ArcIMS 4 Installation Guide

Windows

ESRI

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Introduction

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

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

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

Overview

What's included with ArcIMS 4.0?

- The installation CD with ArcIMS software. See *Using ArcIMS* for details on working with ArcIMS. To find out about ArcIMS customization, see *Customizing ArcIMS,* a five-book series you can install with the software. The *ArcXML Programmer's Reference Guide,* a programming guide for customizing map configuration files, is also included with the software. For a printable version of *Installing ArcIMS,* see ArcIMS Online at http://arcimsonline.esri.com for a PDF file for your platform.

- ArcExplorer™—Java™ Edition is included with ArcIMS and is documented in *Using ArcExplorer— Java Edition.*

- ArcSDE™ for Coverages is included with ArcIMS and comes with two digital documents: *Installing ArcSDE for Coverages* and *ArcSDE for Coverages Administration Guide.* ArcSDE for Coverages can be used without any special licenses or keycodes. Refer to the ArcSDE for Coverages CD for information. Installing ArcSDE for Coverages is optional.

ArcIMS components

ArcIMS is made up of:
- ArcIMS Manager/Manager Applications
- ArcIMS Application Server
- ArcIMS Application Server Connectors
- ArcIMS Spatial Servers
- ArcIMS Service Administrator
- ArcIMS Viewers
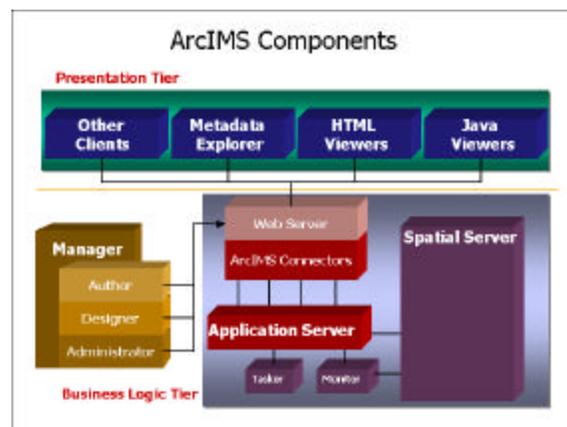
Each component is described in the following paragraphs.

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

ArcIMS Manager

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

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

instructions regarding Remote Manager.

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

ArcIMS Manager Applications

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

ArcIMS Service Administrator

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

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

ArcIMS Application Server

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

ArcIMS Application Server Connectors

The ArcIMS Application Server Connectors are used to connect the Web server to the ArcIMS Application Server. Each instance of a connector is dedicated to one Web server and must be installed on the same computer as the Web server; however, a single Web server can support several connectors.
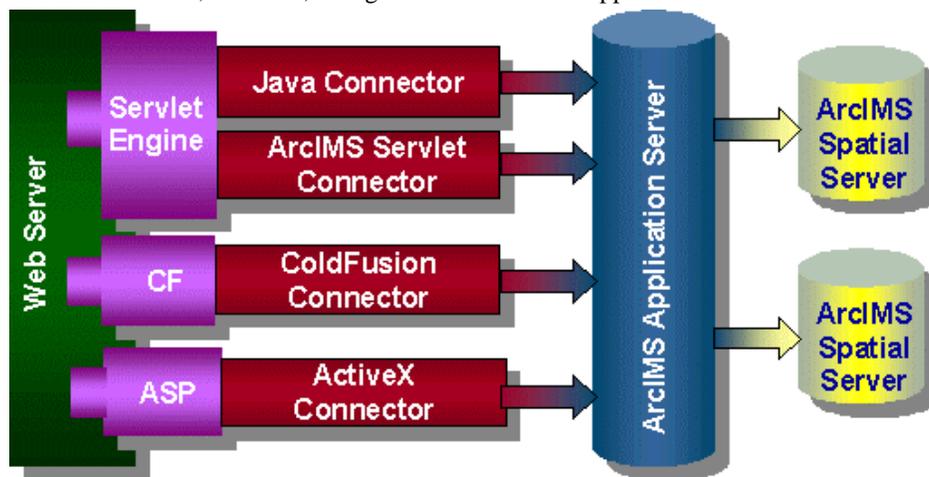
The ArcIMS Servlet Connector is the standard connector used for ArcIMS, and it supports the OpenGIS Consortium (OGC) Web Map Service (WMS) 1.1.0 implementation specification. It uses the ArcIMS language, ArcXML, to communicate from the Web server to the ArcIMS Application Server. The ArcIMS Servlet Connector provides Map Service-level user password authentication. You need the ArcIMS Servlet

Connector to administer your ArcIMS site and author and design ArcIMS Web pages.

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

- ColdFusion® Connector
- ActiveX® Connector
- Java Connector

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

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

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

ArcIMS Spatial Servers

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

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

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

ArcIMS Viewers

ArcIMS provides client-side viewers:

- 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: 909-793-3774.

- Fax: 909-792-0960.

- E-mail: support@esri.com.

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

ArcIMS Knowledge Base

The ArcIMS Knowledge Base is a database that contains:

- Frequently Asked Questions

- How To instructions

- Troubleshooting tips

- Error messages

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

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

Using ArcIMS Help

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

Visit the ESRI home page on the Internet

Visit the ESRI home page at www.esri.com 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

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

Installation flowchart

Do you have a previous version of ArcIMS installed? — No → Does your site meet ArcIMS system requirements? — Yes → Have you determined your ArcIMS site configuration? — Yes →

Install ArcIMS
- Typical
- Application Server Connectors
- ArcIMS ArcMap Server
- ArcIMS Manager Applications
- ArcIMS Service Administrator
- ArcIMS Spatial Servers
- Metadata Explorer

→ **Configure your Web Server**
- iPlanet
- JRun for IIS
- Oracle Application Server
- ServletExec for Apache
- ServletExec for IIS
- Tomcat for Apache
- Tomcat for IIS
- WebLogic
- WebSphere

Do you have a previous version of ArcIMS installed? — Yes → See 'Existing users'

Does your site meet ArcIMS system requirements? — No → Install ArcIMS **system** requirements

Have you determined your ArcIMS site configuration? — No → Determine ArcIMS site configuration

Did ArcIMS Diagnostics work for the ArcIMS Servlet Connector? — Yes → Did ArcIMS Diagnostics work for the ArcIMS Application Server? — Yes → Configure ArcIMS → Do you need to increase memory parameters? — No → Do you use JAI? — No → Do you use proxy servers on your LAN?

Did ArcIMS Diagnostics work for the ArcIMS Servlet Connector? — No → See 'Troubleshooting'

Did ArcIMS Diagnostics work for the ArcIMS Application Server? — No → See 'Troubleshooting'

Do you need to increase memory parameters? — Yes → Set memory parameters

Do you use JAI? — Yes → Set path

Do you use proxy servers on your LAN? — Yes → Edit aimsproxy.properties

→ No → You are ready to use ArcIMS!

Existing users

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

- The ArcIMS 3.1 files EsriMapCatalog.ser (configuration file for saved services) and EsriMapCookies.ser contain your ArcIMS preferences. Copy these files to a directory outside the ArcIMS Installation Directory prior to ArcIMS 4.0 installation. The ArcIMS 4.0 installation program converts these files to files called ArcIMSSite.sez and ArcIMSFolders.sez.

- You cannot have ArcIMS 3.1 and ArcIMS 4.0 installed on the same computer. Uninstall ArcIMS 3.1 before installing ArcIMS 4.0. See Uninstalling ArcIMS 3.1 or Uninstalling ArcIMS 4.0 for details.

- Make sure the ArcIMS 3.1 Esrimap_prop file is deleted from your computer before installing ArcIMS 4.0. Search your computer and delete this file.

- The ArcIMS installation directory is now called ArcIMS. Update your virtual directories (especially for Manager) to reflect the new directory name. See Step 4: Configuring your Web server for your configuration.

- See Supported Software Environments for Web servers and servlet engines supported for ArcIMS 4.0.

- If you don't run the Site Starter Conversion utility during ArcIMS installation, you can run it manually. See ArcIMS Site Information Conversion.

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

Note: To review your installation settings, refer to the log file created during the ArcIMS installation located at <ArcIMS Installation Directory>\Common\InstallSummary.log.

1. The ArcIMS 3.1 files EsriMapCatalog.ser (configuration file for saved services) and EsriMapCookies.ser contain your ArcIMS preferences. Copy these files to a directory outside the ArcIMS Installation Directory prior to ArcIMS 4.0 installation. The default location for these files is <ArcIMS Installation Directory>\AppServer. The ArcIMS 4.0 installation program converts these files to files called ArcIMSSite.sez and ArcIMSFolders.sez.

2. To uninstall ArcIMS, choose Start | Settings | Control Panel and double-click Add/Remove Programs on Windows NT or Change/Remove on Windows 2000.

   Note: If you are using iPlanet Web server, on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and Stop your Web server.

3. Click ESRI ArcIMS 3.1 and click Add/Remove on Windows NT or Change/Remove on Windows 2000.

4. Accept the default of all components or choose specific components to uninstall and click Uninstall.

5. Close the windows.

6. Stop your Web server and servlet engine.

7. Navigate to \Program Files\Esri, or the alternate location you selected during installation, and delete the ArcIMS3.1 directory.

8. Navigate to <drive>:\ArcIMS\Website or the alternate location you selected for your Website directory during installation and delete the htmlviewer, install, and javaviewer directories.

9. Navigate to your servlets directory and verify that the com directory, Esrimap_prop, jaxp.jar, parser.jar, ServletConnector_Res.properties, ServletConnector_Res_en_US.properties, and WMSEsrimap_prop files have been deleted.

   For example:

   Apache with Tomcat: <Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes

   IBM HTTP Server with WebSphere: \Websphere\appserver\servlets

   iPlanet: com directory and jaxp.jar and parser.jar files from \Netscape\server4\docs\servlet and Esrimap_prop, ServletConnector_Res, ServletConnector_Res_en_US, and WMSEsrimap_prop files from \Netscape\server4\https-<localhost>.<domain>.com\config

   Microsoft IIS with JRun: \Program Files\Allaire\Jrun\servlets

   Microsoft IIS with ServletExec: \Program Files\Unify\ServletExec ISAPI\Servlets

   Microsoft IIS with Tomcat: <Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes

   Oracle Application Server: \Oracle\iAS\Apache\Jserv\servlets

10. Go to Program Files\JavaSoft\Jre\1.3.0_02\bin and \lib\ext. If these folders contain any ArcIMS JAR files or Dynamic Link Libraries (DLLs), delete them:

    - **ext directory:** arcims_admin.jar, arcims_admincore.jar, arcims_aej.jar, arcims_author.jar, arcims_designer.jar, arcims_resadmin.jar, arcims_resaej.jar, arcims_resauthor.jar, arcims_resdesigner.jar, arcims_ressdk.jar, arcims_sdk.jar, jai_codec.jar, jai_core.jar, jaxp.jar, jcert.jar, jnet.jar, jsse.jar, jsde81_sdk.jar, jsde81_sdkres.jar, mlibwrapper_jai.jar, and parser.jar

      Note: If you installed the ArcSDE812 update for ArcIMS, delete the \bak31 directory in the lib\ext directory.

      Note: If you have ArcExplorer 3.1—Java Edition installed, do not delete the JAR files.

    - **bin directory:** mlib_image_jai.dll and mlib_java_jai.dll

      Note: All *jai*.* files are part of Sun's JAI package but are distributed with ArcIMS to facilitate the

display of images.

11. Start your Web server and servlet engine.

12. Clear the jar_cache and any TLB files from your temp directory.

13. Delete your Temporary Internet files from your Web browser.

14. Delete aimsclient.properties, aimsdefault.properties, and aimsproxy.properties from your user profile.

   Note: If you have ArcExplorer 3.1—Java Edition installed, **do not** delete the aimsclient.properties file.

15. Reboot your computer to clear your system.

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. At 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 will prompt you for the location of the EsrimapCatalog.ser and EsrimapCookies.ser files and will convert them to ArcIMSSite.sez and ArcIMSfolders.sez files. The newly created *.sez files will contain ArcIMS 3.1 site information that can be used by the ArcIMS 4.0 Application Server. Note that the existing EsrimapCatalog.ser and EsrimapCookies.ser files will not be deleted.

If you choose not to convert the files during installation, you can convert the *.ser files using the SerConverter utility. This utility is installed in a typical installation and whenever ArcIMS Application Server or ArcIMS Spatial Server are installed.

1. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

2. Stop ArcIMS Tasker, ArcIMS Monitor, and ArcIMS Application Server.

3. Edit the SerConverter.properties file. Navigate to <ArcIMS Installation Directory>\Middleware\SerConverter.

4. In a text editor, open the SerConverter.properties file and change the line
   `workingDrectory=C:/Program Files/ArcGIS/ArcIMS/Middleware/SerConverter`

   to the full path to the location of your ArcIMS 4.0 SerConverter folder.

5. Change the line `inputDirectory=C:/Program Files/ESRI/ArcIMS3.1/AppServer` to the full path of the location of your ArcIMS 3.1 EsrimapCatalog.ser and EsrimapCookies.ser files.

6. If necessary, change the line
   `outputDirectory=C:/Program Files/ArcGIS/ArcIMS/AppServer`

   to the full path of the location of your ArcIMS 4.0 AppServer folder.

7. Save and close the file.

8. Open a command prompt and issue the command:

   `SerConverter SerConverter.properties`

   to start the conversion.

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

9. Start ArcIMS Application Server, ArcIMS Monitor, and ArcIMS Tasker and close the Services window.

Note: New virtual servers in ArcIMS 4.0 (Metadata Server and ArcGIS ArcMap Server) will not show up in the converted ArcIMS site. The ArcIMS site is capable of running them; however, you need to manually create these two virtual servers and save the site configuration. See *Using ArcIMS* for details on creating virtual servers.

Step 1: Verify that your site meets ArcIMS system requirements

The following system requirements are required to run ArcIMS on Microsoft Windows computers.

Hardware configuration

Memory requirements

- Web server/Manager: 256 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 (typical installation): 256 MB of RAM recommended per CPU

Disk space

For the disk space requirements for each ArcIMS component, see the ArcIMS installation program on the CD.

System software

The following system software is required to run ArcIMS.
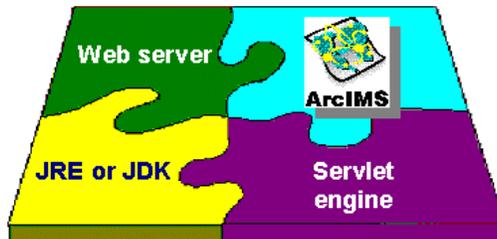
Operating system

Microsoft Windows NT—Intel® 4.0 with Service Pack 6a, Windows 2000, or Windows XP (hereafter collectively referred to as Windows)

To determine if Service Pack 6a is installed on Windows NT:

Choose Start | Run, type `Winver` and press Enter. If your system is running it, 'Revised Service Pack 6a' is listed in the About Windows NT screen.

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 these Web servers on Microsoft Windows computers:

- Apache Web Server using Jakarta-Tomcat installed as a service or ServletExec as its servlet engine
- IBM HTTP Server using WebSphere® as its servlet engine

- iPlanet™ Web Server, Enterprise Edition, using its Native Java servlet engine
- Microsoft IIS for Windows NT Server, Windows 2000, and Windows XP using a servlet engine

  Note: Microsoft Personal Web Server is not supported.

- Oracle® Application Server (OAS) using Apache Web Server
- WebLogic®

See Supported Software Environments at http://arconline.esri.com/arconline/sysreqs.cfm?PID=6 for other Web servers and their ESRI support level.

Servlet engine

ArcIMS requires a servlet engine if the Web server does not support servlets natively. The servlet engine must use Java Runtime Engine (JRE) or Java 2 Software Development Kit (JDK) 1.3.1 or higher.

- IBM WebSphere
- JRun for IIS using JDK instead of JRE from www.livesoftware.com/products/jrun
- Jakarta-Tomcat for Apache Web Server or IIS installed as a service from www.apache.org (hereafter referred to as Tomcat)
- ServletExec™ for IIS from www.newatlanta.com

See Supported Software Environments at http://arconline.esri.com/arconline/sysreqs.cfm?PID=6 for other servlet engines and their ESRI support level.

Note: Servlet engine evaluation versions are **not** supported.

Java Runtime Environment

JRE is a prerequisite for installing ArcIMS. JRE 1.3.1 is included on the ArcIMS CD. The ArcIMS setup program will install JRE if it doesn't detect it on your computer. You must have JRE installed to install ArcIMS.

Note: JRE is not needed if JDK 1.3.x is installed on the computer.

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

ArcIMS Metadata Service requirements

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

- ArcGIS 8.2
- ArcSDE 8.2

ArcMap Server requirements

The following software is required to use the ArcMap Server:

- ArcGIS 8.2 is needed create the map documents that can be served in ArcIMS
- ArcObjects runtime files

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.

Metadata Explorer requirements

The following software is required to use the Metadata Explorer:

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

Web browser for ArcIMS Manager

- Microsoft Internet Explorer 5.0, 5.5, or 6.0

Remote Manager requires a onetime download for the Java 2 Plug-in and ArcIMS files. See Installing ArcIMS Remote Manager for more information.

Web browser for ArcIMS Viewers

- HTML Viewer: Microsoft Internet Explorer 5.0, 5.5, or 6.0 and Netscape Communicator 4.61, 4.7, 4.75, or 6.0

The Java Viewers require that a onetime download including the Java 2 Plug-in and ArcIMS Viewer be installed:

- Java Standard Viewer: Microsoft Internet Explorer 5.0, 5.5, or 6.0 and Netscape Communicator 4.61, 4.7, or 4.75
- Java Custom Viewer: Microsoft Internet Explorer 5.0, 5.5, or 6.0 only

Note: See Supported Software Environments at http://arconline.esri.com/arconline/sysreqs.cfm?PID=6 for the latest support information.

ArcIMS Application Server Connectors

ArcIMS Application Server connectors require the following optional software if you will be creating custom viewers using ColdFusion or ActiveX:

ActiveX Connector

- Web Server: Microsoft IIS 4.0 on Windows NT or IIS 5.0 on Windows 2000 and XP
- Development Environment: Microsoft Visual InterDev 6.0, SP3, or Visual Studio 6.0

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

ColdFusion Connector

- ColdFusion Server Professional or Enterprise 4.5.1 or 5.0
- Development Environment: ColdFusion Studio 4.5.1, 4.5.2 or 5.0

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

Java Connector

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

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, 8.1, or 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 site

ArcIMS provides the ability for 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 ArcIMS 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 provides a quick and easy way to learn ArcIMS; the 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 (ArcIMS on one computer)	• Limited computer resources. • Quick and easy way to learn ArcIMS. • Light Web site usage. • Remotely access ArcIMS Manager using Microsoft Internet Explorer Web browser (Windows only).
Multiple ArcIMS Spatial Servers	• Expand configuration. • Add processing capabilities. • Heavy Web site usage.
ArcMap Server	• Enables the use of ArcMap as a map authoring tool for Web applications. ArcMap is the map-authoring tool contained in ArcView, ArcEditor, or ArcInfo.
ArcIMS Manager Applications	• Access ArcIMS functions without needing Internet Explorer Web browser. • Solution for environments where Internet Explorer isn't available and for advanced users.
Application Server Connectors	• Customize Web pages using ColdFusion, ActiveX, or JSP.
Metadata Explorer	• View metadata from an ArcIMS Metadata Service.

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

Step 3: Install ArcIMS

Choose the installation steps for your configuration:

Doing a typical installation

Installing ArcIMS ArcMap Server

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 are installed on the same computer. This configuration is useful for those with limited resources or light server loads. You can access Manager remotely from any computer using your Internet Explorer Web browser; you only need one Manager per ArcIMS Web site. For details on ArcIMS components, see Overview.

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 <CD–ROM>\license. Installation of this software indicates an acceptance of the license agreement. The following files are included in the <CD–ROM>\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

1. Run ArcIMS40Setup.exe.

   Note: If an Uninstall ArcIMS 3.1 screen displays, click Exit, click Exit Setup, and see 'Existing users.'

   Note: If an Uninstall ESRI ArcIMS Viewer screen displays, click Exit and click Exit Setup. Then 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. Click ESRI ArcIMS Viewer and click Add/Remove on Windows NT or Change/Remove on Windows 2000 or Windows XP.

2. At the Welcome screen, click Install Guide to view ArcIMS requirements. Close the window when done. Click Next.

3. At the Select Installation Type screen, click Typical and click Next.

4. At the Destination Folder screen, click Browse to change the Destination Folder, if desired, and click OK. Click Next.
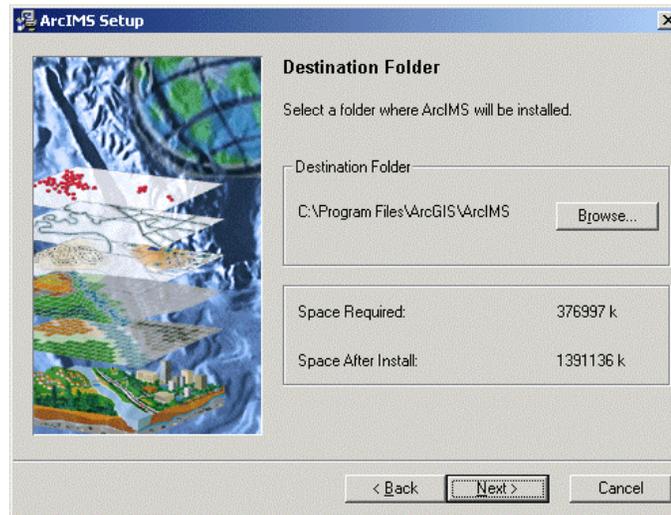
5. If JRE 1.3.1 is not installed or not detected, a Java Runtime Environment Installation screen displays. You must have JRE installed to install and run ArcIMS Manager and the Java Viewers.

   Note: The setup program looks for a specific registry entry to determine if JRE is installed on your computer. JDK may not create the registry entry even though it contains a valid JRE.

