeny directory in a text editor:
  - a. Uncomment the AIMSHOME property and set it to the path to your ArcIMS Installation Directory: AIMSHOME=/<server name>/aims40exe; export AIMSHOME
  - b. Uncomment the JAVA\_HOME property and set it to the path to your Java or jre installation: JAVA\_HOME=/usr/java/jrel.3.1\_02
  - **Note:** For this utility, you must have JDK or JRE installed. You can install these 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 login. If you have set up the software correctly, you will see an ArcSDE option.

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

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

## Configuring your Web server for ArcIMS Metadata Explorer

If you wish to use ArcIMS Metadata Explorer, you must configure your Web server: Configuring Oracle Application Server Configuring Tomcat for Apache

Configuring WebLogic

Configuring WebSphere 3.5.5

## **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 9*i* Application Server. 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. 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>/aims40exe/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 Tomcat for Apache for Metadata Explorer**

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

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

```
Alias /metadataexplorer "<Tomcat Installation Directory>/webapps/MetadataExplorer"
```

- 4. Save and close the file.
- 5. Start the Tomcat and Apache services by typing:

```
setenv JAVA_HOME <JDK Installation Directory>
setenv PATH $JAVA_HOME/bin:$PATH
<Tomcat Installation Directory>/bin/startup.sh
<Apache Installation Directory>/bin/apachectl start
```

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

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

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

## Configuring WebLogic for Metadata Explorer

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

- 1. Start WebLogic by typing:
  - <WebLogic Installation

Directory>/bea/wlserver6.1/config/mydomain/startWebLogic.sh

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

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

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 3.5.5 for Metadata Explorer

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

- 1. Start the Administrator and HTTP servers by navigating to <IBM HTTP Server Installation Directory>/bin and typing:
  - ./adminctl start
  - ./apachectl start
- 2. Start the WebSphere Server:
  - <WebSphere Installation Directory>/bin/startServer.sh
- 3. Start the WebSphere Administrative Client:
  - <WebSphere Installation Directory>/bin/adminclient.sh
  - The WebSphere console displays.
- 4. Click Console, click Tasks, click Convert a War File.
- 5. On the left sidebar, expand Nodes, expand the computer name, then expand Default Server.
- 6. Select Default Servlet Engine.
- 7. Click Next.
- 8. Expand Virtual Hosts.
- 9. Select default\_host.
- 10. Click Next.
- 11. Browse to <ArcIMS Installation Directory>/aims40exe/Metadata/MetadataExplorer.war.
- 12. Click Next.
- 13. Browse to your destination directory, usually under the default\_host directory at <WebSphere Installation Directory>/Appserver/hosts/default\_host.
- 14. Click Next.

- 15. For Web Application Web Path, type: metadataexplorer
- 16. For Web Application Name, type: metadataexplorer
- 17. Click Finish.
  - After the Web application is deployed, you will see Command "warfile.convert" completed successfully Information dialog, click OK.
- 18. Expand the WebSphere Administrative Domain, expand the <hostname> node, expand Default server, then expand Default Servlet Engine.
- Right-click on the metadataexplorer node and select Restart Web App.
   You will see the Command metadataexplorer.setRefreshConfig completed successfully Information dialog, click OK.
- 20. Close the WebSphere Advanced Administrative Console.
- 21. Create a directory called lib under <WebSphere Installation Directory>/Appserver/hosts/default\_host/metadataexplorer/web/WEB-INF.
- 22. Navigate to <WebSphere Installation
  - Directory>/Appserver/hosts/default\_host/metadataexplorer/servlets and copy the arcims\_taglib.tld and i18n.tld files to <WebSphere Installation Directory>/Appserver/hosts/default\_host/metadataexplorer/web/WEB-INF/lib.
- 23. Start the Administrator and HTTP servers by navigating to <IBM HTTP Server Installation Directory>/bin and typing:
  - ./adminctl start
  - ./apachectl start
- 24. Start the WebSphere Server:
  - <WebSphere Installation Directory>/bin/startServer.sh

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

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

See Step 5: 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:

Setting up your ArcIMS account

Using ArcIMS with a proxy server

Starting the ArcIMS processes

Running ArcIMS

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

## Setting up your ArcIMS account

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

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

setenv AIMSHOME <ArcIMS Installation Directory>/aims40exe

Make sure that \$AIMSHOME/bin is in the PATH and \$AIMSHOME/lib and \$AIMSHOME/bin are in the LIBPATH.

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.