   Click Next to begin JRE installation or Browse to an existing JDK location. After JRE installation, click Next to continue ArcIMS installation.

Installing ArcIMS 4.0 on Microsoft Windows

6. At the Host Name and Working Directories screen, choose a protocol and change the Web Server Host Name, if needed.
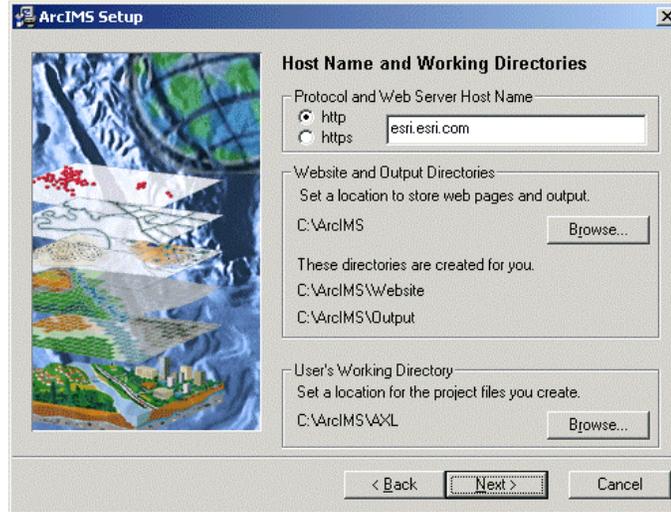
If you are setting up an Internet Web site or a multiple ArcIMS Spatial Server configuration, you must include your domain name, for example, esri.esri.com. If your Web server has a port number other than the default HTTP port (80), then it should have the syntax Webservername:port number, for example, esri.esri.com:81.

7. For the Website and Output Directories, accept the default location to store Web pages and ArcIMS output, or click Browse to change the directory.

    Note: If you choose the default, after installation you must create virtual directories for Output and Website. See Step 4: Configure your Web server for instructions.

    Note: WebLogic users must set the Website and Output directories to the WebLogic documentation root directory, since virtual directories cannot be created for WebLogic: \bea\wlserver6.1\config\mydomain\applications\DefaultWebApp.

    If you browse to the location of your Web server root directory, then you don't need to create virtual directories for Output and Website.

8. For the User's Working Directory, accept the default location or click Browse to navigate to another location. Click Next.

9. At the Application Server Information screen, change the Registry Port and Connector Port, if desired.
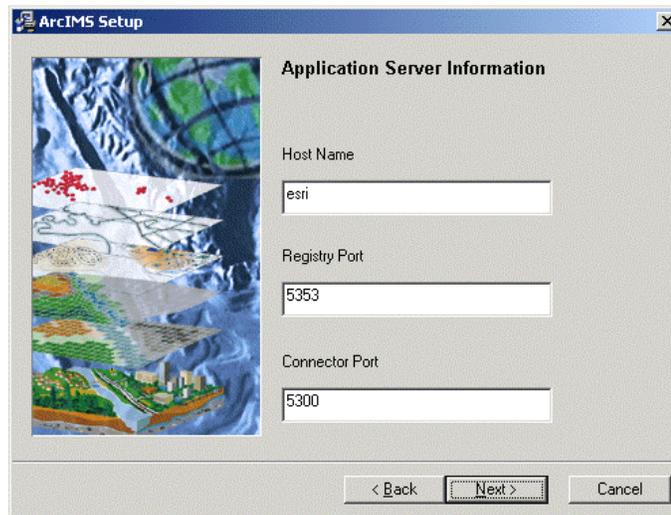
Installing ArcIMS 4.0 on Microsoft Windows

The ArcIMS Spatial Server, Monitor, and Tasker communicate with the ArcIMS Application Server via the Registry port. The Servlet Connector and ArcIMS Application Server communicate via the Connector port. Click Next.

10. At the Servlet Connector Directory screen, Browse to the location of your Servlet directory.
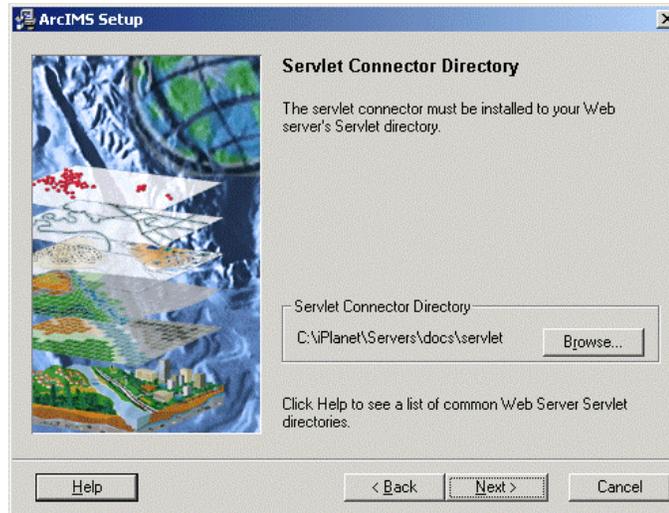
If you don't know this location, click Help for a list of the most common Servlet directory locations.

If you are unsure, use this location: <ArcIMS Installation Directory>\Connectors\Servlet and contact your system administrator. In this case, the Servlet Connector (com directory and associated files) mu st be moved from <ArcIMS Installation Directory>\Connectors\Servlet to the appropriate Web server directory before using ArcIMS. See Step 4: Configuring your Web server for details.

Click Next.

11. At the Windows Services Authorization screen, change your Domain\User Name, if necessary. The User Name and Password must be for the installation account and must have administrator privileges.
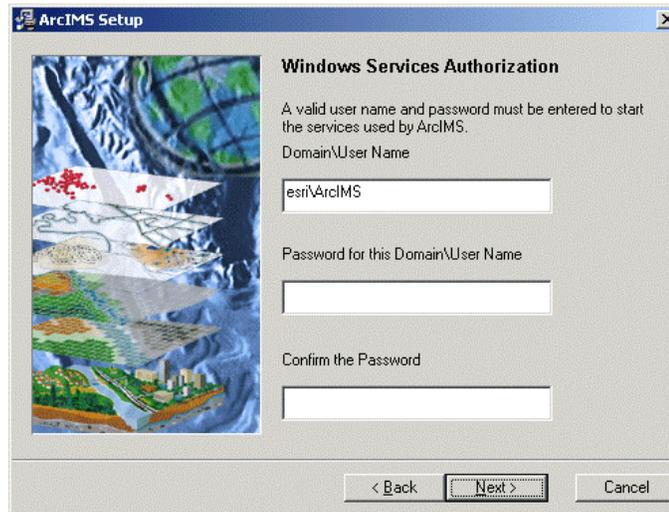
This information gives ArcIMS the ability to start Windows services (ArcIMS Application Server, Monitor, and Tasker) and gives the ArcIMS Spatial Server the necessary privileges to access resources on the local computer and/or network.

12. Type your Password for the selected User Name and type it again to confirm it. Click Next.

13. At the ArcIMS Site Information Converter Screen, click No if you are a new ArcIMS user and click Next.

Installing ArcIMS 4.0 on Microsoft Windows

If you used ArcIMS 3.1 and backed up your EsriMap_Catalog.ser and EsriMap_Cookies.ser files prior to uninstalling ArcIMS 3.1, click Yes, Browse to <ArcIMS 3.1 Installation Directory>\AppServer or the location where you backed up your EsriMapCatalog.ser and EsriMapCookies.ser files, and click Next. If desired, you may run the converter after installation.

14. At the Summary of Installation Information screen, verify that the information displayed is correct. After you complete the ArcIMS installation, this information will be available in a log file located at <ArcIMS Installation Directory>\Common\InstallSummary.log.

Click Next to begin installation.

Note: Microsoft's Java VM 3186 or later is required for the ArcIMS Windows Services. The installation prompts you to update your system if Microsoft Java VM is not detected or if you have an older version.

15. At the Installation Successful screen, click Finish to restart your computer.

Note: You must restart your computer to complete ArcIMS installation.

16. After ArcIMS installation, it is recommended that you update your Services file. This file contains a record of what ports are in use. It is typically located at \WINNT\system32\drivers\etc on Windows NT and Windows 2000 and at \WINDOWS\System32\drivers\etc on Windows XP.

Open the Services file in a text editor, scroll to the place where the port numbers fit in, and add the Connector and Registry port numbers to the file, for example,

```
esri_conn     5300/tcp     #ArcIMS connector port
esri_reg      5353/tcp     #ArcIMS registry port
```

Save the file.

This tells your system administrator which ports are in use, so they will not be duplicated. The port numbers are listed on the ArcIMS Summary screen; this information is written to a summary log file located at <ArcIMS Installation Directory>\Common.

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.

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 available Application Server Connectors are Servlet with WMS, ColdFusion, ActiveX, and Java.

The ArcIMS Application Server Connectors reside on the Web server computer. Each Web server can have more than one Application Server Connector, as long as they are of different types.
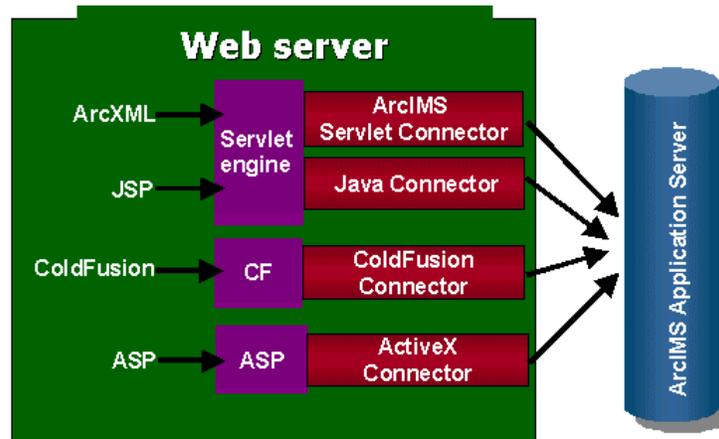
The Servlet with WMS Connector is the standard ArcIMS Connector. The typical installation installs this connector. You need this connector if you plan to administer Web pages or use the Web design tools in ArcIMS (Author and Designer). The Servlet Connector also provides MapService-level user password authentication. WMS works within the OGC WMS 1.0.0 specification.

Use the ColdFusion Connector if you plan to embed ColdFusion applications in your Web pages. The ActiveX Connector permits you to customize the ArcIMS Viewers with embedded ActiveX applications. The Java Connector communicates with the ArcIMS Application Server and a JSP client.

See System requirements for requirements for the ColdFusion and ActiveX Connectors.

Note: These instructions describe only ArcIMS Application Server and custom connector installation. To install the ArcIMS Host (ArcIMS Manager 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 <CD–ROM>\license. Installation of this software indicates an acceptance of the license agreement. The following files are included in the <CD–ROM>\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 Application Server Connectors

On the Web server computer, perform the following steps:

1. Run ArcIMS40Setup.exe.

2. At the Welcome screen, click Next.

3. At the Select Installation Type screen, click Custom and click Next.

4. At the ArcIMS Components and Destination Folder screen, uncheck everything except Application Server Connectors, Samples, and Documentation and change the Destination Folder, if desired.
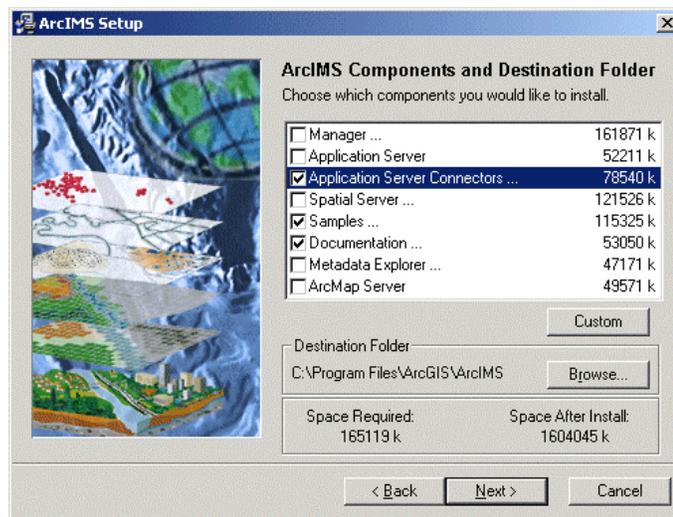
Highlight Samples, click Custom, and check the samples you want installed. Click OK.
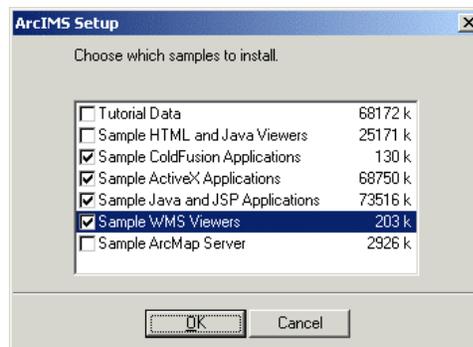
Highlight Documentation, click Custom, and check the documents for the connectors you are installing. Click OK.
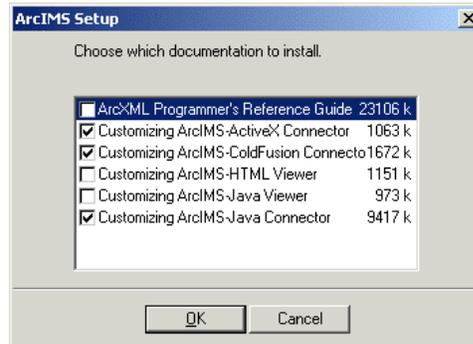
After installation, documentation can be found at Start | Programs | ArcGIS | ArcIMS | Documentation.

5. Highlight Application Server Connectors and click Custom.

6. Check the connector(s) and click OK. Click Next.
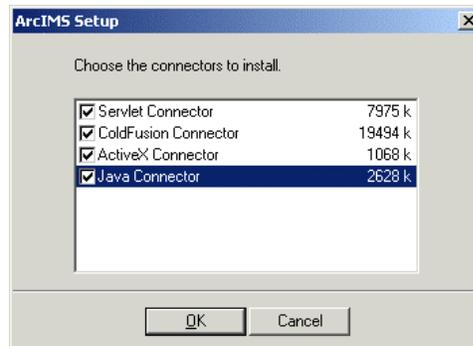
Note: The ArcIMS Servlet Connector is already installed if you previously did the ArcIMS typical installation.

7. At the Application Server Information screen, change the Host Name to that of your Application Server, if necessary.
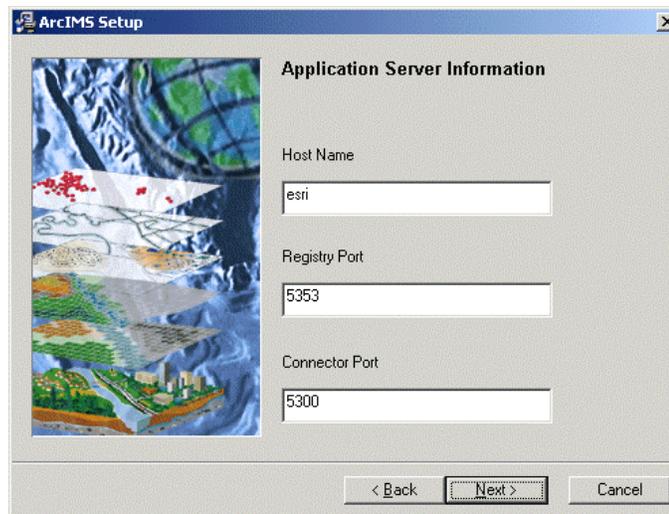
8. If desired, change the Registry Port and Connector Port.

The ArcIMS Spatial Server and ArcIMS Application Server communicate via the Registry port. The Servlet, ColdFusion, ActiveX, and Java Connectors and ArcIMS Application Server communicate via the Connector port.

Click Next.

9. At the Connector Directory screen, follow the instructions for the connector you are installing:

a. At the Servlet Connector Directory screen, Browse to the location of your Servlets directory and click Next.
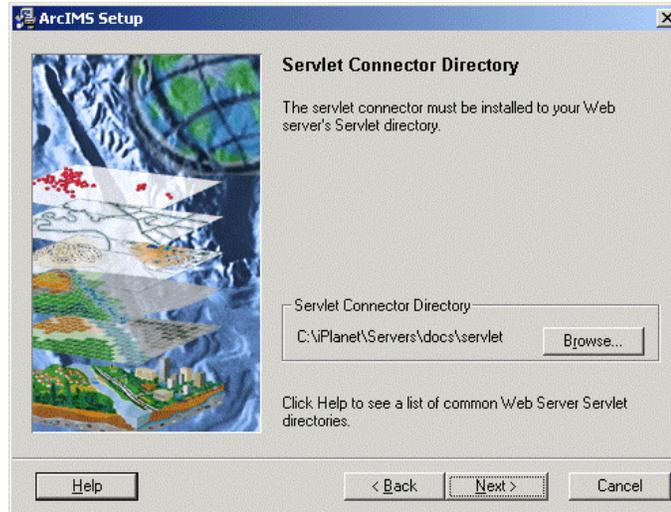
If you don't know this location, click Help for a list of the most common Servlet directory locations.

If you are unsure, use this location: <ArcIMS Installation Directory>\Connectors\Servlet and contact your system administrator. In this case, the Servlet Connector (com directory and associated files) must be moved from <ArcIMS Installation Directory>\Connectors\Servlet to the appropriate Web server directory before using ArcIMS. See Step 4: Configure your Web server for details.

Click Next.

The WMS com and properties files are installed at <ArcIMS Installation Directory>\Connectors\Servlet and in the Servlets directory location that you browsed to at the Servlet Connector Directory screen.

b. At the ColdFusion Connector Directory screen, Browse to your ColdFusion Server directory or accept the default directory if correct. Click Next.
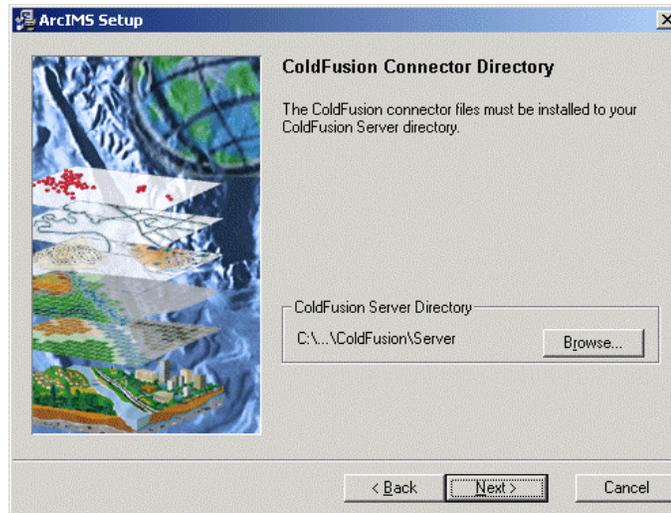
The ArcIMS ColdFusion extension libraries are installed at <ColdFusion_Server_Install_Drive>:\cfusion\bin.

The ArcIMS custom tag files are installed at

<ColdFusion_Server_Install_Drive>:\cfusion\CustomTags.

c. The ActiveX Connector doesn't have a special install screen.

The ArcIMS ActiveX libraries are installed at <ArcIMS Installation Directory>\Connectors\ActiveX.

d. The Java Connector doesn't have a special install screen.

The jar files required to use the Java Connector are installed at <ArcIMS Installation Directory>\Connectors\Java_Connector. They are arcims_jconnect.jar, jcert.jar, jnet.jar, and jsse.jar.

10. At the Windows Services Authorization screen, change your Domain\User Name, if necessary. The User Name and Password must be for the installation account and must have administrator privileges.
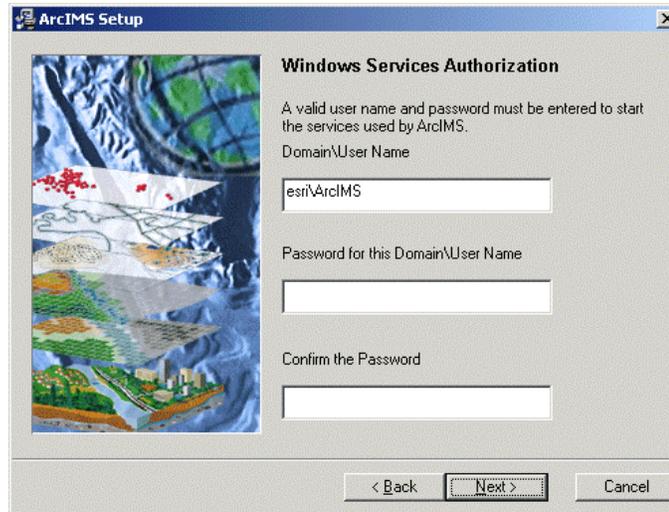
This information gives ArcIMS the ability to start Windows Services (ArcIMS Application Server and Tasker) and gives the ArcIMS Spatial Server the necessary privileges to access resources on the local computer and/or network.

11. Type your Password for the selected User Name and type it again to confirm it. Click Next.

12. At the ArcIMS Site Information Converter Screen, click No if you are a new ArcIMS user and click Next.

If you used ArcIMS 3.1 and backed up your EsriMap_Catalog.ser and EsriMap_Cookies.ser files prior to uninstalling ArcIMS 3.1, click Yes, Browse to <ArcIMS 3.1 Installation Directory>\AppServer or the location where you backed up your EsriMapCatalog.ser and EsriMapCookies.ser files, and click Next. If desired, you may run the converter after installation.

13. At the Summary of Installation Information screen, verify that the information displayed is correct. After you complete the ArcIMS installation, this information will be available in a log file located at <ArcIMS Installation Directory>\Common\InstallSummary.log.

    Click Next to begin installation.

14. At the Installation Successful screen, click Finish to restart your computer.

15. After ArcIMS installation, it is recommended that you update your Services file. This file contains a record of what ports are in use. It is typically located at \WINNT\system32\drivers\etc on Windows NT and Windows 2000, and at \WINDOWS\System32\drivers\etc on Windows XP.

    Open the Services file in a text editor, scroll to the place where the port numbers fit in, and add the Connector and Registry port numbers to the file, for example,

```
esri_conn     5300/tcp     #ArcIMS connector port
esri_reg      5353/tcp     #ArcIMS registry port
```

    Save the file.

    This tells your system administrator which ports are in use, so they will not be duplicated. The port numbers are listed on the ArcIMS Summary screen; this information is written to a summary log file located at <ArcIMS Installation Directory>\Common.

Configure the connector you installed:

ArcIMS ActiveX Connector

ArcIMS ColdFusion Connector

ArcIMS Java Connector

ArcIMS Servlet Connector

WMS

ArcIMS ActiveX Connector

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

ArcIMS ColdFusion Connector

After installing the ArcIMS ColdFusion Connector, you must configure ColdFusion Server to work with ArcIMS. To use ArcIMS with ColdFusion, you need ColdFusion Server Professional or Enterprise, and you need ColdFusion Studio to create custom Web pages.

Installing ArcIMS 4.0 on Microsoft Windows

The ArcIMS ColdFusion extension DLLs are installed at <ColdFusion Server Directory>\bin.

These files are aimsutil.dll, cfx_esrimap.dll, emaplink.dll, xerces-c_1_3.dll, icuuc.dll, icui18n.dll, and icudata.dll.

The ArcIMS custom element files are installed at <ColdFusion Server Directory>\CustomTags.

These files are ai_QueryForm.cfm, ArcIMS.cfm, ArcIMS_FilterSQL.cfm, ArcIMS_Layer.cfm, ArcIMS_MultiPoint.cfm, ArcIMS_Polygon.cfm, ArcIMS_Polygon_Query.cfm, ArcIMS_PolyLine.cfm, ArcIMS_SQL.cfm, and ArcIMS_Text.cfm.

If the custom element files listed above are not in the location indicated, you can copy them from the ArcIMS ColdFusion Connector directory located at <ArcIMS Installation Directory>\Connectors\ColdFusion under the CustomTags directory. Also copy the server bin files.

Setting up the ColdFusion Server to recognize the ArcIMS ColdFusion Connector

1. Open the ColdFusion Server administrator page. On the navigation bar, find extensions and click CFX_Tags. The tag should read CFX_, and Type is C++. Click Add.

2. Type the following as the Tag Name:

   CFX_esrimap

   For the Server library (DLL), click Browse Server to navigate to <ColdFusion Server Directory>\bin\cfx_esrimap.dll.

3. Click OK, then click Add.

4. Close the ColdFusion Server administrator page.

Setting up the design time control in ColdFusion Studio

The design time control is a wizard that allows users to supply the parameters required for the elements and then generates the element code in the page. To add the control to the ColdFusion Studio toolbar:

1. If you had ColdFusion Studio installed prior to ArcIMS installation, CF_ARCIMS.vtm, CF_Arcims_layer.vtm, Point.vtm, and Text.vtm are at:

   <ColdFusion Studio Directory>\Extensions\TagDefs\VTML.

   The images used by the ArcIMS Custom Toolbar: aimslayer.bmp, aimsline.bmp, aimslogo.bmp, aimspnt.bmp, aimspoly.bmp, and aimssql.bmp are at:

   <ColdFusion Studio Install directory>\Wizards\Images.

   The ArcIMS Custom toolbar, ArcIMS.tbr, is at:

   <ColdFusion Studio Install directory>\UserData\Toolbars.

   If you did not have ColdFusion Studio installed prior to installing ArcIMS, then copy the files from the following locations to the locations indicated above:

   VTML files: <ArcIMS Installation Directory>\Connectors\ ColdFusion\Studio

   Image files: <ArcIMS Installation Directory>\Connectors\ ColdFusion\images

   Toolbar files: <ArcIMS Installation Directory>\Connectors\ ColdFusion\userdata\toolbars

2. Open ColdFusion Studio to edit Tag Insight and Tag Completion.

   a. Click the Options menu and click Settings. Click the Tag Help tab. Check Tag Insight and click Settings.

   b. Click Add, and type the following:

      cf_arcims

      Click OK. Click OK to close Tag Insight settings.

   c. Check Tag Completion and click Settings.

   d. Click Add, and type the following:

```
cf_arcims
```

Click OK. Click OK to close the Tag Completion editor. Click OK to close the Settings window.

3. To create the ArcIMS toolbar, click the Options menu and click Customize. In the Toolbars list, check ArcIMS. Click Close.

4. Dock the ArcIMS tool to the ColdFusion tag toolbar.

5. Open <ColdFusion Studio Directory>\Extensions\ MarkUpTags.vtm in a text editor. After the line <CAT CAPTION='Custom Tags,' add the following:

```
<CAT CAPTION="ESRI Custom Tags"  ICON="Images/Custom.bmp">
 <E CAPTION='CF_ARCIMS'  VALUE='<CF_ARCIMS action="" servicename=""
servername="" serverport=""'
HELPFILE='Docs/CFMLTags/ArcIMSColdFusion.htm'>
 </CAT>
```

Save the file.

6. To test the control, click the CF_ArcIMS button. A dialog opens to set all the tag parameters. Click Apply to see the tag code created in the page. Close ColdFusion Studio.

Testing the design time control in ColdFusion Studio

After installing the connector, ColdFusion Studio should contain a new toolbar for ArcIMS.

The toolbar contains six buttons for working with the new ArcIMS elements: <CF_ARCIMS>, <CF_ARCIMS_LAYER>, <CF_ARCIMS_SQL>, <CF_ARCIMS_MULTIPOINT>, <CF_ARCIMS_POLYLINE>, and <CF_ARCIMS_POLYGON>.
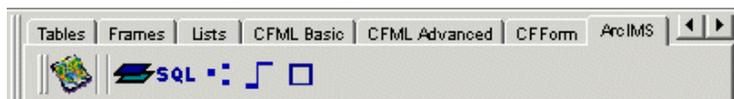
When you choose the <CF_ARCIMS> tool, a dialog opens presenting all the element attributes.

The tabs across the top represent the different values of the ACTION attribute of the <CF_ARCIMS> element. For example, the element code for the Generatemap action might look like this.

```
<CF_ARCIMS ACTION="GENERATEMAP"
 SERVERNAME="bear"
 SERVERPORT="5300"
 SERVICENAME="SanFrancisco"
 ENVELOPE="-122.46,37.76,-122.42,37.79"
 IMAGESIZE="400,400"
 LAYERLISTORDER="true"
```

```
    GENERATEHTML="true">
    </CF_ARCIMS>
```

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

ArcIMS Java Connector

For information on using the 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 iPlanet

Configuring JRun for IIS

Configuring Oracle Application Server

Configuring ServletExec for Apache

Configuring ServletExec for IIS

Configuring Tomcat for Apache

Configuring Tomcat for IIS

Configuring WebLogic

Configuring WebSphere

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

WMS

To configure ArcIMS with WMS, perform the following:

1. In a text editor, open the WMSEsrimap_prop file in the location of your Servlets directory where the Servlet Connector is installed (see 'Installing ArcIMS custom Application Server Connectors,' Step 9a).

   For example:

   Apache with ServletExec: \Program Files\New Atlanta\ServletExec AS\se-<instance-name>\Servlets

   Apache with Tomcat: \<Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes

   IBM HTTP Server with WebSphere:
   \WebSphere\AppServer\installedApps\servlet.ear\arcimsservletconnector.war\WEB-INF\classes

   iPlanet: \iPlanet\Servers\docs\servlet

   Microsoft IIS with JRun: \Program Files\Allaire\Jrun\servlets

   Microsoft IIS with ServletExec: \Program Files\New Atlanta\ServletExec ISAPI\Servlets

   Microsoft IIS with Tomcat: \<Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes

   Oracle Application Server: \Oracle\isuites\Apache\Jserv\servlets

   WebLogic: \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=c:/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=c:/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. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

12. Stop and Start your Web server.

13. 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 ArcMap Server

In this custom scenario, you install ArcIMS ArcMap Server as an extension for ArcIMS Spatial Server.

The ArcIMS ArcMap Server component requires an ArcGIS license manager. An ArcIMS ArcMap Server keycode is used to "turn on" the ArcIMS ArcMap Server functionality; license manager controls this. You purchase the right to use the ArcIMS ArcMap Server on your licensed server/CPU configuration.

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

Note: ArcIMS ArcMap Server cannot reside on the same computer as ArcGIS.

When you choose the ArcIMS ArcMap Server component during a custom ArcIMS installation, the ArcIMS setup completes and a dialog displays providing license manager options. You can install the license manager locally during the installation or use an existing ArcGIS 8.x license manager on your network. A network license manager can run on Microsoft Windows or UNIX and must be an 8.x license manager.

During license manager installation, you are prompted for the location of your license file. This refers to the license file you received from ESRI customer service.

Once you complete license manager installation, you can supply the license manager information to those users installing ArcIMS ArcMap Server. They can browse to this network license manager when prompted for the license manager computer during their installation.

Note: ArcIMS and ArcGIS licenses can be served from either a Windows or UNIX license manager. For example, a Windows installation of ArcIMS ArcMap Server can obtain a license from either a Windows or UNIX 8.x license manager. For more information on sharing licenses across platforms, see the License Manager's Reference Guide, LicenseManagerGuide.htm, available in the documentation folder on the ArcIMS CD. After installing the license manager, this guide is also available at Start | Programs | ArcGIS | License Manager | License Manager Reference Guide or in the installation folder, typically \Program Files\ESRI\License\Documentation\LicenseManagerGuide.htm.

Obtaining a license file

The license manager can run either on a Windows or UNIX server regardless of where you install the software.

If you intend to install the license manager on a Windows server you need a SentinelPro hardware key on that server. You only need one hardware key per license manager and you only need one license manager per network. You can use your existing hardware key and license manager if you have one.

In the United States, request new keycodes on the Internet at www.myesri.com. Outside the United States, contact your local ESRI distributor. For the number of your distributor, call ESRI at 909-793-2853, ext. 1-1235 or visit our Web site at www.esri.com. Click Outside the United States.

Note: The license file is provided to you as an attachment to an e-mail. Save the attachment as a text (.txt) file on your computer without opening it. Opening the attachment with Microsoft Word may corrupt your license file and adversely affect the license manager installation and operation.

About the license manager

The license manager allows you to install ArcIMS ArcMap Server on as many computers as you want. The same license manager can be used for other ESRI software products such as ArcInfo Workstation and ArcGIS Desktop. The license manager can be installed on a computer where ArcIMS will be run or on a computer where only the license manager will be installed. Other ArcIMS, ArcSDE, or ArcGIS installations can point to that license manager during their installation process.

License manager requirements

FLEXlm® communicates through TCP/IP, which must be installed and functioning properly on any Windows license server. TCP/IP requires either a network card along with its drivers or the MS Loopback Adapter on your Windows workstation.

Checking for TCP/IP

Microsoft Windows NT

Choose Start | Settings | Control Panel, double-click Network, and choose the Protocols tab. There should be a listing for TCP/IP.

Microsoft Windows 2000

Choose Start | Settings | Control Panel, double-click Network and Dial-up connections, double-click Local Area Connection, and click Properties. There should be a listing for TCP/IP.

Microsoft Windows XP

Choose Start | Control Panel, double-click Network and Internet Connections, double-click Network Connections, double-click Local Area Connection, and click Properties. There should be a listing for TCP/IP.

Checking for a network card or MS Loopback adapter

Microsoft Windows NT

Choose Start | Settings | Control Panel, double-click Network, and choose the Adapters tab.

Installing ArcIMS 4.0 on Microsoft Windows

Microsoft Windows 2000

Choose Start | Settings | Control Panel, double-click System, choose the Hardware tab, click the Device Manager button, and expand Network Adapters.

Microsoft Windows XP

Choose Start | Control Panel, double-click Performance and Maintenance, double-click System, choose the Hardware tab, click Device Manager, and exp and Network Adapters.

Installing a network card or MS Loopback Adapter

Microsoft Windows NT

To install either component, choose Start | Settings | Control Panel, and double-click Network.

Microsoft Windows 2000

To install either component, choose Start | Settings | Control Panel, double-click Network and Dial-up Connections, and click the Add Network Components link on the left side of the display.

Microsoft Windows XP

To install either component, choose Start | Control Panel, double-click Network and Internet Connections, and click the connection to which you want to add a network component. Under network tasks, click Change Settings of this Connection.

For details, refer to the Windows operating system installation instructions provided by Microsoft.

For more information about using the license manager, see the License Manager Reference Guide, LicenseManagerGuide.htm, available in the documentation folder of the ArcIMS CD. After license manager installation, this guide is also available at Start | Progra ms | ArcGIS | License Manager | License Manager Reference Guide or in the installation folder, for example \Program Files\ESRI\License\Documentation\LicenseManagerGuide.htm.

Installing ArcIMS ArcMap Server

On the computer where you wish to install ArcIMS A rcMap Server, perform the following steps:

1. Run ArcIMS40Setup.exe.
2. At the Welcome screen, click Next.
3. At the Select Installation Type screen, click Custom and click Next.
4. At the ArcIMS Components and Destination Folder screen, select Spatial Server, Sample s, and ArcMap Server and change the Destination Folder, if desired.
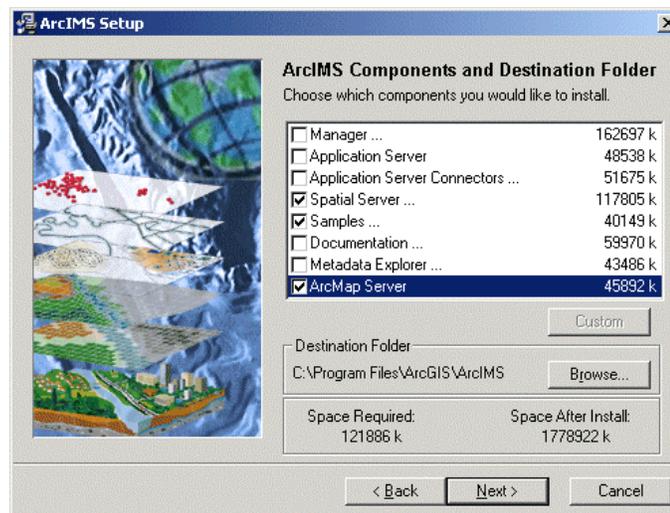
Installing ArcIMS 4.0 on Microsoft Windows

Highlight Samples, click Custom, and check Sample ArcMap Server.
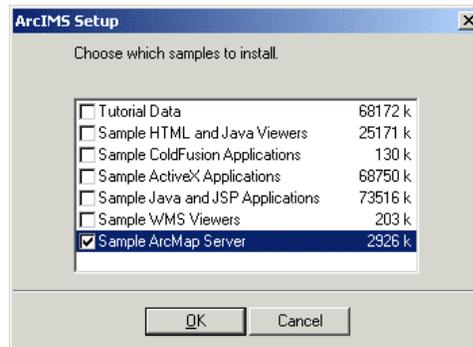
Click OK. Click Next.

5. At the Application Server Information screen, change the Host Name to your ArcIMS Host or the computer where your Application Server is installed.
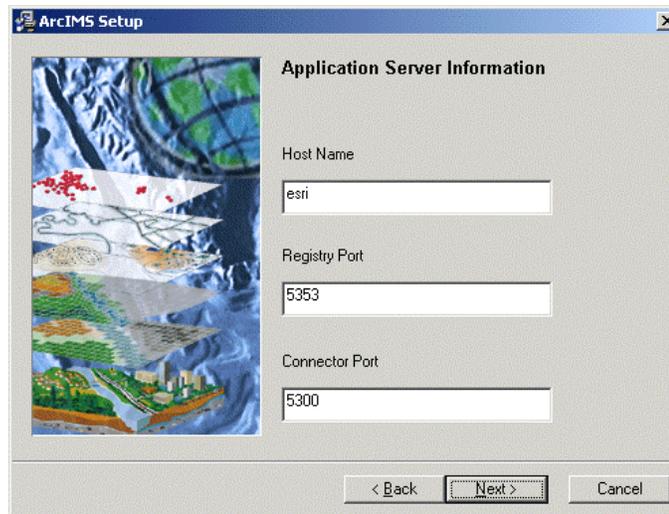
The information on this screen enables the ArcIMS Spatial Server to communicate with the ArcIMS Application Server.

6. If necessary, change the Registry Port and Connector Port.

The ArcIMS Spatial Server, Monitor, and Tasker communicate with the ArcIMS Application Server via the Registry port. The Servlet, ColdFusion, and ActiveX Connectors and ArcIMS Application Server communicate via the Connector port.

7. Click Next.

Installing ArcIMS 4.0 on Microsoft Windows

8. At the Windows Services Authorization screen, change your Domain\User Name, if necessary. The User Name and Password must be for the installation account and must have administrator privileges.

9. Type the password for the selected User Name and type it again to confirm it.

    This information gives ArcIMS the ability to start ArcIMS Monitor as a Windows Service and gives the ArcIMS Spatial Server the necessary privileges to access resources on the local computer and/or network. Click Next.

10. At the ArcIMS Site Information Converter Screen, click No if you are a new ArcIMS user and click Next.

    If you used ArcIMS 3.1 and backed up your EsriMap_Catalog.ser and EsriMap_Cookies.ser files prior to uninstalling ArcIMS 3.1, click Yes, Browse to <ArcIMS 3.1 Installation Directory>\AppServer or the location where you backed up your EsriMapCatalog.ser and EsriMapCookies.ser files, and click Next. If desired, you may run the converter after installation.

11. At the Summary of Installation Information screen, verify that the information displayed is correct.

    After you complete ArcMap Server installation, this information will be available in a log file located at <ArcIMS Installation Directory>\Common\InstallSummary.log.

12. When the License Manager Setup displays, follow the instructions on the screen. If a license manager is already installed, browse to the license file you received from customer service. See Start | Programs | ArcGIS | License Manager | License Manager Reference Guide or navigate to \Program Files\ESRI\License\Documentation\LicenseManagerGuide.htm for details. Reboot your computer

when prompted.

ArcIMS ArcMap Server is installed at <ArcIMS Installation Directory>\Server\locales\ArcMapServer.

For information on using ArcIMS ArcMap Server see *Using ArcIMS* or ArcIMS Help.

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

Configuring your computer

Windows NT and Windows 2000

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

2. Stop ArcIMS Tasker, ArcIMS Monitor, and ArcIM S Application Server in that order.

3. Open Task Manager and confirm that AppLockMgr does not appear in the list. If it does, end the process.

4. Choose Start | Run and type: `dcomcnfg.exe`

5. Locate the AppLockMgr application in the list of DCOM enabled applications. It will be listed as esriCore.esriAppLockMgr. Right-click it and click Properties.

6. Click the Identity tab.

7. Select the This User option.

8. Type the user and password.

9. Click OK and close the DCOM configuration dialog.

10. Start ArcIMS Application Server, ArcIMS Monitor, and ArcIMS Tasker in that order and close the Services window.

Windows XP

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

2. Stop ArcIMS Tasker, ArcIMS Monitor, and ArcIMS Application Server in that order.

3. Open Task Manager and confirm that AppLockMgr does not appear in the list. If it does, end the process.

4. Choose Start | Run and type: `dcomcnfg.exe` This will start the Component Services console.

5. Select the appropriate computer in the component services node on the left.

6. Expand the DCOM Config node.

7. Locate the AppLockMgr application in the list. It will be listed as esriCore.esriAppLockMgr. Right-click it and click Properties.

8. Click the Identity tab.

9. Select the This User option.

10. Type the user and password.

11. Click OK and close the DCOM configuration dialog.

12. Start ArcIMS Application Server, ArcIMS Monitor, and ArcIMS Tasker in that order and close the Services window.

Installing ArcIMS Manager Applications

In this custom scenario, ArcIMS Manager Applications—Author, Designer, and Administrator—can be installed on any computer on your network. ArcIMS Manager Applications don't require a Web browser.
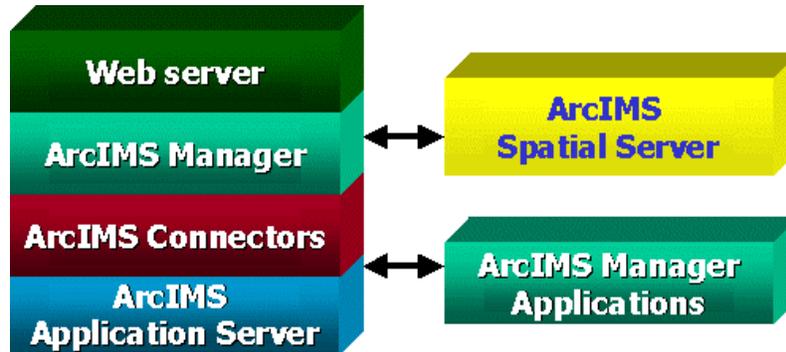
ArcIMS Manager is installed with the typical installation; you only need one ArcIMS Manager installation per site.

For more information on ArcIMS Manager and ArcIMS Manager Applications, see Overview.

Note: These instructions describe only ArcIMS Manager Applications 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 <CD–ROM>\license. Installation of this software indicates an acceptance of the license agreement. The following files are included in the <CD–ROM>\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. Run ArcIMS40Setup.exe.