- Replace all references to ARCIMSHOST with the full name of your host computer.
- 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>

For geocoding, you must add a path to the following variable:

IndexBuilderEXE=<ArcIMS Installation</pre>

Directory>/aims40exe/IndexBuilder/aimsindxb.exe

Update the value of the following variable to point to the location of the image output directory: ImagePath=/disk1/ArcIMS/output

Update the value of the following line to point to the location of a valid browser:

WebBrowser=<Netscape Installation Directory>/netscape

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

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

WebSiteDir=/disk1/ArcIMS/website

## Using ArcIMS with a proxy server

Use the Proxy Server properties to specify whether your LAN uses a proxy server to connect to the Internet. A proxy server is a computer on your LAN that connects to the Internet without compromising the security of 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:
  - Open \$AIMSHOME/Xenv/aimsproxy.properties in a text editor.
  - Set the HostName and Port of the proxy server to use. For example:

```
httpproxyhost=proxy.esri.com
httpproxyport=5000
```

- 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):
  - Open \$AIMSHOME/Xenv/aimsproxy.properties in a text editor.
  - Set the HostName and Port of the https proxy server to use. For example: httpsproxyhost=httpsproxy.esri.com httpsproxyport=5010
  - After editing the aimsproxy.properties file, copy it to your \$HOME directory: cp \$AIMSHOME/Xenv/aimsproxy.properties \$HOME
- If your LAN doesn't use a proxy server and is directly connected to the Internet, do not set these properties. By default, they are **not** set.

## **Starting the ArcIMS processes**

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

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

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

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

Application Server: \$AIMSHOME/Middleware/Application Server/AppServer.properties

**Monitor:** \$AIMSHOME/Monitor/Monitor.properties

Tasker: \$AIMSHOME/Middleware/Tasker.properties

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

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

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

• Edit the Tasker.properties file and change the value "localhost" to the name of your Application Server, for example:

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

• To start the processes manually, navigate to the \$AIMSHOME/Xenv directory and start the services in the following order:

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

To test the processes, open <ArcIMS Installation
 Directory>/aims40exe/Xenv/ArcIMS\_Diagnostics/ArcIMS\_Diagnostics.html in Netscape. The
 ArcIMS Diagnostics displays.

- a. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.
- b. Click 2 to test the ArcIMS Application Server.

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

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

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

## **Running ArcIMS**

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

aimsauthor

aimsdesigner

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

You are ready to use ArcIMS.

## **Troubleshooting**

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

- The ports used by ArcIMS are already in use on my system.
- My ArcIMS Catalog hangs when I select local data.
- When I run aimsadmin for the first time or after deleting \*.sez files, there are no ArcIMS Virtual Servers available.

**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
```

Edit the following line in the \$AIMSHOME/Monitor/Monitor.properties:

registryPort=5353

- 3. 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.

**Problem:** When I run aimsadmin for the first time or after deleting \*.sez files, there are no ArcIMS Virtual Servers available.

#### **Solution:**

Exit aimsadmin and reinitiate it. This should resolve the problem.

## **Uninstalling ArcIMS**

You must remove the following items to uninstall ArcIMS:

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

For example:

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

**IBM HTTP Server with WebSphere:** <WebSphere Installation Directory>/AppServer/servlets **Oracle Application Server:** <OAS Installation Directory>/Apache/Jserv/servlets

WebLogic: < WebLogic Installation

Directory>/bea/wlserver6.1/config/mydomain/applications/DefaultWebApp/WEB-INF/classes

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

## **Installing ArcIMS Viewer**

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

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

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

The items installed are:

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

See the section for your platform:

Installing ArcIMS Viewer on HP-UX

Installing ArcIMS Viewer on IBM AIX

Installing ArcIMS Viewer on Linux Red Hat

Installing ArcIMS Viewer on Microsoft Windows

Installing ArcIMS Viewer on Sun Solaris

## **Installing ArcIMS Viewer on HP-UX**

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

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

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

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

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

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

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

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

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

## **Setting up the ArcIMS Host computer on UNIX**

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

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

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

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

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

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

### **Internet clients only**

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

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

#### **Internet and Intranet clients**

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

```
-Xms10m - Xmx256m
```

and click Apply.

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

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

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

- b. For Netscape to use the correct Plug-in, add the following variables to your .cshrc file: setenv NPX\_PLUGIN\_PATH <path to Java install>/plugin/PA\_RISC/ns4 setenv NPX\_JRE\_PATH <JRE Installation Directory>
- c. Source the .cshrc file:

```
source .cshrc
```

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

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

#### Internet clients only

- 1. Once you have installed JRE and configured JPI, close your browser to clear the cache and reopen it.
- 2. Type the URL to the ArcIMS Web site:

```
http://<hostname>/Website/<name>/default.htm
```

- 3. At the ESRI ArcIMS Viewer screen, click Download installer for Unix.
- 4. In the Save As window, select a location to save the Viewer installer: AEJava.bin. Click OK.
- 5. Make sure that AEJava.bin has execute permissions. If not, type:

```
chmod 755 AEJava.bin
```

6. Execute the Viewer installer:

```
./AEJava.bin
```

- 7. At the language screen, choose a language and click OK.
- 8. At the Location of JRE screen, choose the location where you installed JRE 1.3. This should be the same as what your \$NPX\_JRE\_PATH variable is set to in Step 3 of 'Installing JRE 1.3 on a remote HP-UX computer.' Click Next.

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

- 9. At the Introduction screen, click Next.
- 10. At the Installation Directory screen, choose the installation directory and click Install. The installer creates a directory called AEJava4.0 at this location.

**Note:** The Viewer JAR files and libraries are installed directly into the JRE directory that you selected in Step 8. See the install.log file located in AEJava/UninstallerData for a list of where each file is copied.

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

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

#### **Intranet clients only**

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

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

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

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

#### **Intranet and Internet clients**

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

- 1. To enable ArcExplorer—Java Edition, set the following variable in your .cshrc file: setenv AEJHOME <arcExplorer Installation Directory>/aej40exe
- 2. In your .cshrc file, add \$AEJHOME/bin to your \$PATH variable or set an alias to the startup script:

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

alias aejava \$AEJHOME/bin/aejava

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

```
WebBrowser=/<Netscape Installation Directory>/netscape AEJavaHelp=/<ArcIMS Installation Directory>/Help/aejava_help.htm
```

- 4. Save and close the file.
- 5. Source your .cshrc file:

```
source .cshrc
```

6. To start ArcExplorer—Java Edition, type:

```
aejava
```

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

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

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

## **Installing ArcIMS Viewer on IBM AIX**

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

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

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

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

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

#### ArcIMS Viewer

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

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

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

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

## Setting up the ArcIMS Host computer on UNIX

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

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

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

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

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

## **Installing JRE 1.3 on a remote IBM AIX computer**

### **Internet clients only**

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

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

#### **Internet and Intranet clients**

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

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

```
-Xms10m - Xmx256m
```

Click Apply.

Make sure that you add \$JAVA\_HOME/bin to LIBPATH. See 'System requirements' for more information.

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

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

b. Source the .cshrc:

```
source .cshrc
```

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

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

Installation Directory>/plugins

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

## **Installing ArcIMS Viewer on a remote IBM AIX computer**

### **Internet clients only**

- 1. Once you have installed JRE, close your browser to clear the cache and reopen it.
- 2. Type the URL to the ArcIMS Web site:

```
http://<hostname>/Website/<name>/default.htm
```

- 3. At the ESRI ArcIMS Viewer screen, click Download installer for Unix.
- 4. In the Save As window, select a location to save the Viewer installer: AEJava.bin. Click OK.
- 5. Make sure that AEJava.bin has execute permissions. If not, type: chmod 755 AEJava.bin
- 6. Execute the Viewer installer:
  - ./AEJava.bin
- 7. At the language screen, choose a language and click OK.
- 8. At the Location of JRE screen, choose the location where you installed JRE 1.3. This should be the same as what your \$JAVA\_HOME variable is set to in step 3 of Installing JRE 1.3 on a remote computer. Click Next.

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

- 9. At the Introduction screen, click Next.
- 10. At the Installation Directory screen, choose the installation directory and click Install. The installer creates a directory called AEJava4.0 at this location.

**Note:** The Viewer JAR files and libraries are installed directly into the JRE directory that you selected in Step 8. See the install.log file located in AEJava/UninstallerData for a list of where each file is copied.

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

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

## Intranet clients only

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

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

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

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

#### **Intranet and Internet clients**

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

- 1. To enable ArcExplorer—Java Edition, set the following variable in your .cshrc file: setenv AEJHOME <ArcExplorer Installation Directory>/aej40exe
- 2. In your .cshrc file, add \$AEJHOME/bin to your \$PATH variable or set an alias to the startup script:

```
set path = ( $path $AEJHOME/bin )
or
alias aejava $AEJHOME/bin/aejava
```

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

WebBrowser=/<Netscape Installation Directory>/netscape AEJavaHelp=/<ArcIMS Installation Directory>/Help/aejava\_help.htm

- 4. Save and close the file.
- 5. Source your .cshrc file:

```
source .cshrc
```

6. To start ArcExplorer—Java Edition, type: ae java

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

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

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

## **Installing ArcIMS Viewer on Linux Red Hat**

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

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

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

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

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

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

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

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

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

## Setting up the ArcIMS Host computer on UNIX

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

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

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

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

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

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

### **Internet clients only**

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

#### **Internet and Intranet clients**

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

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

and click Apply.

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

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

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

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

#### **Internet clients only**

- 1. Once you have installed JRE and configured JPI, close your browser to clear the cache and reopen it.
- 2. Type the URL to the ArcIMS Web site:

```
http://<hostname>/Website/<name>/default.htm
```

- 3. At the ESRI ArcIMS Viewer screen, click Download installer for Unix.
- 4. In the Save As window, select a location to save the Viewer installer: AEJava.bin. Click OK.
- 5. Make sure that AEJava.bin has execute permissions. If not, type:

```
chmod 755 AEJava.bin
```

6. Execute the Viewer installer:

```
./AEJava.bin
```

- 7. At the language screen, choose a language and click OK.
- 8. At the Location of JRE screen, choose the location where you installed JRE 1.3. This should be the same as what your \$NPX\_JRE\_PATH variable is set to in Step 4 of Installing JRE 1.3 on a remote Linux computer. Click Next.

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

- 9. At the Introduction screen, click Next.
- 10. At the Installation Directory screen, choose the installation directory and click Install. The installer creates a directory called AEJava4.0 at this location.

**Note:** The Viewer JAR files and libraries are installed directly into the JRE directory that you selected in Step 8. See the install.log file located in AEJava/UninstallerData for a list of where each file is copied.

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

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

#### **Intranet clients only**

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

- Copy the Viewer \*.jar files to your JRE ext directory:
   cp \$AEJHOME/lib/\*.jar \$NPX JRE PATH/lib/ext
- Add \$AEJHOME/lib to your LD\_LIBRARY\_PATH in your .cshrc file: setenv LD\_LIBRARY\_PATH \$AEJHOME/lib:\$LD\_LIBRARY\_PATH

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

## **Installing ArcIMS Viewer on Microsoft Windows**

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

Installing ArcIMS Viewer on Internet Explorer 5.0

Installing ArcIMS Viewer on Internet Explorer 5.5 and 6.0

Installing ArcIMS Viewer on Netscape

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

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

1. Type the URL to the ArcIMS Web site:

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

**Note:** If you do not have the correct Java Plug-in, you will be prompted to install Java 2 Runtime Environment. Otherwise skip to Step 6.

- 2. At the Security Warning screen for Java Plug-in 1.3, click Yes.
- 3. At the Locale selection screen, click Install.
- 4. At the Software License Agreement screen, click Yes.
- 5. At the Choose Destination Location screen, click Next. JRE 1.3.1 is installed on your computer, and the ArcIMS Viewer installation begins.

**Note:** You may see Steps 6 and 7; otherwise skip to Step 8.

- 6. Install on Demand displays, if Java Virtual Machine is needed. Click Download.
- 7. A Security Warning for Microsoft Virtual Machine displays. Click Yes.
- 8. At the Security Warning screen for Java Plug-in, click Yes.
- 9. Click Start Installer for Windows.
- 10. At the language screen, choose English and click OK.
- 11. At the Location Directory screen, click Next.
- 12. At the Location of JRE screen, highlight the directory and click Install.
- 13. At the Installation Complete screen, click Done.
- 14. Close your browser to clear the cache and reopen it.
- 15. Type the URL to the Web site:

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

16. Now you can access the ArcIMS Web site.

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

### **Uninstalling ArcIMS Viewer**

To uninstall ArcIMS Viewer:

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

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

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

1. Type the URL to the ArcIMS Web site:

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

**Note:** If you do not have the correct Java Plug-in, you will be prompted to install Java 2 Runtime Environment. Otherwise skip to Step 6.

- 2. At the Security Warning screen for Java Plug-in 1.3, click Yes.
- 3. At the Locale selection screen, click Install.
- 4. At the Java 2 Runtime Environment Software License Agreement screen, click Yes.
- 5. At the Choose Destination Location screen, click Next. JRE 1.3.1 is installed on your computer, and the ArcIMS Viewer installation begins.

Note: You may see Steps 6 and 7; otherwise skip to Step 8.

- 6. Install on Demand displays, if Java Virtual Machine is needed. Click Download.
- 7. A Security Warning for Microsoft Virtual Machine displays. Click Yes.
- 8. At the Security Warning screen for InstallAnywhere Web Installer, click Yes.
- 9. Click Start Installer for Windows.
- 10. At the language screen, choose English and click OK.
- 11. At the Installation Directory screen, click Next.
- 12. At the Location of JRE screen, highlight the correct path and click Install. If you do not highlight the path, the ArcIMS Viewer installation will not be complete.
- 13. At the Installation Complete screen, click Done.
- 14. Close your browser to clear the cache and reopen it.
- 15. Type the URL to the Web site:

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

Now you can access the ArcIMS Web site.

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

#### **Uninstalling ArcIMS Viewer**

To uninstall ArcIMS Viewer:

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

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

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

1. Type the URL to the ArcIMS Web site:

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

**Note:** If you do not have the correct Java Plug-in, you will be prompted to install Java 2 Runtime Environment, otherwise skip to step 5.

- 2. At the Plug-in not loaded screen, click Get the Plug-in.
- 3. After being directed to the Java Web site, you will be prompted to download Java 2 Runtime Environment. Follow the instructions.
- 4. Install JRE.
- 5. Type the URL to the ArcIMS Web site:

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

- 6. On Netscape 6.0, at the Java Plug-in security warning, select Grant this session.
  - On Netscape 4.75, at the Java Security screen, select Grant.
- 7. Click Start Installer for Windows.
- 8. At the language screen, choose English and click OK.
- 9. At the Installation Directory screen, click Next.
- 10. At the Location of JRE screen, highlight the correct path and click Install.
- 11. At the Installation Complete screen, click Done.
- 12. Close your browser to clear the cache and reopen it.
- 13. Type the URL to the Web site:

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

Now you can access the ArcIMS Web site.

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

#### **Uninstalling ArcIMS Viewer**

To uninstall ArcIMS Viewer:

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

## **Installing ArcIMS Viewer on Sun Solaris**

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

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

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

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

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

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

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

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

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

## **Setting up the ArcIMS Host computer on UNIX**

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

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

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

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

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

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

### **Internet clients only**

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

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

#### **Internet and Intranet clients**

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

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

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

3. Execute the JRE script for Solaris.

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

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

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

- b. For Netscape to use the correct Plug-in, add the following variables to your .cshrc file: setenv NPX\_PLUGIN\_PATH <JRE Installation Directory>/plugin/sparc/ns4 setenv NPX JRE PATH <JRE Installation Directory>
- c. Source the .cshrc file: source .cshrc

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

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

## **Internet clients only**

- 1. Once you have installed JRE and configured JPI, close your browser to clear the cache and reopen it.
- 2. Type the URL to the ArcIMS Web site:

```
http://<hostname>/Website/<name>/default.htm
```

- 3. At the ESRI ArcIMS Viewer screen, click Download installer for Unix.
- 4. In the Save As window, select a location to save the Viewer installer: AEJava.bin. Click OK.
- 5. Make sure that AEJava.bin has execute permissions. If not, type: chmod 755 AEJava.bin
- 6. Execute the Viewer installer:
  - ./AEJava.bin
- 7. At the language screen, choose a language and click OK.
- 8. At the Location of JRE screen, choose the location where you installed JRE 1.3. This should be the same as what your \$NPX\_JRE\_PATH variable is set to in Step 4 of Installing JRE 1.3 on a remote Solaris computer. Click Next.

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

- 9. At the Introduction screen, click Next.
- 10. At the Installation Directory screen, choose the installation directory and click Install. The installer creates a directory called AEJava4.0 at this location.

**Note:** The Viewer JAR files and libraries are installed directly into the JRE directory that you selected in Step 8. See the install.log file located in AEJava/UninstallerData for a list of where each file is copied.

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

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

### Intranet clients only

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

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

```
cp $AEJHOME/lib/*.jar $NPX_JRE_PATH/lib/ext
```

2. Add \$AEJHOME/lib to your LD\_LIBRARY\_PATH in your .cshrc file: setenv LD\_LIBRARY\_PATH \$AEJHOME/lib:\$LD\_LIBRARY\_PATH

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

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

### **Intranet and Internet clients**

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

- 1. To enable ArcExplorer—Java Edition, set the following variable in your .cshrc file: setenv AEJHOME <ArcExplorer Installation Directory>/aej40exe
- 2. In your .cshrc file, add \$AEJHOME/bin to your \$PATH variable or set an alias to the startup script:

```
set path = ( $path $AEJHOME/bin )
or
alias aejava $AEJHOME/bin/aejava
```

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

```
WebBrowser=/<Netscape Installation Directory>/netscape AEJavaHelp=/<ArcIMS Installation Directory>/Help/aejava_help.htm
```

- 4. Save and close the file.
- 5. Source your .cshrc file:

```
source .cshrc
```

6. To start ArcExplorer—Java Edition, type:

```
aejava
```

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

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

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

## **Configuring iPlanet for ArcIMS Viewer**

The following instructions are for iPlanet only.

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

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