2. At the Welcome screen, click Next.

3. At the Select Installation Type screen, click Custom and click Next.

4. At the ArcIMS Components and Destination Folder screen, uncheck all items except Manager and click Browse to change the Destination Folder, if desired.
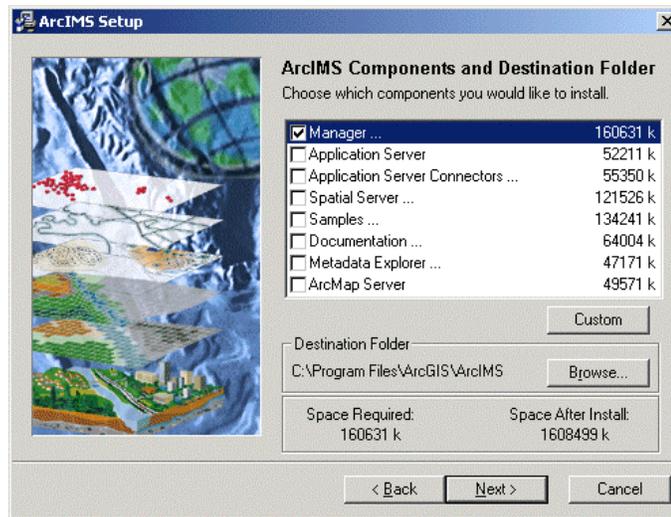
5. With Manager highlighted, click Custom.
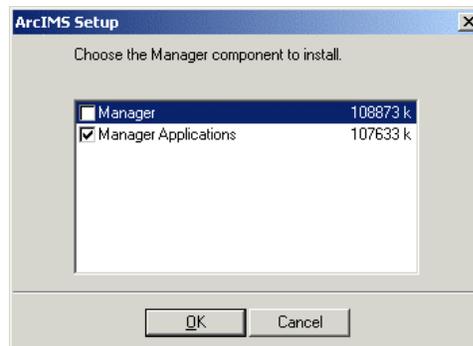
6. Check Manager Applications and click OK. Uncheck Application Server and click Next.

7. If JRE 1.3.1 is not installed or not detected, a Java Runtime Environment Installation screen displays. You must have JRE installed to install and run ArcIMS Manager Applications.

    Note: The setup program looks for a specific registry entry to determine if JRE is installed on your computer. JDK may not create the registry entry, even though it contains a valid JRE.

    Click OK to begin JRE installation or Browse to an existing JDK location. After JRE installation, click Next to continue ArcIMS installation.

8. At the Host Name and Working Directories screen, choose a protocol and change your Web Server Host Name, if needed.
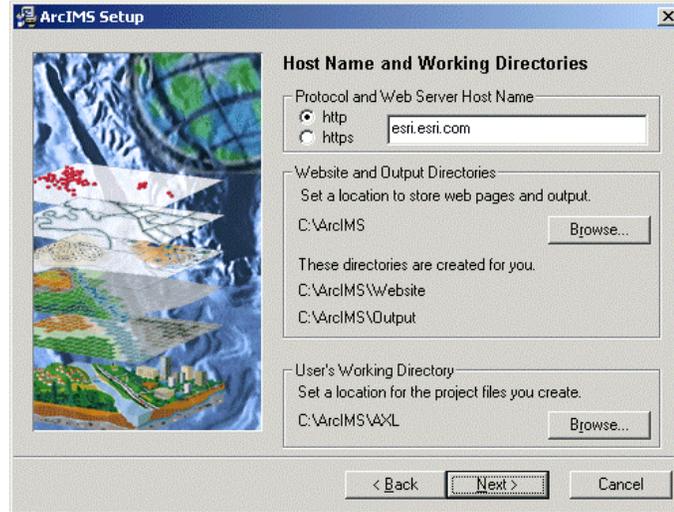
If you are setting up an Internet Web site or a multiple ArcIMS Spatial Server configuration, you must include your domain name, for example, esri.esri.com. If your Web server has a port number other than the default HTTP port (80), then it should have the syntax Webservername:port number, for example, esri.esri.com:81.

9. For the Website and Output Directories, accept the default location to store Web pages and ArcIMS output or Browse to change the directory.

    Note: If you choose the default, after installation you must create virtual directories for Output and Website for each individual installation of ArcIMS Manager Applications. See Step 4: Configure your Web server for details.

    Note: WebLogic users must set the Website and Output directories to the WebLogic documentation root directory, since virtual directories cannot be created for WebLogic: \bea\wlserver6.1\config\mydomain\applications\DefaultWebApp.

    If you browse to the location of your Web server root directory, then you don't need to create virtual directories for Output and Website. In this case, you must have the Web server's root directory mapped as a network drive.

10. For the User's Working Directory, accept the default location or Browse to another location. Click Next.

11. At the Summary of Installation Information screen, verify that the information displayed is correct. After you complete the ArcIMS installation, this information will be available in a log file located at <ArcIMS Installation Directory>\Common\InstallSummary.log.
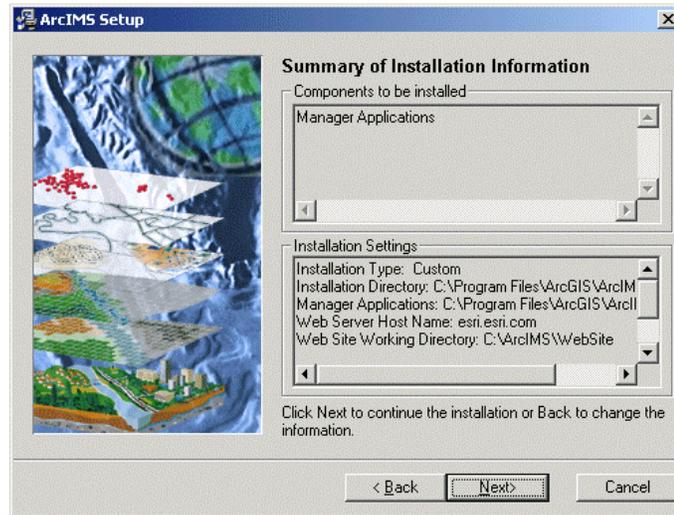
Click Next to begin installation.

12. At the Installation Successful screen, click Finish to restart your computer.

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. If you plan to administer only ArcIMS Services, you need to:

   1. Install ArcIMS using a typical installation.

   2. Configure ArcIMS Service Administrator for your Web server.

- The ArcIMS Service Administrator can also be used to administer ArcSDE. To administer ArcSDE on Windows, you need to do the following:

   1. Install ArcIMS using a typical installation.

   2. Configure ArcIMS Service Administrator for your Web server.

   3. Install the optional ArcSDE Administrator component on the ArcIMS Spatial Server.

Installing multiple ArcIMS Spatial Servers

In this custom scenario, several computers run ArcIMS Spatial Server and communicate with the ArcIMS Host. One computer, the ArcIMS Host, runs Web server software with ArcIMS Manager, ArcIMS Application Server, and Application Server Connectors while, on other computers, ArcIMS Spatial Server runs. All ArcIMS Spatial Servers must point back to the ArcIMS Host, and the ArcIMS Host must be able to communicate with the ArcIMS Spatial Servers. ArcIMS Service Administrator is also installed with an ArcIMS Spatial Server.
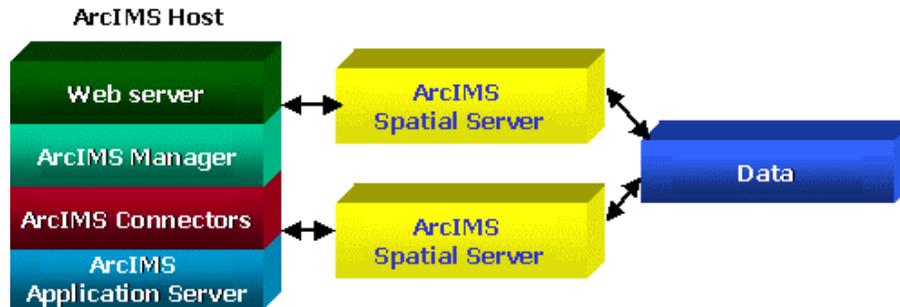
Note: These instructions describe only ArcIMS Spatial Server installation. To install the ArcIMS Host (ArcIMS Manager, ArcIMS Application Server, and Application Server Connectors), refer to Doing a typical installation.

Before you begin, you should identify the following locations:

- **Output directory for Image Services:** You need to share the output directory so the ArcIMS Spatial Servers can access it.

- **Data directory:** Each ArcIMS Spatial Server must have access to all data. Thus you should put data on a common drive (if it is not stored in ArcSDE).

- **AXL directory:** You need to edit your map configuration files and ArcMap documents to reflect the common data drive.

You will need this information to complete your distributed configuration. Additionally, your Web server must be configured for ArcIMS, and the necessary virtual directories must be created.

There are two parts to setting up a multiple ArcIMS Spatial Server configuration:

1. Setting up the ArcIMS Host computer

2. Installing ArcIMS Spatial Servers on additional computers

Setting up the ArcIMS Host computer

1. Share the output directory so the ArcIMS Spatial Servers can access it. Go to Start | Programs | Windows NT Explorer on Windows NT or Start | Programs | Accessories | Windows Explorer on Windows 2000, navigate to your output directory, right-click the directory, click Sharing, click Shared As, and click OK to share the directory.

2. Edit the aimsdefaults.properties file. This file stores the ArcIMS configuration parameters and is used by ArcIMS Administrator. You can edit this file by opening the file directly in a text editor or through ArcIMS Administrator.

   - To edit the aimsdefaults.properties file using a text editor:

     Find the aimsdefaults.properties file and open it in a text editor. If necessary, edit the following lines to reflect the universal naming convention (UNC) pathname:

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

     ```
     ImagePath=//<ArcIMS Host>.<domain>.com/output
     ```

   - To edit the aimsdefaults.properties file using ArcIMS Administrator:

     Open ArcIMS Administrator, click View, and click Site Properties.

In the Site Properties dialog, click the Server Output tab and edit the output Directory Location. Use UNC pathname to specify the output directory.

Click OK to save the modified properties in the aimsdefaults.properties file.

3. Edit your Web server Startup parameters:

a. Change the Web server service Startup parameters. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab. Highlight your Web server, and click Startup. Click This Account and choose a network account. You cannot use a system account.

b. Stop and start your Web server.

Note: If you are using Microsoft IIS Web server, perform the following instead of Steps 3a and 3b in the preceding instructions:

For IIS 4.0, go to Start | Programs | Windows NT Option Pack | Microsoft Internet Information Server | Internet Service Manager. For IIS 5.0, go to Start | Settings | Control Panel | Administrative Tools | Internet Services Manager. Under your localhost name, find Default Web site. Click to highlight it. Click Action in the toolbar. From the dropdown menu, point to New and click Virtual Directory. Create a virtual directory for your output directory to <common output drive>:\output, for example, O:\output. When the wizard asks for the user name/password for accessing the networked drive, choose a networked account that has access to that drive, \\<Web server computer>\<sharename>\<directory>.

Note: IIS requires that users logged in as remote network users access the Web server from network access rights set in User Manager. This login method enables the user to access the server from a Web browser but doesn't give the user the right to log in locally. Users logged in with this method cannot access remote authenticated resources such as SQL Server using integrated security.

4. Share the data directory so the ArcIMS Spatial Servers can access the data referenced in the map configuration files. When determining the location to store your data, each ArcIMS Spatial Server must be able to access all data displayed in all ArcIMS Services; thus it is recommended that you locate your data in a common data directory—if it is not already stored in ArcSDE. This directory must be accessible from all Spatial Servers.

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

To share the data directory, go to Start | Programs | Windows NT Explorer on Windows NT or Start | Programs | Accessories | Windows Explorer on Windows 2000, navigate to your data directory, right-click the directory, click Sharing, click Shared As, and click OK to share the directory.

5. Edit your map configuration files. The map configuration file stores the location of the data layers. This file must be edited to reflect the common data drive. Open the file in a text editor and edit the directory in the following lines to reflect the UNC pathname:

```
</PROPERTIES>

    <WORKSPACES>

        <SHAPEWORKSPACE name="shp_ws-8" directory="\\<ArcIMS
  Host>.<domain>.com\GISData"\>

    </WORKSPACES>
```

For ArcMap Server, use UNC paths to data in the ArcMap document.

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 <CD–ROM>\license. Installation of this software indicates an acceptance of the license agreement. The following files are included in the

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<CD– ROM>\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 Servers on additional computers

1. Run ArcIMS40Setup.exe.

2. At the Welcome screen, click Next.

3. At the Select Installation Type screen, click Custom and click Next.

4. At the ArcIMS Components and Destination Folder screen, uncheck all boxes except Spatial Server.

5. Browse to change the Destination Folder, if desired. Click Next.

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6. At the Application Server Information screen, change the Host Name to your ArcIMS Host or the computer where your Application Server is installed.

The information on this screen enables the ArcIMS Spatial Server to communicate with the ArcIMS Application Server.

7. If necessary, change the Registry Port and Connector Port.

The ArcIMS Spatial Server, Monitor, and Tasker communicate with the ArcIMS Application Server via the Registry port. The Servlet, ColdFusion, and ActiveX Connectors and ArcIMS Application Server communicate via the Connector port.

Click Next.

8. At the Windows Services Authorization screen, change your Domain\User Name, if necessary. The User Name and Password must be for the installation account and must have administrator privileges.

9. Type the password for the selected User Name and type it again to confirm it.

This information gives ArcIMS the ability to start ArcIMS Monitor as a Windows Service and gives the ArcIMS Spatial Server the necessary privileges to access resources on the local computer and/or network. Click Next.

10. At the ArcIMS Site Information Converter Screen, click No if you are a new ArcIMS user and click Next.

If you used ArcIMS 3.1 and backed up your EsriMap_Catalog.ser and EsriMap_Cookies.ser files prior

to uninstalling ArcIMS 3.1, click Yes, Browse to <ArcIMS 3.1 Installation Directory>\AppServer or the location where you backed up your EsriMapCatalog.ser and EsriMapCookies.ser files, and click Next. If desired, you may run the converter after installation.

11. At the Summary of Installation Information screen, verify that the information displayed is correct. After you complete the ArcIMS installation, this information will be available in a log file located at <ArcIMS Installation Directory>\Common\InstallSummary.log.

Click Next to begin installation.

Note: Microsoft's Java VM 3186 or later is required for the ArcIMS Monitor Windows Service. The installation updates your system if Java VM is not detected or if you have an older version.

12. At the Installation Successful screen, click Finish to restart your computer.

Repeat these steps to install additional ArcIMS Spatial Servers.

Note: When you install only Spatial Server, an entry is not added to your Start menu. To make sure Spatial Server is installed, go to \Program Files\ArcGIS\ArcIMS or your Installation Directory location and check for a Server folder.

There is no need to configure your Web server or configure ArcIMS. Those steps are not necessary when installing only ArcIMS Spatial Server.

After installing 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 ArcSDE Administrator

In this custom scenario, you install ArcIMS Spatial Server, ArcIMS Service Administrator, and ArcSDE Administrator on your ArcSDE computer. One computer, the ArcIMS Host, runs Web server software with ArcIMS Manager, ArcIMS Application Server, and Application Server Connectors while, on other computers, ArcIMS Spatial Server runs. All Spatial Servers must point back to the ArcIMS Host, and the ArcIMS Host must be able to communicate with the Spatial Servers.
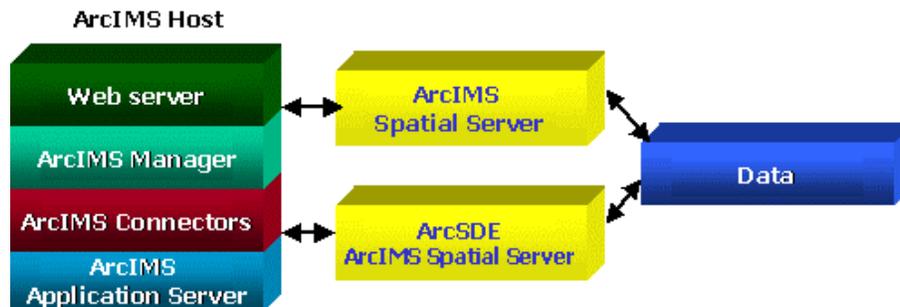
Note: These instructions describe only ArcIMS Spatial Server and ArcSDE Administrator installation. To install the ArcIMS Host (ArcIMS Manager, ArcIMS Application Server, and Application Server Connectors), refer to Doing a typical installation.

Before you begin, you should identify the following locations:

- **Output directory for Image Services:** You need to share the output directory so the ArcIMS Spatial Servers can access it.

- **Data directory:** Each ArcIMS Spatial Server must have access to all data. Thus you should put data on a common drive (if it is not stored in ArcSDE).

- **ArcIMS working (AXL) directory:** You need to edit your map configuration files and ArcMap documents to reflect the common data drive.

You will need this information to complete your distributed configuration. Additionally, your Web server must be configured for ArcIMS, and the necessary virtual directories must be created.

There are two parts to setting up a multiple ArcIMS Spatial Server configuration:

1. Setting up the ArcIMS Host computer
2. Installing ArcIMS Spatial Servers on additional computers

Setting up the ArcIMS Host computer

1. Share the output directory so the ArcIMS Spatial Servers can access it. Go to Start | Programs | Windows NT Explorer on Windows NT or Start | Programs | Accessories | Windows Explorer on Windows 2000, navigate to your output directory, right-click the directory, click Sharing, click Shared As, and click OK to share the directory.

2. Edit the aimsdefaults.properties file. This file stores the ArcIMS configuration parameters and is used by ArcIMS Administrator. You can edit this file by opening the file directly in a text editor or through ArcIMS Administrator.

   a. To edit the aimsdefaults.properties file using a text editor:

   Find the aimsdefaults.properties file and open it in a text editor. If necessary, edit the following lines to reflect the universal naming convention (UNC) pathname:

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

   b. To edit the aimsdefaults.properties file using ArcIMS Administrator:

   Open ArcIMS Administrator, click View, and click Site Properties.

   In the Site Properties dialog, click the Server Output tab and edit the output Directory Location. Use

UNC pathname to specify the output directory.

Click OK to save the modified properties in the aimsdefaults.properties file.

3. Edit your Web server Startup parameters:

   a. Change the Web server service Startup parameters. Go to Start | Settings | Control Panel | Services on Windows NT or Start | Settings | Control Panel | Administrative Tools | Services on Windows 2000, highlight your Web server, and click Startup. Click This Account and choose a network account. You cannot use a system account.

   b. Stop and start your Web server.

   Note: If you are using Microsoft IIS Web server, perform the following instead of Steps 3a and 3b in the preceding instructions:

   For IIS 4.0, go to Start | Programs | Windows NT Option Pack | Microsoft Internet Information Server | Internet Service Manager. For IIS 5.0, go to Start | Settings | Control Panel | Administrative Tools | Internet Services Manager. Under your localhost name, find Default Web site. Click to highlight it. Click Action in the toolbar. From the dropdown menu, point to New and click Virtual Directory. Create a virtual directory for your output directory to <common output drive>:\output, for example, O:\output. When the wizard asks for the user name/password for accessing the networked drive, choose a networked account that has access to that drive, \\<Web server computer>\<sharename>\<directory>.

   Note: IIS requires that users logged in as remote network users access the Web server from network access rights set in User Manager. This login method enables the user to access the server from a Web browser but doesn't give the user the right to log in locally. Users logged in with this method cannot access remote authenticated resources such as SQL Server using integrated security.

4. Share the data directory so the ArcIMS Spatial Servers can access the data referenced in the map configuration files. When determining the location to store your data, each ArcIMS Spatial Server must be able to access all data displayed in all ArcIMS Services; thus it is recommended that you locate your data in a common data directory—if it is not already stored in ArcSDE. This directory must be accessible from all Spatial Servers.

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

   To share the data directory, go to Start | Programs | Windows NT Explorer on Windows NT or Start | Programs | Accessories | Windows Explorer on Windows 2000, navigate to your data directory, right-click the directory, click Sharing, click Shared As, and click OK to share the directory.

5. Edit your map configuration files. The map configuration file stores the location of the data layers. This file must be edited to reflect the common data drive. Open the file in a text editor and edit the directory in the following lines to reflect the UNC pathname:

```
</PROPERTIES>
    <WORKSPACES>
        <SHAPEWORKSPACE name="shp_ws-8" directory="\\<ArcIMS
Host>.<domain>.com\ GISData"\>
    </WORKSPACES>
```

For ArcMap Server, use UNC paths to data in the ArcMap document.

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 <CD–ROM>\license. Installation of this software indicates an acceptance of the license agreement. The following files are included in the <CD–ROM>\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 and SDE Administrator

1. Run ArcIMS40Setup.exe.
2. At the Welcome screen, click Next.
3. At the Select Installation Type screen, click Custom and click Next.
4. At the ArcIMS Components and Destination Folder screen, uncheck all boxes except Spatial Server.
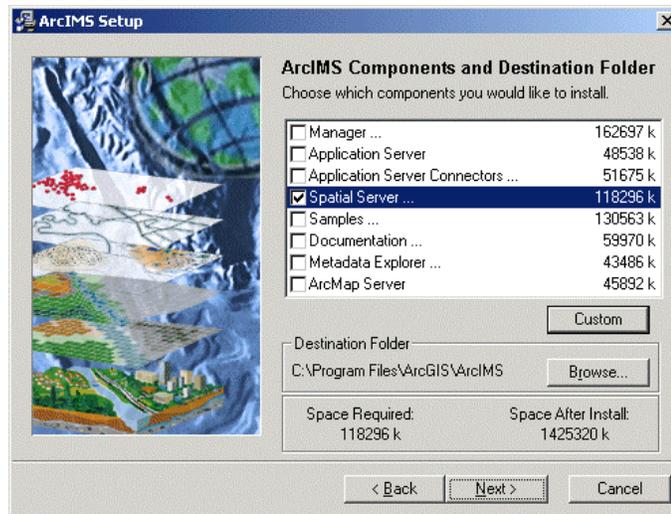
5. Highlight Spatial Server, click Custom, check ArcSDE Administrator, and click OK.

Installing ArcIMS 4.0 on Microsoft Windows
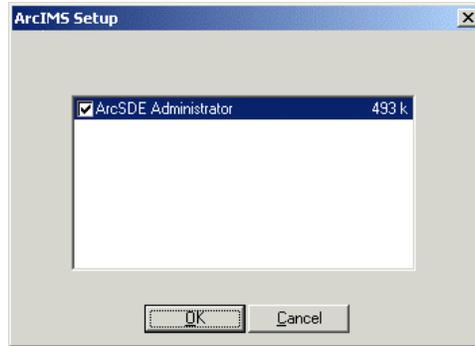
6. Browse to change the Destination Folder, if desired. Click Next.

7. At the Application Server Information screen, change the Host Name to your ArcIMS Host or the computer where your Application Server is installed.
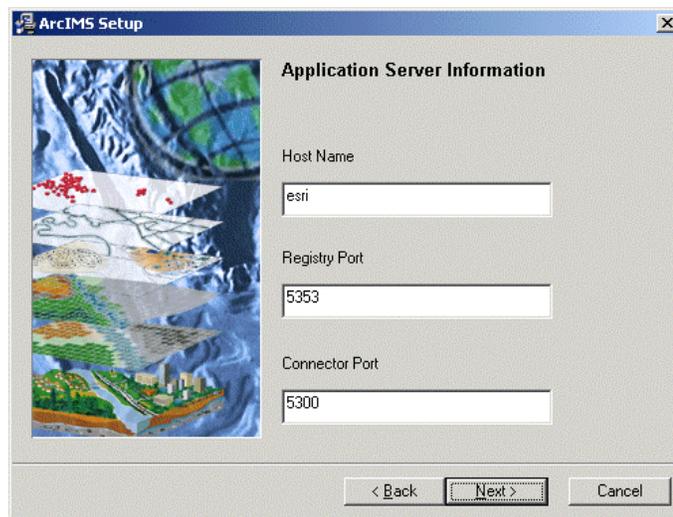
The information on this screen enables the ArcIMS Spatial Server to communicate with the ArcIMS Application Server.

8. If necessary, change the Registry Port and Connector Port.

The ArcIMS Spatial Server, Monitor, and Tasker communicate with the ArcIMS Application Server via the Registry port. The Servlet, ColdFusion, and ActiveX Connectors and ArcIMS Application Server communicate via the Connector port.

Click Next.

9. At the Windows Services Authorization screen, change your Domain\User Name, if necessary. The User Name and Password must be for the installation account and must have administrator privileges.

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Installing ArcIMS 4.0 on Microsoft Windows
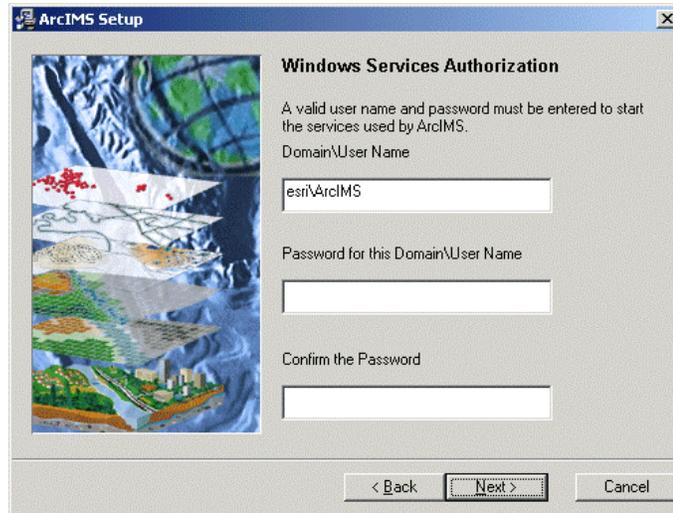
10. Type the password for the selected User Name and type it again to confirm it.

    This information gives ArcIMS the ability to start ArcIMS Monitor as a Windows Service and gives the ArcIMS Spatial Server the necessary privileges to access resources on the local computer and/or network. Click Next.

11. At the ArcIMS Site Information Converter Screen, click No if you are a new ArcIMS user and click Next.

    If you used ArcIMS 3.1 and backed up your EsriMap_Catalog.ser and EsriMap_Cookies.ser files prior to uninstalling ArcIMS 3.1, click Yes, Browse to <ArcIMS 3.1 Installation Directory>\AppServer or the location where you backed up your EsriMapCatalog.ser and EsriMapCookies.ser files, and click Next. If desired, you may run the converter after installation.

12. At the Summary of Installation Information screen, verify that the information displayed is correct. After you complete the ArcIMS installation, this information will be available in a log file located at <ArcIMS Installation Directory>\Common\InstallSummary.log.
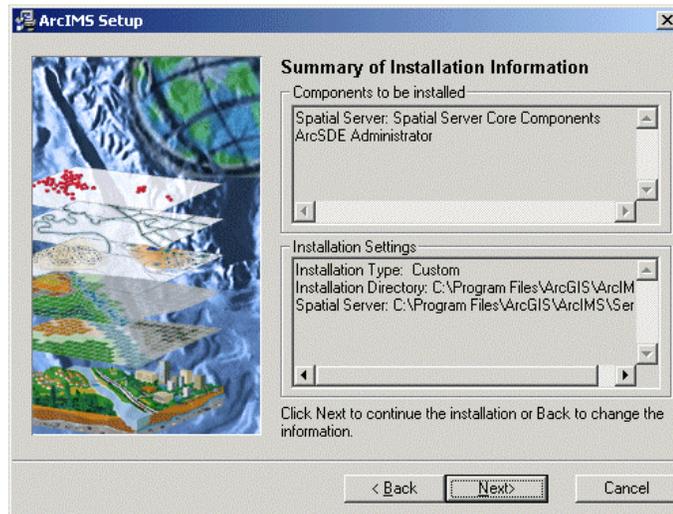
    Click Next to begin installation.

    Note: Microsoft's Java VM 3186 or later is required for the ArcIMS Monitor Windows Service. The installation updates your system if Java VM is not detected or if you have an older version.

13. At the Installation Successful screen, click Finish to restart your computer.

    Note: When you install only Spatial Server, an entry is not added to your Start menu. To make sure

Spatial Server is installed, go to \Program Files\Esri\ArcIMS or your Installation Directory location and check for a Server folder.

14. File-level changes that enable the ArcSDE Administrator:

When you install the ArcSDE Administrator through the ArcIMS Spatial Server, the Windows installer checks for ArcSDE services in the Windows registry under \HKEY_LOCAL_MACHINE\SOFTWARE\ESRI\ArcInfo\ArcSDE\8.0\ArcSDE for <dbms type>. If a service is found, the installer will edit the <ArcIMS Installation Directory>\Server\monitor\sde.properties file and set these parameters:

- `instanceNames=<your ArcSDE Service name>`

- `portNumbers=<your ArcSDE Service port>`

- `sdehomes=<your ArcSDE Service's Home>`

The installer will also edit the Monitor.properties file located at <ArcIMS Installation Directory>\Server\monitor and uncomment this line: `sdePropertiesFilename=Sde.properties`

When you reboot or try to s tart the ArcIMS Monitor, if you have a typo or error in either of these files, your ArcIMS Monitor may not start.

You need to configure your Web server to use ArcIMS Service Administrator.

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 <CD–ROM>\license. Installation of this software indicates an acceptance of the license agreement. The following files are included in the <CD–ROM>\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 A merican)
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. Run ArcIMS40Setup.exe.

2. At the Welcome screen, click Next.

3. At the Select Installation Type screen, click Custom and click Next.

4. At the ArcIMS Components and Destination Folder screen, uncheck all boxes except Metadata Explorer and change the Installation Directory, if desired.
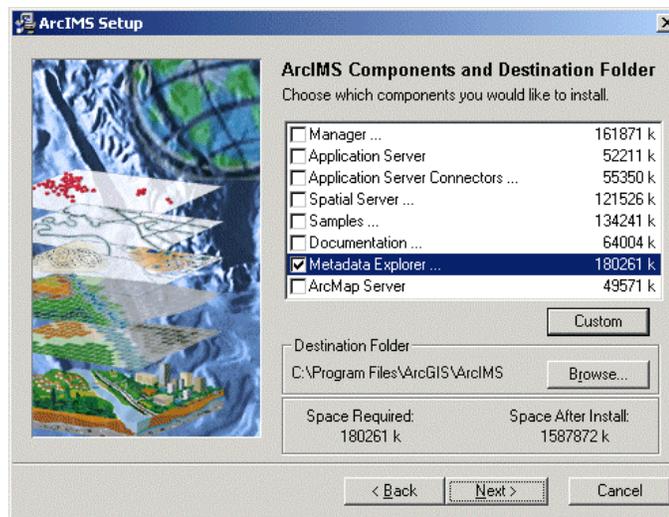
5. Highlight Metadata Explorer and click Custom.

6. Check the desired items and click OK. Click Next.
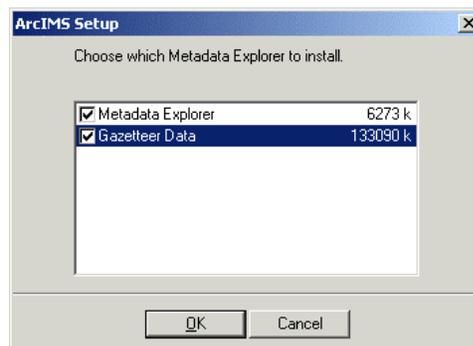
Note: The Metadata Explorer is already installed if you previously did the ArcIMS typical installation on this computer.

7. At the Gazetteer Directory screen, change the Installation Directory if desired. Click Next.

Installing ArcIMS 4.0 on Microsoft Windows
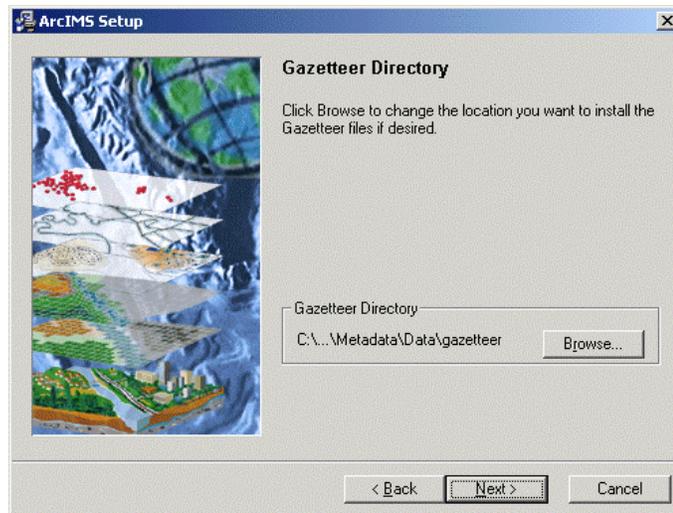
8. At the Summary of Installation Information screen, verify that the information displayed is correct. After you complete the ArcIMS installation, this information will be available in a log file located at <ArcIMS Installation Directory>\Common\InstallSummary.log.
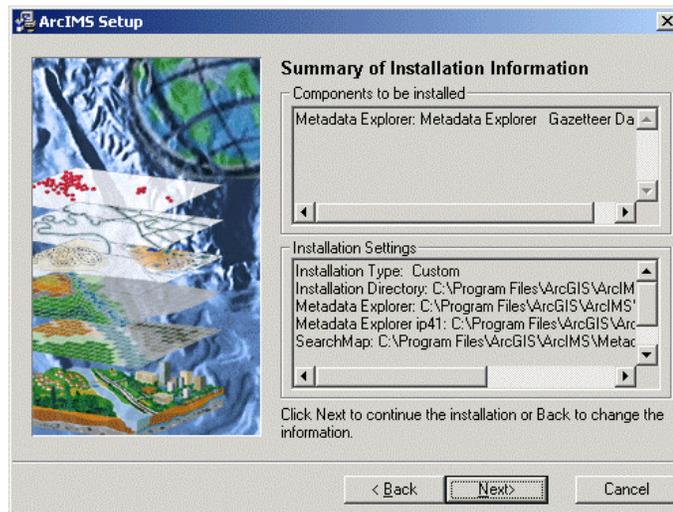
Click Next to begin installation.

9. At the Installation Successful screen, click Finish. You don't need to restart your computer.

Metadata Explorer files are installed at <ArcIMS Installation Directory>\Metadata\Metadata Explorer.

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

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

Step 4: Configure your Web server

Choose the steps for your Web server and servlet engine:

Configuring iPlanet

Configuring JRun for IIS

Configuring Oracle Application Server

Configuring ServletExec for Apache

Configuring ServletExec for IIS

Configuring Tomcat for IIS

Configuring Tomcat for Apache

Configuring WebLogic

Configuring WebSphere

Configuring iPlanet

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

1. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

2. Stop your Web server.

    > **Note:** If you plan to use ArcIMS Manager with iPlanet, you must copy the <ArcIMS Installation Directory>\Manager folder to the iPlanet root directory, \iPlanet\Servers\docs. You can still use standalone ArcIMS Administrator, ArcIMS Author, ArcIMS Designer, or the ArcIMS Service Administrator without this action.

3. Verify that the following items are at \iPlanet\Servers\docs\servlet:

    *   com directory
    *   Esrimap_prop
    *   ServletConnector_Res.properties
    *   ServletConnector_Res_en_US.properties files
    *   WMSEsrimap_prop

    If the files are not there, skip to Step 4.

    Move the following items from \iPlanet\Servers\docs\servlet to \iPlanet\Servers\https-<localhost>.<domain>.com\config:

    *   Esrimap_prop
    *   ServletConnector_Res.properties
    *   ServletConnector_Res_en_US.properties
    *   WMSEsrimap_prop

    Skip to Step 5.

4. If the files are not at \iPlanet\Servers\docs\servlet, navigate to <ArcIMS Installation Directory>\Connectors\Servlet, and copy the com directory to that location.

    Note: You may need to create a Servlet directory.

    Copy the following items from <ArcIMS Installation Directory>\Connectors\Servlet to

\iPlanet\Servers\https-<localhost>.<domain>.com\config:

- Esrimap_prop
- ServletConnector_Res.properties
- ServletConnector_Res_en_US.properties
- WMSEsrimap_prop

5. Start iPlanet Web server.

Setting up your Web server for ArcIMS

6. In your Web browser, type:

   `http://<localhost>:<serveradminport>`

   For example: http://esri:10000

   Note: You may need to include your domain:
   `http://<localhost.domain.com>:<serveradminport>`. For example:
   http://esri.esri.com:10000

   Note: If you don't know your server's administration port, open iPlanet\Servers\https-admserv\config\admin.conf in a text editor and read the port there.

7. Type your user name and password and click OK. The iPlanet Web Server Administration Server screen displays.

   Note: If you receive a message that you need to apply changes, click OK and click Apply in the upper right of the screen. This applies the changes you made to the config directory above.

8. Select your server from the dropdown list and click Manage. The Server On/Off screen displays. Make sure the server is **on.**

9. Click the Java tab along the top.

10. The Enable/Disable Java screen displays. Make sure the Enable Java Globally and Enable Java for class defaultclass options are checked. Click OK.

11. Click Class Manager in the upper right corner of the screen. The Manage Virtual Servers screen displays.

12. Click Content Mgmt in the navigation bar on the top. The Document Root Settings screen displays.

13. Click Document Preferences on the left sidebar. The Document Preferences screen displays.

14. Add the following first in the list under Index Filenames:

    `default.htm,default.html,index.htm,`
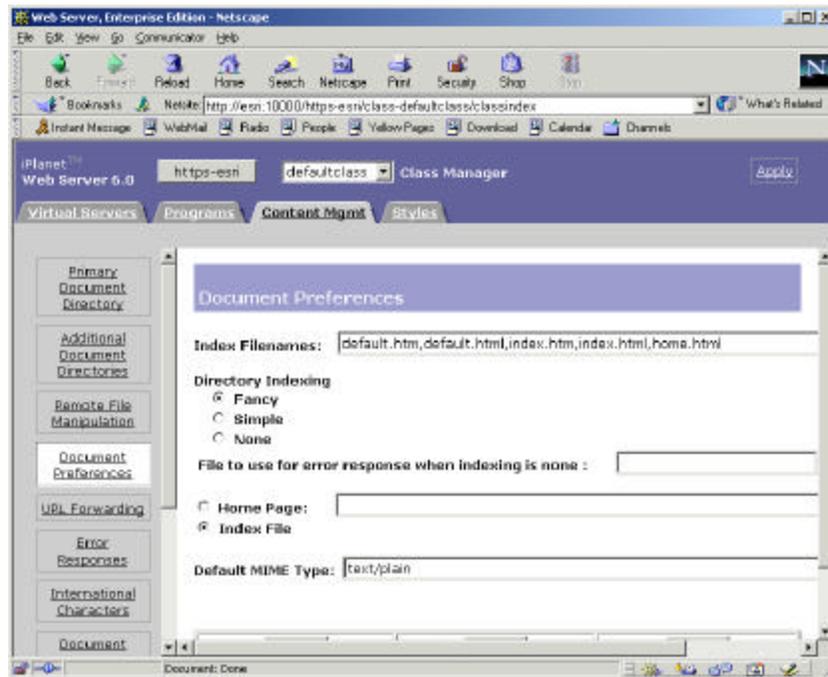
    Click OK. Click OK and Apply in the upper right corner.

15. Click Apply Changes to restart your Web server. Exit iPlanet.

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.

Note: If you browsed to \iPlanet\Servers\docs to create directories for Output and Website (the Web site Working Directories) during ArcIMS installation, you don't need to create virtual directories for Output and Website. Skip to Using the Diagnostics tool to test your ArcIMS installation.

16. Click Additional Document Directories on the left sidebar. The Additional Document Directories screen displays.

17. Type the following for the URL prefix:

    output
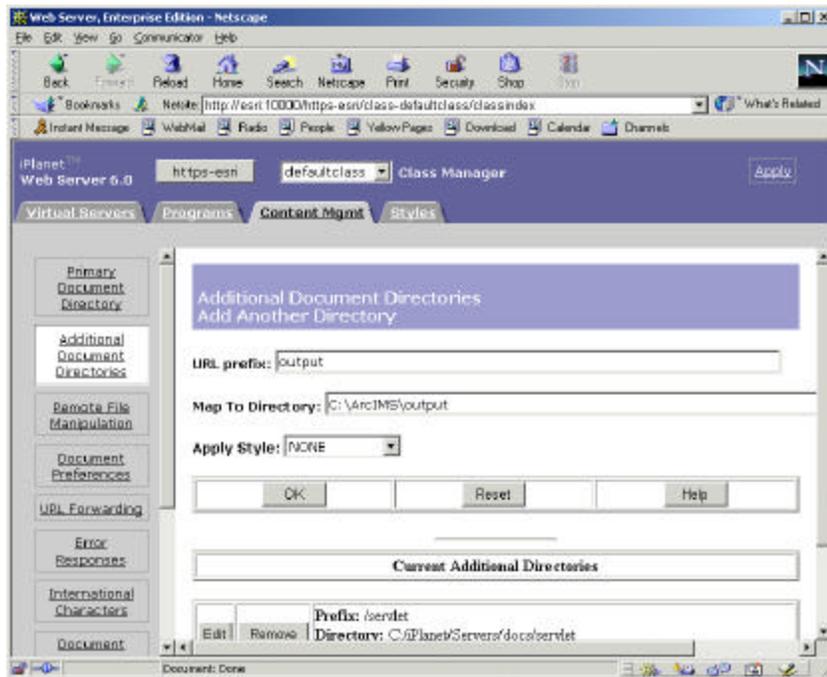
18. Type the appropriate path under Map To Directory, for example, C:\ArcIMS\output.

19. Click OK.

20. Type the following for the URL prefix:

    Website
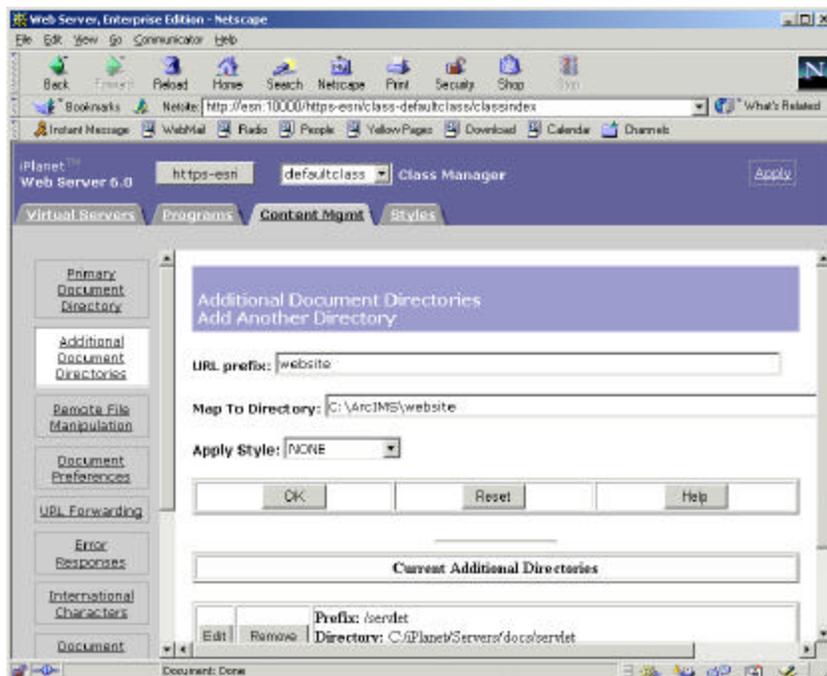
21. Type the appropriate path next to Map To Directory, for example, C:\ArcIMS\Website.

22. Click OK and Apply in the upper right corner.

23. Select Apply Changes to restart iPlanet Web Server.

24. Exit iPlanet.

Using the Diagnostics tool to test your ArcIMS installation

25. Choose Start | Programs | ArcGIS | ArcIMS | ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.

26. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.

27. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are 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 iPlanet for ArcIMS Service Administrator' for information on configuring ArcIMS Service Administrator.

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

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

Configuring JRun for IIS

After installing ArcIMS, you must configure your IIS Web server for ArcIMS. If your Web server and servlet engine are not operational, contact your system administrator before you proceed. See www.livesoftware.com/products/jrun for information on problems with JRun.

1. Verify that the following items are at \Program Files\Allaire\Jrun\servlets:

   - com directory

   - Esrimap_prop

   - ServletConnector_Res.properties

   - ServletConnector_Res_en_US.properties files

   - WMSEsrimap_prop

   If not, on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

   In the left panel, highlight Default Web site, then in the toolbar, click the square to stop IIS. Then navigate to <ArcIMS Installation Directory>\Connectors\Servlet and copy the items to that location.

   Click the arrow in the IIS Manager toolbar to restart IIS.

   On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

   Stop and start JRun Admin Server and JRun Default Server and close the Services window.

Using the Diagnostics tool to test your ArcIMS installation

2. Choose Start | Programs | ArcGIS | ArcIMS | ArcIMS Diagnostics. 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 and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are 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.

5. Continue to Creating virtual directories on IIS.

See 'WMS' for information on configuring for WMS.

See 'Configuring JRun for ArcIMS Service Administrator' for information on configuring ArcIMS Service Administrator.

See 'Configuring JRun for Metadata Explorer' for information on configuring Metadata Explorer.

Configuring Oracle Application Server for Apache

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

1. Verify that the following items are at \Oracle\iSuites\Apache\Jserv\servlets:

    *   com directory

    *   Esrimap_prop

    *   ServletConnector_Res.properties

    *   ServletConnector_Res_en_US.properties files

    *   WMSEsrimap_prop

    If not, on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

    Stop your Oracle Application Server, navigate to <ArcIMS Installation Directory>\Connectors\Servlet, and copy the items to that location.

    Start your Oracle Application Server.

Creating virtual directories

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

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website (the Web site Working Directories) during ArcIMS installation, you don't need to create virtual directories for Output and Website.

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

3. Stop your Oracle Application Server.

4. In a text editor, open <ArcIMS Installation Directory>\Common\ApacheAlias.txt and copy the contents of the file.

5. In a text editor, open \Oracle\iSuites\Apache\Apache\conf\httpd.conf.

    Under the line

    ```
    Alias /icons/ ">:\Oracle\iSuites\Apache\Apache\icons/"
    ```

    paste the lines from the ApacheAlias.txt file that follow this pattern. Replace the paths in these lines with the appropriate paths where necessary.

6. Save and close the file.

7. Start your Oracle Application Server and close the services window.

Using the Diagnostics tool to test your ArcIMS installation

8. Choose Start | Programs | ArcGIS | ArcIMS | ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.

9. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.

10. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are 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 ServletExec for Apache Web 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.newatlanta.com for information on problems with ServletExec.

1. Verify that the following items are at \Program Files\New Atlanta\ServletExec AS\se-<instance-name>\Servlets:

    *   com directory
    *   Esrimap_prop
    *   ServletConnector_Res.properties
    *   ServletConnector_Res_en_US.properties files
    *   WMSEsrimap_prop

    If not, on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance |

Administrative Tools | Component Services and click Services on the Tree tab.

Stop the Apache and Sevlet Exec services. Then navigate to <ArcIMS Installation Directory>\Connectors\Servlet and copy the items to that location.

Start the Apache and ServletExec services.

Creating virtual directories

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

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website (the Web site Working Directories) during ArcIMS installation, you don't need to create virtual directories for Output and Website.

2. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

3. Stop your Apache Web server.

4. In a text editor, open <ArcIMS Installation Directory>\Common\ApacheAlias.txt and copy the contents of the file. Close the file.

5. In a text editor, open \<Apache_Home>\conf\httpd.conf. Under the line

   ```
   Alias /icons/ "<drive>:/Program Files/Apache Group/Apache/icons/"
   ```

   paste the lines from the ApacheAlias.txt file. Replace the paths in these lines with the appropriate paths where necessary.

6. Save and close the file.

7. Start your Apache Web Server and close the Services window.

Using the Diagnostics tool to test your ArcIMS installation

8. Choose Start | Programs | ArcGIS | ArcIMS | ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.

9. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.

10. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are 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 ServletExec for ArcIMS Service Administrator' for information on configuring ArcIMS Service Administrator.

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

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

Configuring ServletExec for IIS

After installing ArcIMS, you must configure your IIS Web server for ArcIMS. If your Web server and servlet engine are not operational, contact your system administrator before you proceed. See the New

Installing ArcIMS 4.0 on Microsoft Windows

Atlanta Web site for information on problems with ServletExec.

1. Verify that the following items are at \Program Files\New Atlanta\ServletExec ISAPI\Servlets:

   - com directory

   - Esrimap_prop

   - ServletConnector_Res.properties

   - ServletConnector_Res_en_US.properties files

   - WMSEsrimap_prop

   If not, on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

   In the left panel, highlight Default Web site, then in the toolbar, click the square to stop IIS. Then navigate to <ArcIMS Installation Directory>\Connectors\Servlet and copy the items to that location.

   Click the arrow in the IIS Manager toolbar to restart IIS.

2. Provide read/write access to the ServletExec Data directory:

   a. Browse to the ServletExec ISAPI directory in the ServletExec installation folder, for example, \Program Files\New Atlanta.

   b. Right-click the ServletExec ISAPI directory and choose Properties.

   c. Click the Security tab.

   d. Click Add.

   e. In the Look in dropdown list, choose your computer name.

   f. Double-click IUSR_<computer name> and click OK.

   g. Highlight the user, Internet Guest Account(<computer name>\IUSR_<computer name>).

   h. For Write access, choose Allow, and click OK.

3. On Windows NT, choose Start | Programs | Windows NT 4.0 Option Pack | Microsoft Internet Information Server | Internet Service Manager; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Internet Services Manager.

   In the left panel, highlight Default Web site, then in the toolbar, click the square to stop IIS. Click the arrow to restart IIS.

Using the Diagnostics tool to test your ArcIMS installation

4. Choose Start | Programs | ArcGIS | ArcIMS | ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.

5. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.

6. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

   If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are 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.

7. Continue to Creating virtual directories on IIS.

See 'WMS' for information on configuring for WMS.

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

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

Configuring Tomcat for Apache Web 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.apache.org for information on problems with Jakarta-Tomcat or Apache.

1. Verify that the following items are at <Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes:

    -   com directory
    -   Esrimap_prop
    -   ServletConnector_Res.properties
    -   ServletConnector_Res_en_US.properties
    -   WMSEsrimap_prop

    If not, on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

    Stop your Apache and Jakarta services.

    Navigate to <ArcIMS Installation Directory>\Connectors\Servlet, and copy the items to that location.

    Start the Jakarta and Apache services.

2. Choose Start | Programs | Apache httpd Server | Configure Apache Server | Edit the Apache httpd.conf Configuration File.

3. Find the line: `DirectoryIndex index.html`

4. Add default.htm to the end of the line, so it reads:

    `DirectoryIndex index.html default.htm`

5. Save and close the file.

Creating virtual directories

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

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website (the Web site Working Directories) during ArcIMS installation, you don't need to create virtual directories for Output and Website.

6. Stop your Apache Web server.

7. In a text editor, open <ArcIMS Installation Directory>\Common\ApacheAlias.txt and copy the contents of the file. Close the file.

8. Choose Start | Programs | Apache httpd Server | Configure Apache Server | Edit the Apache httpd.conf Configuration File.

9. Under the line

    `Alias /icons/ "<drive>:/Program Files/Apache Group/Apache/icons/"`

    paste the lines from the ApacheAlias.txt file. Replace the paths in these lines with the appropriate paths where necessary.

10. Save and close the file.

11. Start your Apache Web Server and close the Services window.

Using the Diagnostics tool to test your ArcIMS installation

12. Choose Start | Programs | ArcGIS | ArcIMS | ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.

13. Select your Web server protocol, type your Web server name including domain>, and type your port number. The default is 80.

14. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are 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 Apache with Tomcat for ArcIMS Service Administrator' for information on configuring ArcIMS Service Administrator.

See 'Configuring Apache with Tomcat 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 IIS

After installing ArcIMS, you must configure your IIS Web server for ArcIMS. 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 Jakarta-Tomcat.

1. Verify that the following items are at <Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes:

    - com directory

    - Esrimap_prop

    - ServletConnector_Res.properties

    - ServletConnector_Res_en_US.properties files

    - WMSEsrimap_prop

    If not, on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

    In the left panel, highlight Default Web site, then in the toolbar, click the square to stop IIS. Then navigate to <ArcIMS Installation Directory>\Connectors\Servlet and copy the items to that location.

    Click the arrow in the IIS Manager toolbar to restart IIS.

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

    Stop and Start Jakarta.

Using the Diagnostics tool to test your ArcIMS installation

2. Choose Start | Programs | ArcGIS| ArcIMS | ArcIMS Diagnostics. 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 and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are 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.

5. Continue to Creating virtual directories on IIS.

See 'WMS' for information on configuring for WMS.

See 'Configuring Tomcat with IIS for ArcIMS Service Administrator' for information on configuring ArcIMS Service Administrator.

See 'Configuring Tomcat with IIS for Metadata Explorer' for information on configuring Metadata Explorer.

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. Verify that the following items are at \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

    If the files are not at that location, navigate to <ArcIMS Installation Directory>\Connectors\Servlet, and copy the items to that location.

    Note: You may need to create a classes directory.

2. Choose Start | Programs | BEA Weblogic | WebLogic Server | Start Default Console.

3. Type your username and password.

4. On the left sidebar, click Deployments.

5. Click Web Applications.

6. Click DefaultWebApp.

7. On the right panel, under the Files tab, check the box to enable Index Directories and click Apply.

8. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

9. Stop WebLogic Web server.

10. In a text editor, open the \bea\wlserver6.1\config\mydomain\applications\DefaultWebApp\WEB-INF\Web.xml file.

11. 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>
```

12. Find the line `<welcome-file-list>` and add the following under it:

    `<welcome-file>default.htm</welcome-file>`

13. Save and close the file.

14. Start WebLogic Web server.

Verifying that the Web applications are deployed

15. In the WebLogic Default Console, on the left sidebar, click Servers.

16. Click <WebLogic Server Name>.

17. On the right panel, under the Deployments tab, click the Web Applications tab.

18. Ensure that the Web Applications you want to deploy are listed under Chosen in the Web App Component table, for example, defaultWebapp.

19. Click Apply.

20. Close the Default console window.

Configuring for ArcIMS Manager

If you don't plan to use the ArcIMS Manager, skip to 'Using the Diagnostics tool' to test your ArcIMS installation.

21. In the Services window, Stop ArcIMS Tasker, ArcIMS Monitor, and ArcIMS Application Server in that order.

22. Navigate to <ArcIMS Installation Directory> and copy the Manager directory to \bea\wlserver6.1\config\mydomain\applications\DefaultWebApp.

23. Start ArcIMS Application Server, ArcIMS Monitor, and ArcIMS Tasker in that order and close the Services window.

Using the Diagnostics tool to test your ArcIMS installation

24. Choose Start | Programs | ArcGIS | ArcIMS | ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.

25. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.

26. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are 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 http://www-4.ibm.com/software/Webservers for information on problems with WebSphere.

1. Verify that the following items are at \WebSphere\AppServer\servlets:

   - com directory

   - Esrimap_prop

   - ServletConnector_Res.properties

   - ServletConnector_Res_en_US.properties

   - WMSEsrimap_prop

   If not, on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab.

   Stop your Web server, navigate to <ArcIMS Installation Directory>\Connectors\Servlet, and copy the items to that location.

   Then start your Web server.

Creating virtual directories

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

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website (the Web site Working Directories) during ArcIMS installation, you don't need to create virtual directories for Output and Website.

2. Open IBM HTTP server admin by opening a browser and typing your computer name. Logon.

3. Click the Mappings folder on the left sidebar and clic k Aliases.

4. In the Defined aliases list, click Add. Click URL path and for the Alias for directory or filename, type the following: /Manager/

5. For the Actual directory or filename, type the following or the alternate location you selected during installation:

   <drive>:/<ArcIMS Installation Directory>/Manager/

6. Click Apply. Click Submit on the right.

   Note: If you browsed to the location of your Web server root directory to create directories for Output and Website during ArcIMS installation, See 'Step 5: Configure ArcIMS' for the final step required to get ArcIMS running.

7. In the Defined aliases list, click Add. Click URL path and for the Alias for directory or filename, type the following: /Website/

8. For the Actual directory or filename, type the appropriate path, for example, C:/ArcIMS/Website/.

9. Click Apply. Click Submit on the right.

10. In the Defined aliases list, click Add. Click URL path and for the Alias for directory or filename, type the following: /output/

11. For the Actual directory or filename, type the appropriate path, for example, C:/ArcIMS/Output/.

12. Click Apply. Click Submit on the right.

13. Close IBM HTTP server admin.

14. Restart IBM HTTP Server and close the Services window.

Using the Diagnostics tool to test your ArcIMS installation

15. Choose Start | Progra ms | ArcGIS | ArcIMS | ArcIMS Diagnostics. The ArcIMS Diagnostics tool displays.

16. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.

17. Click 1 to test the ArcIMS Servlet Connector and 2 to test the ArcIMS Application Server.

    If these tests are successful, your ArcIMS Application Server and ArcIMS Servlet Connector are 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 for ArcIMS Service Administrator' fo r information on configuring ArcIMS Service Administrator.

See 'Configuring WebSphere 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 iPlanet

Configuring JRun for IIS

Configuring Oracle Application Server

Configuring ServletExec for Apache

Configuring ServletExec for IIS

Configuring Tomcat for Apache

Configuring Tomcat for IIS

Configuring WebLogic

Configuring WebSphere

Configuring iPlanet for ArcIMS Service Administrator

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

1. In your Web browser, type:

   ```
   http://<localhost>:<serveradminport>
   ```

   For example: http://esri:10000.

   Note: You may need to include your domain:
   ```
   http://<localhost.domain.com>:<serveradminport>
   ```

For example: http://esri.esri.com:10000.

Note: If you don't know your server's administration port, open iPlanet\Servers\https-admserv\config\admin.conf in a text editor and read the port there.

2. Type your user name and password and click OK.

3. Click the Global Settings tab.

4. Click Configure JRE/JDK Paths on the left sidebar.

5. Click JDK.

6. For path, type the JDK Path, for example, <drive>:/jdk1.3.1_02. The Libpath and Classpath can be left blank.

7. Click OK and exit iPlanet.

8. In a text editor, open <iPlanet Installation Directory>\https-<localhost>.<domain>.com\config\Web-apps.xml.

9. Scroll to the end of the file and add the following line before </vs>.

```
<Web-app uri="/esriadmin" dir="<ArcIMS Installation
Directory>\Administrator\esriadmin"/>
```

Note: Make sure you specify a valid directory path for Web-app. Invalid entries for Web-app will prevent your iPlanet Web server from starting. Also, the context path you specify, /esriadmin, is case sensitive. You might want to create additional Web-apps with names like ESRIAdmin or ESRIADMIN pointing to ArcIMS Service Administrator.

10. Save and close the file.

11. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

12. Stop and start iPlanet Web Server and close the Services window.

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

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

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

Configuring JRun for ArcIMS Service Administrator

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

1. Open the JRun Management Console.

2. Expand JRun Default Server.

3. Click Web Applications.

4. Click Deploy an Application.

5. For the Servlet War File or Directory, type: `<ArcIMS Installation Directory>\Administrator\esriadmin.war`

6. For JRun Server Name, type: `JRun Default Server`

7. For Application Name, type: `esriadmin`

8. For Application Host, type: `All Hosts`

9. For Application URL, type: `/esriadmin`

Installing ArcIMS 4.0 on Microsoft Windows

10. For Application Deploy Directory, leave the default path.

11. Click Deploy.

12. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

13. Stop and start JRun Default Server and close the Services window.

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

See 'Configuring JRun for Metadata Explorer' for information on configuring Metadata Explorer.

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

Configuring Oracle Application Server with 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. Install Oracle9*i*AS Containers for J2EE (OC4J).

   Note: You can find OC4J in the $ORACLE_HOME\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. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

3. Stop OC4J.

4. In a text editor, open $OC4J\config\application.xml and add the following line under the line `<orion-application>`:

   ```
   <Web-module id="esriadmin" path= "<ArcIMS Installation
   Directory>\Administrator\esriadmin" />
   ```

5. Save and close the file.

   ```
   In a text editor, open $OC4J\config\default-Web-site.xml and add
   the following under the line <Web-site port="8888">:
   ```

   ```
   <Web-app application="default" name="esriadmin" root="/esriadmin" />
   ```

6. Save and close the file.

7. Start OC4J.

8. In a text editor, open \Oracle\iSuites\Apache\Apache\conf\httpd.conf and add the following two lines:

   ```
   ProxyPassReverse /esriadmin http://<computer name>:8888/esriadmin
   ProxyPass /esriadmin http://<computer name>:8888/esriadmin
   ```

9. Save and close the file.

10. Stop and start your Oracle Application Server and close the Services window.

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

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

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

Configuring ServletExec for Apache for ArcIMS Service Administrator

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

1. Choose Start | Programs | New Atlanta | ServletExec 4.1.1 AS | ServletExec Admin to open ServletExec Admin.

2. On the left sidebar under Servlets, click Manage and verify that JSP10Servlet has been loaded.

3. On the left sidebar under Servlets, click Aliases and verify that there is an entry for *.jsp that points to JSP10Servlet.

4. In the left sidebar under Web Applications, click Manage.

5. Click Add Web Application.

6. For Application Name, type: esriadmin

7. For URL Context Path, type: /esriadmin

   This is the name you will use to run ArcIMS Service Administrator.

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

8. For Location, type: <ArcIMS Installation Directory>\Administrator\esriadmin

9. Click Submit and close ServletExec Admin.

10. Launch the ServletExec/AS install.

11. On the first screen, click Next.

12. On the Setup Type screen, select Install or Update a Web server adapter and click Next.

13. At the License Agreement screen, click Yes.

14. At the Setup Type screen, select Apache HTTP Server and click Next.

15. At the update ServletExec AS instance screen, type your hostname and click Next.

16. For the application URL, type: /esriadmin and click Next.

17. At the Confirm ServletExec Install screen, click Next.

18. When asked to update the httpd.conf file, select Yes.

19. Click OK when informed that the httpd.conf file is updated.

20. At the InstallShield Wizard Complete screen, click Finish.

21. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

22. Stop and start Apache Web server and ServletExec and close the Services window.

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

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

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

Configuring ServletExec for IIS for ArcIMS Service Administrator

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

1. Choose Start | Programs | New Atlanta | ServletExec 4.1 | ServletExec Admin to open ServletExec Admin.

2. On the left sidebar under Servlets, click Manage and verify that JSP10Servlet has been loaded.

3. On the left sidebar under Servlets, click Aliases and verify that there is an entry for *.jsp that points to JSP10Servlet.

4. In the left sidebar under Web Applications, click Manage.

5. Click Add Web Application.

6. For Application Name, type: `esriadmin`

7. For URL Context Path, type: `/esriadmin`
    This is the name you will use to run ArcIMS Service Administrator.

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

8. For Location, type:
    `<ArcIMS Installation Directory>\Administrator\esriadmin`

9. Click Submit and close ServletExec Admin.

10. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

11. Stop and start IIS Admin Service and World Wide Web Publishing Service, and close the Services window.

See *Using ArcIMS,* 'Appendix A: Using ArcIMS Service Administrator,' for information.
See 'Configuring ServletExec for Metadata Explorer' for information on configuring Metadata Explorer.
See 'Step 5: Configure ArcIMS' for the final step required to get ArcIMS running.

Configuring Tomcat for Apache for ArcIMS Service Administrator

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

1. Navigate to <ArcIMS Installation Directory>\Administrator and copy the esriadmin folder to <Tomcat Installation Directory>\Webapps.

2. Choose Start | Programs | Apache httpd Server | Configure Apache Server | Edit the Apache httpd.conf Configuration File.

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. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

6. Stop and start your Apache and Jakarta services and close the Services window.

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

See 'Configuring Apache with Tomcat 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 with IIS 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>\Administrator and copy the esriadmin folder to <Tomcat Installation Directory>\Webapps.

2. In a text editor, open the uriworkermap.properties file located at <Tomcat Installation Directory>\conf.

3. Add the following lines:
   ```
   # Mount the esriadmin context to the ajp13 worker
   /esriadmin/*=ajp13
   ```

4. Save and close the file.

5. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

6. Stop and start IIS Admin Service, World Wide Web Publishing Service, and Jakarta, and close the Services window.

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

See 'Configuring Tomcat with IIS for Metadata Explorer' for information on configuring Metadata Explorer.

See 'Step 5: Configure 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. Choose Start | Programs | BEA Weblogic | WebLogic Server | Start Default Console.

2. Type your password.

3. On the left sidebar, click Web Applications.

4. Click Configure a new Web Application.

5. For the name, type: esriadmin

6. For the Path, type: <ArcIMS Installation Directory>\Administrator\esriadmin

7. Click Create.

8. Click the Targets tab.

9. In Servers, move <WebLogic Server Name> from Available to Chosen.

10. Click Apply.

11. Close the console.

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

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

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

Configuring WebSphere 3.5.5 for ArcIMS Service Administrator

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

1. Choose Start | Programs | IBM Web Server | Application Server v3.5 | Administrator's Console.
2. Click Console, click Tasks, click Create a War File. Follow the instructions in the task wizard.
3. On the left sidebar, expand Nodes, expand the computer name, then expand Default Server.
4. Select Default Servlet Engine.
5. Click Next.
6. Expand Virtual Hosts.
7. Select default_host.
8. Click Next.
9. Browse to <ArcIMS Installation Directory>\Administrator\esriadmin.war.
10. Click Next.
11. Browse to your destination directory, usually under the default_host directory at <WebSphere Installation Directory >\Appserver\hosts\default_host.
12. Click Next.
13. For Web Application Web Path, type: esriadmin
14. For Web Application Name, type: esriadmin
15. Click Finish. This deploys the application.
16. After the Web application is deployed you will see the Command "warfile.convert" completed successfully Information dialog. Click OK.
17. Close the WebSphere Administrative Console.
18. Navigate to <WebSphere Installation Directory>\Appserver\hosts\default_host\esriadmin\Web\WEB-INF and create a directory called lib.
19. Copy the arcims_taglib.tld and i18n.tld files from <WebSphere Installation Directory>\Appserver\hosts\default_host\esriadmin\servlets to <WebSphere Installation Directory>\Appserver\hosts\default_host\esriadmin\Web\WEB-INF\lib.
20. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab.
21. Stop and start IBM HTTP Server and WebSphere and close the Services window.

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

See 'Configuring Websphere 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 Metadata Explorer

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

Configuring iPlanet
Configuring JRun for IIS
Configuring Oracle Application Server
Configuring ServletExec for Apache
Configuring ServletExec for IIS
Configuring Tomcat for Apache
Configuring Tomcat for IIS
Configuring WebLogic
Configuring WebSphere

Configuring iPlanet for Metadata Explorer

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

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

1. In your Web browser, type:

    ```
    http://<localhost>:<serveradminport>
    ```

    For example: http://esri:10000

    Note: You may need to include your domain :
    ```
    http://<localhost.domain.com>:<serveradminport>
    ```

    For example: http://esri.esri.com:10000

    Note: If you don't know your server's administration port, open iPlanet\Servers\https-admserv\config\admin.conf in a text editor and read the port there.

2. Type your user name and password and click OK.

3. Click the Global Settings tab.

4. Click Configure JRE/JDK Paths on the left sidebar.

5. Click JDK.

6. For path, type the JDK Path, for example, <drive>:\j2sdkee1.3.1. The Libpath and Classpath can be left blank.

7. Click OK and exit iPlanet.

8. In a text editor, open <iPlanet Installation Directory>\https-<localhost>.<domain>.com\config\Web-apps.xml.

9. Scroll to the end of the file and add the following line before </vs>.

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

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

10. Save and close the file.

11. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree

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

12. Stop and start the iPlanet Web Server and close the Services window.

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

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

Configuring JRun for IIS for Metadata Explorer

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

1. Open the JRun Management Console.

2. Expand JRun Default Server.

3. Click Web Applications.

4. Click Deploy an Application.

5. For the Servlet War File or Directory, type: `<ArcIMS Installation Directory>\Metadata\MetadataExplorer.war`

6. For JRun Server Name, type: `JRun Default Server`

7. For Application Name, type: `metadataexplorer`

8. For Application Host, type: `All Hosts`

9. For Application URL, type: `/metadataexplorer`

10. For Application Deploy Directory, leave the default path.

11. Click Deploy.

12. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

13. Stop and start JRun Default Server and close the Services window.

14. Navigate to <ArcIMS Installation Directory>\Metadata\MetadataExplorer\WEB-INF\classes and copy the aimsmeta.properties file to <JRun Installation Directory>\servers\default\metadataexplorer\WEB-INF\classes.

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

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

Configuring Oracle Application Server with Apache for Metadata Explorer

If you wish to use Metadata Explorer, you must configure your Web server:
Note: Skip to Step 3 if you already installed Oracle9iAS Containers for ArcIMS Service Administrator.

1. Install Oracle9iAS Containers for J2EE (OC4J).

    Note: You can find OC4J in the $ORACLE_HOME\J2EE_containers\oc4j.zip file after you've installed Oracle 9i Application Server. If you don't have the oc4j.zip file, you can install it from your Oracle Application Server 9i installation CD or you can download it from Oracle's Web site.

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

2. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

3. Stop OC4J.

4. In a text editor, open $OC4J\config\application.xml and add the following line under the line `<orion-application>`:

   ```
   <Web-module id="metadataexplorer" path= "<ArcIMS Installation
   Directory>\Metadata\MetadataExplorer" />
   ```

5. Save and close the file.

6. In a text editor, open $OC4J\config\default-Web-site.xml and add the following under the line `<Web-site port="8888">`:

   ```
   <Web-app application="default" name="metadataexplorer"
   root="/metadataexplorer" />
   ```

7. Save and close the file.

8. Start OC4J.

9. In a text editor, open \Oracle\iSuites\Apache\Apache\conf\httpd.conf and add the following two lines:

   ```
   ProxyPass /metadataexplorer http://<computer
   name>:8888/metadataexplorer

   ProxyPassReverse /metadataexplorer http://<computer
   name>:8888/metadataexplorer
   ```

10. Save and close the file.

11. Stop and start your Oracle Application Server and close the Services window.

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

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

Configuring ServletExec for Apache for Metadata Explorer

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

1. Choose Start | Programs | New Atlanta | ServletExec 4.1.1 AS | ServletExec Admin to open ServletExec Admin.

   Note: Skip to Step 4 if you already verified that JSP10Servlet has been loaded for ArcIMS Service Administrator.

2. On the left sidebar under Servlets, click Manage and verify that JSP10Servlet has been loaded.

3. On the left sidebar under Servlets, click Aliases and verify that there is an entry for *.jsp that points to JSP10Servlet.

4. In the left sidebar under Web Applications, click Manage.

5. Click Add Web Application.

6. For Application Name, type: metadataexplorer

7. For URL Context Path, type: `/metadataexplorer`

   This is the name you will use to run Metadata Explorer.

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

8. For Location, type: `<ArcIMS Installation Directory>\metadata\metadataexplorer`

9. Click Submit and close ServletExec Admin.

10. Launch the ServletExec/AS install.

11. On the first screen, click Next.

12. On the Setup Type screen, select Install or Update a Web server adapter and click Next.

13. At the License Agreement screen, click Yes.

14. At the Setup Type screen, select Apache HTTP Server and click Next.

15. At the update ServletExec AS instance screen, type your hostname and click Next.

16. For the application URL, type: /metadataexplorer and click Next.

17. At the Confirm ServletExec Install screen, click Next.

18. When asked to update the httpd.conf file, select Yes.

19. Click OK when informed that the httpd.conf file is updated.

20. At the InstallShield Wizard Complete screen, click Finish.

21. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

22. Stop and start Apache Web server and ServletExec and close the Services window.

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

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

Configuring ServletExec for IIS for Metadata Explorer

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

1. Choose Start | Programs | New Atlanta | ServletExec 4.1 | ServletExec Admin to open ServletExec Admin.

   Note: Skip to Step 4 if you already verified that JSP10Servlet has been loaded for ArcIMS Service Administrator.

2. On the left sidebar under Servlets, click Manage and verify that JSP10Servlet has been loaded.

3. On the left sidebar under Servlets, click Aliases and verify that there is an entry for *.jsp that points to JSP10Servlet.

4. In the left sidebar under Web Applications, click Manage.

5. Click Add Web Application.

6. For Application Name, type: `metadataexplorer`

7. For URL Context Path, type: `/metadataexplorer`

   This is the name you will use to run ArcIMS Service Administrator.

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

8. For Location, type:

   `<ArcIMS Installation Directory>\Metadata\MetadataExplorer`

9. Click Submit and close ServletExec Admin.

10. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

11. Stop and start IIS Admin Service and World Wide Web Publishing Service, and close the Services window.

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

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

Configuring Tomcat for Apache for Metadata Explorer

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

1. Navigate to <ArcIMS Installation Directory>\Metadata and copy the MetadataExplorer folder to <Tomcat Installation Directory>\Webapps.

2. Choose Start | Programs | Apache httpd Server | Configure Apache Server | Edit the Apache httpd.conf Configuration File.

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. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

6. Stop and start your Apache and Jakarta services and close the Services window.

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

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

Configuring Tomcat for IIS for Metadata Explorer

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

1. Navigate to <ArcIMS Installation Directory>\Metadata and copy the MetadataExplorer folder to <Tomcat Installation Directory>\Webapps.

2. In a text editor, open the uriworkermap.properties file located at <Tomcat Installation Directory>\conf.

3. Add the following lines:
   ```
   # Mount the metadataexplorer context to the ajp13 worker
   /MetadataExplorer/*=ajp13
   ```

4. Save and close the file.

5. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

6. Stop and start IIS Admin Service, World Wide Web Publishing Service, and Jakarta, and close the Services window.

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

See 'Step 5: Configure 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. Choose Start | Programs | BEA Weblogic | WebLogic Server | Start Default Console.

2. Type your password.

3. On the left sidebar, click Web Applications.

4. Click Configure a new Web Application

5. For Name, type: `MetadataExplorer`

6. For Path, type: `<ArcIMS Installation Directory>\Metadata\MetadataExplorer`

7. Click Create.

8. Click the Targets tab.

9. In Servers, move <WebLogic Server Name> from Available to Chosen.

10. Click Apply.

11. Close the console.

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

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

Configuring WebSphere 3.5.5 for Metadata Explorer

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

1. Choose Start | Programs | IBM Web Server | Application Server v3.5 | Administrator's Console.

2. Click Console, click Tasks, click Create a War File. Follow the instructions in the task wizard.

3. On the left sidebar, expand Nodes, expand the computer name, then expand Default Server.

4. Select Default Servlet Engine.

5. Click Next.

6. Expand Virtual Hosts.

7. Select default_host.

8. Click Next.

9. Browse to <ArcIMS Installation Directory>\Metadata\MetadataExplorer.war.

10. Click Next.

11. Browse to your destination directory, usually under the default_host directory at <WebSphere Installation Directory>\Appserver\hosts\default_host.

12. Click Next.

13. For Web Application Web Path, type: `metadataexplorer`

14. For Web Application Name, type: `metadataexplorer`

15. Click Finish. This deploys the application.

16. After the Web application is deployed you will see the Command "warfile.convert" completed successfully Information dialog. Click OK.

17. Close the WebSphere Administrative Console.

18. Navigate to <WebSphere Installation Directory>\Appserver\hosts\default_host\metadataexplorer\Web\WEB-INF and create a directory called lib.

19. Copy the arcims_taglib.tld and i18n.tld files from <WebSphere Installation Directory>\Appserver\hosts\default_host\metadataexplorer\servlets to <WebSphere Installation Directory>\Appserver\hosts\default_host\metadataexplorer\Web\WEB-INF\lib.

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

21. Stop and start IBM HTTP Server and WebSphere and close the Services window.

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

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

Creating virtual directories on IIS

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

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website (the Web site Working Directories) during ArcIMS installation, you don't need to create virtual directories for Output and Website.

1. For IIS 4.0, choose Start | Programs | Windows NT Option Pack | Microsoft Internet Information Server | Internet Service Manager. Expand your localhost name.

    For IIS 5.0, choose Start | Settings | Control Panel | Administrative Tools | Internet Services Manager. Expand your localhost name.

    For IIS 5.1, choose Start | Internet Information Services. Expand your local host folder and expand Web sites.

2. Click Default Web site to highlight it.

3. Click Action in the toolbar.

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4. From the dropdown menu, point to New and click Virtual Directory. The Virtual Directory Creation Wizard displays. Click Next.

5. Type the following for the alias: Manager

   Click Next.

6. Click Browse to select the ArcIMS Manager directory at <drive>:\Program Files\ArcGIS\ArcIMS\Manager, and click Next.

7. For IIS 4.0, check Allow Directory Browsing and click Finish.

   For IIS 5.0 and IIS 5.1, check Browse and click Next. Click Finish.
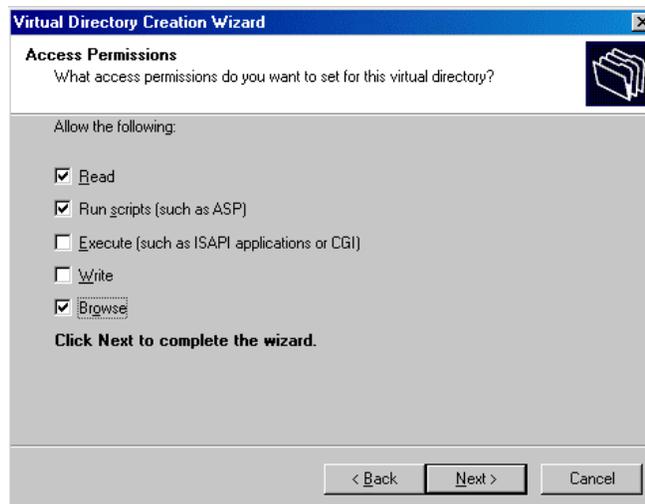
Manager appears in the virtual directory list.

Now create virtual directories for Output and Website.

Note: If you browsed to the location of your Web server root directory to create directories for Output and Website during ArcIMS installation, skip to Step 18.

8. Click Default Web site to highlight it.

9. Click Action, point to New, and click Virtual Directory.

10. Type the following for the alias: output

    Click Next.

11. Click Browse to select the ArcIMS output directory located where you placed it during installation, for example, C:\ArcIMS\output. Click Next.

12. Check Allow Directory Browsing or Browse and click Finish. Output appears in the virtual directory list.

13. Click Default Web site to highlight it.

14. Click Action, point to New, and click Virtual Directory.

15. Type the following for the alias: Website

    Click Next.

16. Click Browse to select the ArcIMS Website directory located where you placed it during installation, for example, C:\ArcIMS\Website. Click Next.

17. Check Allow Directory Browsing or Browse and click Finish. Website appears in the virtual directory list.

18. Change file security for your servlet engine:

    a. In the left panel, click Scripts for JRun. In the right panel, right-click jrun.dll for JRun, and choose Properties.

      b. In the left panel, click Scripts for ServletExec. In the right panel, right-click ServletExec_ISAPI.dll, and choose Properties.

      c. In the left panel, click jakarta for Tomcat. In the right panel, right-click isapi_redirect.dll for Tomcat, and choose Properties.

19. Click the File Security tab and click Edit to change the Anonymous access and authentication control.
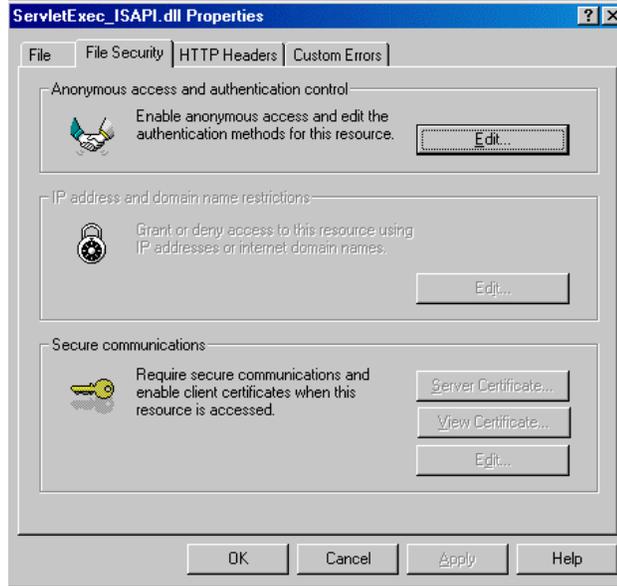
20. Make sure Anonymous access is checked. For IIS 4.0, uncheck Windows NT Challenge/Response and click OK; for IIS 5.0 and 5.1, uncheck Integrated Windows Authentication and click OK.
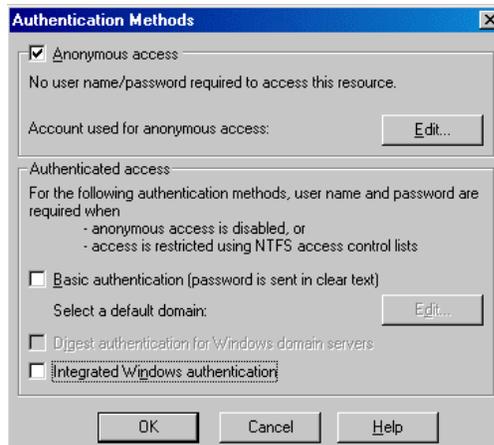
21. Click OK on the properties window.

22. Close the console window. If prompted to save console settings, click Yes.

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

Step 5: Configure ArcIMS

Perform the following activities to set up your ArcIMS environment:

Increasing memory parameters for Java VM

Setting your Windows NT PATH variable

Setting your Windows 2000 PATH variable

Setting your Windows XP PATH variable

Using ArcIMS with a proxy server

Increasing memory parameters for Java VM

ESRI recommends that you increase the Java VM memory parameters to support ArcIMS Manager and the Java Viewers.

Use memory amounts that are relative to the total amount of computer memory. If you have 256 MB of total RAM, do not allocate the entire amount. The -Xms value specifies the minimum amount of memory that is used by the Java VM. The -Xmx value specifies the maximum amount of memory that the Java VM can use. When you change the -Xmx value, it must be less than the total available virtual memory. On Windows, total virtual memory consists of the RAM memory plus the pagefile memory. You can find this value in the Windows Task Manager, on the Performance tab, under Commit Charge Total.

1. Choose Start | Settings | Control Panel | Java Plug-in.

   Note: On Windows XP, you may need to switch to Classic View to see the Java Plug-in. Click the box in the upper left on the Control Panel to Switch to Classic View.

2. On the Basic tab, set the required memory parameters in the field named Java Run Time Parameters:

   ```
   javaw.exe –Xms<initial memory>m –Xmx<maximum memory>m
   ```

   For example: javaw.exe -Xms10m -Xmx256m

3. Click Apply and close the window.

Setting your Windows NT PATH variable

In order to use the JAI libraries from Sun, you need to edit your PATH variable.

1. Choose Start | Settings | Control Panel and double-click System.

2. Click the Environment tab.

3. In the System Variables window, click PATH (or create it if it doesn't already exist).

4. Click in the Value window and add to the end of the value:

   ```
   ;<drive>:\Program Files\Javasoft\Jre\1.3.1\bin
   ```

5. Click OK and close the Control Panel window.

Setting your Windows 2000 PATH variable

In order to use the JAI libraries from Sun, you need to edit your PATH variable.

1. Choose Start | Settings | Control Panel and double-click System.

2. Click the Advanced tab.

3. Click Environment Variables.

4. In the System Variable window:

   a. Click your system variable PATH.

   b. Click Edit and add to the end of the value:

```
;<drive>:\Program Files\javasoft\jre\1.3.1\bin
```
5. Click OK and close the Control Panel window.

Setting your Windows XP PATH variable

In order to use the JAI libraries from Sun, you need to edit your PATH variable. If necessary, click the box in the upper left on the Control Panel to Switch to Category View.

1. Choose Start | Control Panel | Performance and Maintenance | System.

2. Click the Advanced tab.

3. Click Environment Variables.

4. In the System Variable window:

   a. Click your system variable PATH.

   b. Click Edit and add to the end of the value:
   ```
   ;<drive>:\Program Files\javasoft\jre\1.3.1\bin
   ```

5. Click OK and close the Control Panel window.

Using ArcIMS with a proxy server

Use the Proxy Server properties to specify whether your local area network (LAN) uses a proxy server to connect to the Internet. A proxy server is a computer on your LAN that connects to the Internet without compromising the security of your internal network. If you are not sure how your LAN connects to the Internet, contact your system administrator.

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

- If your LAN uses a proxy server to connect to the Internet for HTTP protocol requests:

  1. Find and open the aimsproxy.properties file in a text editor.
  2. Set the HostName and Port of the proxy server to use. For example:
     ```
     httpproxyhost=proxy.esri.com
     httpproxyport=5000
     ```

- If your LAN connects to the Internet via a proxy server using a secure HTTP protocol (HTTPS):

  1. Find and open the aimsproxy.properties file in a text editor.
  2. Set the HostName and Port of the https proxy server to use. For example:
     ```
     httpsproxyhost=httpsproxy.esri.com
     httpsproxyport=5010
     ```

  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.

  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 s olving them.

- I already have JRE installed, but the ArcIMS install wizard prompted me to install JRE.

- During ArcIMS installation, at the Windows Services Authorization screen, I type in the domain\username and password of a user with administrator rights, but I get a message that the user does not have services login privileges and ArcIMS services will not start.

- ArcIMS services don't start.

- I can't log in to ArcIMS Manager or ArcIMS Administrator, or ArcIMS Diagnostics fails when testing ArcIMS Application Server.

- I have a firewall. How do I get ArcIMS to work through the firewall?

- I can't log in to ArcIMS Administrator.

- I'm having problems getting ArcIMS to work with ServletExec and Apache.

- I'm having problems getting ArcIMS to work with ServletExec and IIS.

- Tomcat will not start when I run startup.bat from \<Tomcat Installation Directory>\bin.

- After logging out and logging back in, my Jakarta-Tomcat service is not starting up automatically.

- I'm having trouble installing Tomcat as a service.

- When testing Apache with Tomcat, if I type http://localhost/servlets, I get a 'Page not found' error, and the ArcIMS Diagnostics Servlet Connector test fails.

- I receive the following error message when trying to open an ArcIMS Web site in my Web browser: "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."

- I installed the Java 2 SDK and now ArcIMS Manager doesn't work.

_____

Problem: I already have JRE installed, but the ArcIMS install wizard prompted me to install JRE.
Solution:

The installation checks in the registry under SOFTWARE\JavaSoft\Java Runtime Environment\1.3. If the value of JavaHome is empty or does not contain 1.3.1, then you'll be prompted to install this JRE version. You can either browse to an existing version of JRE or install JRE 1.3.1. If you choose to browse, make sure you browse to a location that has bin and lib directories. For example, C:\Program Files\JavaSoft\Jre\1.3.

After the installation, choose Start | Settings | Control Panel | Java Plug-in. Click the Advanced tab. In the Use Java Plug-in Default dropdown list, choose the location you browsed to during ArcIMS installation. The Java Plug-in must use the JRE that has the ArcIMS JAR files.

Problem: During ArcIMS installation, at the Windows Services Authorization screen, I type in the domain\username and password of a user with administrator rights, but I get a message that the user does not have services login privileges and ArcIMS services will not start.
Solution:

You need to check the "log on as a service" rights for that user. Go to Start | Programs | Administrative Tools | User Manager and select User Rights from the Policies menu. Enable the Show Advanced User Rights check box on the lower left. From the Rights dropdown box, select "Log on as a service". Make sure this user is listed in the Grant To box. If not, add the user.

Then on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools |

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Component Services and click Services on the Tree tab. Highlight each ArcIMS service, click Startup, and add the correct username/password. Start ArcIMS Application Server, ArcIMS Monitor, and ArcIMS Tasker in that order.

Problem: ArcIMS services don't start.
Solution:
1. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

2. Highlight ArcIMS Tasker, ArcIMS Monitor, and ArcIMS Application Server individually and click Startup for each one.

3. Verify that the Account and Password have administrator privileges and the password is correct for that account.

4. Start ArcIMS Application Server, ArcIMS Monitor, and ArcIMS Tasker in that order.

Problem: I can't log in to ArcIMS Manager or ArcIMS Administrator, or ArcIMS Diagnostics fails when testing ArcIMS Application Server.
Solution:
1. Choose Start | Programs | ArcGIS | ArcIMS | ArcIMS Diagnostics. The ArcIMS Diagnostics displays.

2. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.

3. Click Test to test the ArcIMS Servlet Connector and ArcIMS Application Server.

   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.

4. On Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

5. Stop ArcIMS Tasker, ArcIMS Monitor, ArcIMS Application Server, and your Web server and restart them in reverse order.

6. Verify that your servlet engine is working by opening your Internet Explorer Web browser and typing:

   iPlanet: First, copy SimpleServlet.class from <drive>:\iPlanet\Servers\plugins\samples\servlets\servlets\Simple1 to <drive>:\iPlanet\Servers\docs\servlet

   Then, open your Web browser and type http://<localhost>/servlet/SimpleServlet (case sensitive).

   If you can't ping iPlanet, on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab. Stop your iPlanet Web server.

   Now turn off the iPlanet Java interpreter:

   a. In your Web browser, type `http://<localhost>:<serveradminport>`. For example, http://esri:10000

   b. Type your user name and password and click OK at the bottom of the screen.

    c. Select your Server from the dropdown list and click Manage.

    d. Click the Java tab in the navigation bar along the top.

    e. At the Enable/Disable Java screen, uncheck Enable Java Globally and Enable Java for class defaultclass to deactivate the Java interpreter. Click OK.

    f. Now on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab. Start your iPlanet Web server. Then try the queries again.

    g. If successful, then repeat Steps 5a–e to reactivate the Java interpreter.

JRun: http://<localhost>/demo/servlets (case sensitive)

Oracle Application Server: http://<localhost>/servlets/IsItWorking

ServletExec: http://<localhost>/servlet/TestServlet (case sensitive)

If you can't ping ServletExec, on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab. Stop and Start your Web server. Then try the query again.

Tomcat for Apache: http://<localhost>/servlet/SnoopServlet (case sensitive)

WebSphere: http://<localhost>/servlet/HelloWorldServlet

7. Choose Start | Programs | ArcGIS | ArcIMS | ArcIMS Diagnostics. The ArcIMS Diagnostics displays.

8. Select your Web server protocol, type your Web server name including domain, and type your port number. The default is 80.

9. Click Test to test the ArcIMS Servlet Connector and ArcIMS Application Server. The test should be successful.

10. If you're still not able to log in, do the following before you call ESRI Technical Support:

    a. Navigate to \Winnt\Profiles\All Users\Start Menu\Programs\ArcGIS\ArcIMS on Windows NT or, on Windows 2000 or Windows XP, \Documents and Settings\All Users\Start Menu\Programs\ArcGIS\ArcIMS.

    b. Right-click Administrator and choose Properties.

    c. Click the Shortcut tab.

    d. Change the Target entry from

```
"<drive>:\Program Files\JavaSoft\JRE\1.3.1\bin\javaw.exe"
com.esri.aims.admin.console.AdminMain
```

    to

```
"<drive>:\Program Files\JavaSoft\JRE\1.3.1\bin\java.exe"
com.esri.aims.admin.console.AdminMain
```

    and click OK.

When you start Administrator, the command prompt will display, and error messages will be written to the window. This helps track down the problem and is useful to ESRI Technical Support.

Installing ArcIMS 4.0 on Microsoft Windows

Problem: I have a firewall. How do I get ArcIMS to work through the firewall?

Solution:

If you need to make client requests and server responses go through a firewall, there are two issues to consider:

1. If your Web server is outside your firewall, the port on which the Application Server is listening (connector port, default 5300) needs to be open through the firewall to the Web server. The connector port is set during ArcIMS installation, and the firewall software can be used to open the connection to that port. Note that the Registry Port (set during ArcIMS install, default 5353) allows communication between the ArcIMS Spatial Server, Virtual Servers, and ArcIMS Application Server and should not be an issue since they are on the same side of the firewall.

2. Anywhere the hostname appears, it must be fully qualified including the computername.domainnamefor example, mycomputer.esri.com. This includes entries in the aimsdefaults.properties file or Registry entry for ArcIMS Monitor. In this case, you will need to stop the following services: ArcIMS Tasker, ArcIMS Monitor, and ArcIMS Application Server and then start them in reverse order before you begin using ArcIMS.

Problem: I can't log in to ArcIMS Administrator.

Solution:

If you can't log in to ArcIMS Administrator, try the following:

1. Make sure your aimsdefault.properties file settings have the correct hostname variable. This should be the computer name or domain name depending on the system configuration.

2. Make sure your *.jar files are in the right place:

   \Program Files\javasoft\JRE\1.3.1\lib\ext.

3. Check your Microsoft VM version. To do this, open a command window and type the following at the command prompt:

   `jview`

   You need 3186 or higher.

4. Check which Java VM the JRE plug-in is using. The plug-in should be the one with ArcIMS JAR files installed in the JavaHome directory. To check the location of JavaHome, open a command prompt, type the following:

   `regedit`

   Go to HKEY_LOCAL_MACHINE\SOFTWARE\JavaSoft\Java Plug-in\1.3.1, and check the entry for JavaHome. If it is not \Program Files\JavaSoft\JRE\1.3.1 \lib\ext, proceed to Step 5.

5. Choose Start | Settings | Control Panel | Java Plug-in. Click the Advanced tab. Make sure that JRE is set to the JRE in \Program Files\JavaSoft\JRE\1.3.1\lib\ext.

Problem: I'm having problems getting ArcIMS to work with ServletExec for Apache.

Solution:

See the ServletExec Web site at http://www.newatlanta.com/.

Problem: I'm having problems getting ArcIMS to work with ServletExec for IIS.

Solution:

See the ServletExec Web site at http://www.newatlanta.com/.

Installing ArcIMS 4.0 on Microsoft Windows

Problem: Tomcat will not start when I run startup.bat from \<Tomcat Installation Directory>\bin.

Solution:

Make sure you have set your Tomcat_Homeand Java_Home at Control Panel | System | Environment. Reboot after setting these. Also, make sure you run this from the command prompt.

Problem: After logging out and logging back in, my Jakarta-Tomcat service is not starting up automatically.

Solution:

This is a known issue with JDK 1.3.

Problem: I'm having trouble installing Tomcat as a service.

Solution:

Make sure you set your Tomcat_Ho meand Java_Home in the wrapper.properties file located at \<Tomcat Installation Directory>\conf. If you don't have the wrapper.properties file, you can find it at <ArcIMS Installation Directory>\common or at www.apache.org.

Make sure you have jk_nt_service file in the \<Tomcat Installation Directory>\bin directory. This file can be downloaded from the Apache Jakarta Web site at http:\\www.apache.org.

Problem: When testing Apache with Tomcat, if I type http://localhost/servlets, I get a 'Page not found' error, and the ArcIMS Diagnostics Servlet Connector test fails.

Solution:

If you installed Tomcat as a service, find and open your wrapper.properties file and, if the following line is not there, add it:

```
Wrapper.class_path=(wrapper.tomcat_home)\lib\xml.jar
```

Save the file.

Note: If you can't find the xml.jar file on your system, install Tomcat 3.2 from the Apache Jakarta Web site at http:\\www.apache.org.

Then, on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and click Services on the Tree tab; on Windows XP, choose Start | Control Panel | Performance and Maintenance | Administrative Tools | Component Services and click Services on the Tree tab.

Stop and start Apache and Jakarta.

Problem: I receive the following error message when trying to open an ArcIMS Web site in my Web browser:

"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."

Solution:

Make the indicated changes to iPlanet.

Problem: I installed the Java 2 SDK and now ArcIMS Manager doesn't work.

Solution:

You need to copy the JAR files from your previous JRE location, for example, \Program Files\JavaSoft\JRE\1.3x\lib\ext, to the location of the new JRE installed with the SDK, for example, \Program Files\JavaSoft\jre\1.3.1_02\lib\ext.

Uninstalling ArcIMS 4.0

Note: To review your installation settings, refer to the log file created during the ArcIMS installation located at <ArcIMS Installation Directory>\Common\InstallSummary.log.

1. To uninstall ArcIMS, 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.

   Note: If you are using iPlanet Web server, on Windows NT, choose Start | Settings | Control Panel | Services; on Windows 2000, choose Start | Settings | Control Panel | Administrative Tools | Component Services and stop your Web server.

2. Click ESRI ArcIMS 4.0 and click Add/Remove on Windows NT or Change/Remove on Windows 2000 or Windows XP.

3. Accept the default of all components or choose specific components to uninstall and click Uninstall.

4. Close the windows.

5. ArcIMSFolders.sez and ArcIMSSite.sez (configuration file for saved services) are files containing your ArcIMS preferences. They aren't deleted during the ArcIMS uninstall process. Find and delete these files or back them up for future use.

6. Stop your Web server and servlet engine.

7. Navigate to \Program Files\ArcGIS, or the alternate location you selected during installation, and delete the ArcIMS directory.

8. Navigate to your ArcIMS Working Directory, usually \ArcIMS\Axl, and delete the metadata directory.

9. Navigate to \ArcIMS\Website or the alternate location you selected for your Website directory during installation and delete the htmlviewer, install, and javaviewer directories.

10. Navigate to your servlets directory and verify that the com directory, Esrimap_prop, ServletConnector_Res.properties, ServletConnector_Res_en_US.properties, and WMSEsrimap_prop files have been deleted.

    For example:

    Apache with ServletExec: \Program Files\New Atlanta\ServletExec AS\se-<instance-name>\Servlets

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

    IBM HTTP Server with WebSphere 3.5.5: \WebSphere\AppServer\servlets

    iPlanet: com directory from \iPlanet\Servers\docs\servlet; Esrimap_prop, ServletConnector_Res.properties, ServletConnector_Res_en_US.properties, and WMSEsrimap_prop files from \iPlanet\Servers\https-<localhost>.<domain>.com\config; Manager directory from \iPlanet\Servers\docs

    Microsoft IIS with JRun: \Program Files\Allaire\Jrun\servlets

    Microsoft IIS with ServletExec: \Program Files\Unify\ServletExec ISAPI\Servlets

    Microsoft IIS with Tomcat: <Tomcat Installation Directory>\Webapps\ROOT\WEB-INF\classes; esriadmin and MetadataExplorer directories from <Tomcat Installation Directory>\Webapps, if applicable

    Oracle Application Server: \Oracle\iAS\Apache\Jserv\servlets

    WebLogic: \bea\wlserver6.1\config\mydomain\applications\DefaultWebApp\WEB-INF\classes; Manager directory from \bea\wlserver6.1\config\mydomain\applications\DefaultWebApp

11. Go to Program Files\JavaSoft\Jre\1.3.1\bin and \lib\ext. If these folders contain any ArcIMS JAR files or DLLs, delete them:

    - **ext directory:** arcims_admin.jar, arcims_admincore.jar, arcims_aej.jar, arcims_author.jar,

arcims_designer.jar, arcims_jconnect.jar, arcims_resadmin.jar, arcims_resaej.jar, arcims_resauthor.jar, arcims_resdesigner.jar, esri_mo10.jar, esri_mo10res.jar, jai_codec.jar, jai_core.jar, jaxp.jar, jcert.jar, jnet.jar, jsde82_sdk.jar, jsde82_sdkres.jar, jsse.jar, mlibwrapper_jai.jar, and parser.jar

Note: If you installed SDE Administrator, you also need to delete jsde82_sdk.jar and jsde82_sdkres.jar.

Note: If you installed the ArcSDE812 update for ArcIMS, delete the \bak31 directory in the lib\ext directory.

Note: If you have ArcExplorer 4.0—Java Edition installed, do not delete the JAR files.

- **bin directory:** mlib_jai.dll and mlib_jai_mmx.dll

    Note: All *jai*.* files are part of Sun's JAI package but are distributed with ArcIM S to facilitate the display of images.

12. Start your Web server and servlet engine.

13. Clear the jar_cache and any TLB files from your temp directory.

14. Delete your Temporary Internet files from your Web browser.

15. Delete aimsclient.properties, aimsdefault.properties, and aimsproxy.properties (if applicable) from your user profile.

    Note: If you have ArcExplorer 4.0—Java Edition installed, **do not** delete the aimsclient.properties file.

16. Reboot your computer to clear your system.

Installing ArcIMS Remote Manager

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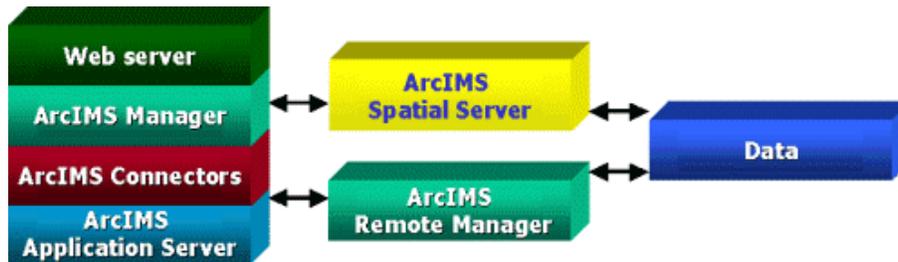
Note: Remote Manager is supported on Windows only.

Note: You must uninstall ArcIMS Manager 3.1 and ArcExplorer 3.1—Java Edition before you install ArcIMS Manager.

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

- Data directory

- AXL directory

- Website directory

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

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

Now you are ready to test the ArcIMS Remote Manager.

Setting up the ArcIMS Host computer for ArcIMS Remote Manager

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

If you use the IIS or iPlanet Web server, you also must make changes to your Web server.

Sharing network drives

Configuring your IIS Web server

Configuring your iPlanet Web server

Sharing network drives for Remote ArcIMS Manager

In order for the remote ArcIMS Manager to access the Output, Website, and Data directories from the ArcIMS Host, you need to share these directories and later establish a UNC connection to them from the remote computer.

The shared drives establish the following access:

- They permit the Remote Computer to access the Data, Output, and Website directories.

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

Installing ArcIMS 4.0 on Microsoft Windows

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

1. Go to Start | Programs | Windows NT Explorer on Windows NT; Start | Programs | Accessories | Windows Explorer on Windows 2000; or Start | All Programs | Windows Explorer on Windows XP.

2. Navigate to C:\ArcIMS.

3. Right-click the directory and click Sharing on Windows NT and Windows 2000 or Sharing and Security on Windows XP.

4. Click Shared As and click OK on Windows NT or click Share this Folder and click OK on Windows 2000 and Windows XP.

5. Share your <drive>:\GISData directory in the same manner.

Now you may install ArcIMS Manager on a remote computer.

Configuring your IIS Web server for Remote ArcIMS Manager

The following instructions are for IIS only.

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

1. For IIS 4.0, choose Start | Programs | Windows NT Option Pack | Microsoft Internet Information Server | Internet Service Manager.

   For IIS 5.0, choose Start | Settings | Control Panel | Administrative Tools | Internet Services Manager.

   For IIS 5.1, choose Start | Internet Information Services. Expand your local host folder and expand Web sites.

2. Right-click the Website virtual directory and click Properties.

3. For IIS 4.0, click the Virtual Directory tab and for the Permis sions setting click Script.

   For IIS 5.0 and IIS 5.1, click the Virtual Directory tab and for the Execute Permissions setting click Script only.

   Note: This setting should not be set to Execute.

4. Click OK and close the console window.

Configuring your iPlanet Web server for ArcIMS Remote Manager

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

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. Select the Edit option and click OK. Click OK again.

6. On the Global Mime Types list, find `Content-Type: application/octet-stream File Suffix: bin`

7. Click Edit and add `,exe` to the File Suffix.

8. Click Change MIME Type and OK to update the record.

9. Scroll down and find `Content-Type: magnus-internal/cgi File Suffix:`

```
cgi,exe,bat
```

10. Click Edit and Remove exe, from the File Suffix.

11. Click Change MIME Type and OK to update the record.

12. Click Apply in the upper right corner.

13. Select Apply Changes to stop and start the Web server.

14. Exit iPlanet.

Installing ArcIMS Manager on a remote computer

Now you are ready to install ArcIMS Manager on a computer remote from your ArcIMS Host.
Note: You must uninstall ArcIMS Manager 3.1 and ArcExplorer 3.1—Java Edition before you install ArcIMS Manager.
Perform the following steps on the remote computer:

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

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

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

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

2. At the Security Warning screen for Java Plug-in 1.3, click Yes.

3. At the Locale selection screen, choose a language and click Install.

4. At the Software License Agreement screen, click Yes.

5. At the Select Browser screen, make sure Internet Explorer is selected and click Next. JRE 1.3.1 is now installed on the computer.

6. At the Security Warning screen, click Grant this Session.

7. Click Start Installer for Windows.

8. At the language screen, choose a language and click OK.

9. At the Installation Directory screen, click Next.

10. At the Choose Java Virtual Machine screen, click Install.

11. At the Protocol Information screen, click the button next to the protocol used by your ArcIMS Host.

12. At the ArcIMS Host Information screen, enter your host information. This should be the same host name in the URL in the browser. Click Next.

13. At the Installation Successful screen, click Done.

14. Close the browser.

Now set up ArcIMS Manager on the remote computer.

Setting up ArcIMS Manager on the remote computer

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

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

1. Find the aimsdefaults.properties file. Typically it is in the user's Profiles directory.
2. Open the file in a text editor.
3. For the following properties, replace each occurrence of <ArcIMS Host> with the name of your ArcIMS Host computer, for example,

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

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

   ```
   WebSiteDir=//<ArcIMS Host>/ArcIMS/Website
   ```

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

   Note: You may need to add the WebSiteDir property.

5. Save and close the file.

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

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

Now you are ready to test ArcIMS Remote Manager.

Testing ArcIMS Remote Manager

To test ArcIMS Remote Manager:

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

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

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

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

Testing ArcIMS Author

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

   Note: If you receive an error stating 'Unable to add <name of map file>', check to ensure that the data

path within the map file has been modified to reflect a UNC path name.

10. Close ArcIMS Manager.

Testing ArcIMS Designer

1. Open ArcIMS Remote Manager.

2. Type your username and password.

3. Select Design Web site.

4. Follow the instructions in the wizard to create a Web site.

5. Open a browser to view the Web site.

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

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

Troubleshooting tips for ArcIMS Remote Manager

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

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

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

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

Installing ArcIMS Viewer

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

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

Note: You must uninstall 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.

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

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

2. Add $AEJHOME/lib to your LD_LIBRARY_PATH in your .cshrc file:

   `setenv LD_LIBRARY_PATH $AEJHOME/lib:$LD_LIBRARY_PATH`

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

Setting up ArcExplorer—Java Edition on a remote UNIX computer

Intranet and Internet clients

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

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

```
setenv AEJHOME <ArcExplorer Installation Directory>/aej40exe
```

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

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

or

```
alias aejava $AEJHOME/bin/aejava
```

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

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

4. Save and close the file.

5. Source your .cshrc file:

```
source .cshrc
```

6. To start ArcExplorer—Java Edition, type:

```
aejava
```

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

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

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

Installing ArcIMS Viewer on IBM AIX

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

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

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

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/javaplugin.a /<Netscape
    Installation Directory>/plugins
    ```

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

Installing ArcIMS Viewer on a remote IBM AIX computer

Internet clients only

1. Once you have installed JRE, close your browser to clear the cache and reopen it.

2. Type the URL to the ArcIMS Web site:

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

3. At the ESRI ArcIMS Viewer screen, click Download installer for Unix.

4. In the Save As window, select a location to save the Viewer installer: AEJava.bin. Click OK.

5. Make sure that AEJava.bin has execute permissions. If not, type:

    ```
    chmod 755 AEJava.bin
    ```

6. Execute the Viewer installer:

    ```
    ./AEJava.bin
    ```

7. At the language screen, choose a language and click OK.

8. At the Location of JRE screen, choose the location where you installed JRE 1.3. This should be the same as what your $JAVA_HOME variable is set to in step 3 of Installing JRE 1.3 on a remote computer. Click Next.

Installing ArcIMS 4.0 on Microsoft Windows

> **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:
   ```
   aejava
   ```

Installing ArcIMS 4.0 on Microsoft Windows

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.

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.

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:

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

Programs on Windows XP.

2. Click ESRI ArcIMS Viewer and click Add/Remove on Windows NT or Change/Remove on Windows 2000 or Windows XP.

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

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

1. Type the URL to the ArcIMS Web site:

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

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

2. At the Security Warning screen for Java Plug-in 1.3, click Yes.

3. At the Locale selection screen, click Install.

4. At the Java 2 Runtime Environment Software License Agreement screen, click Yes.

5. At the Choose Destination Location screen, click Next. JRE 1.3.1 is installed on your computer, and the ArcIMS Viewer installation begins.

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

6. Install on Demand displays, if Java Virtual Machine is needed. Click Download.

7. A Security Warning for Microsoft Virtual Machine displays. Click Yes.

8. At the Security Warning screen for InstallAnywhere Web Installer, click Yes.

9. Click Start Installer for Windows.

10. At the language screen, choose English and click OK.

11. At the Installation Directory screen, click Next.

12. At the Location of JRE screen, highlight the correct path and click Install. If you do not highlight the path, the ArcIMS Viewer installation will not be complete.

13. At the Installation Complete screen, click Done.

14. Close your browser to clear the cache and reopen it.

15. Type the URL to the Web site:

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

Now you can access the ArcIMS Web site.

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

Uninstalling ArcIMS Viewer

To uninstall ArcIMS Viewer:

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

2. Click ESRI ArcIMS Viewer and click Add/Remove on Windows NT or Change/Remove on Windows

2000 or Windows XP.

Installing ArcIMS 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 remo te 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.

2. ESRI recommends that you increase the Java VM memory parameters. Open the Java Plug-in Control Panel and set the required memory parameters in the field named Java Run Time parameters to

    ```
    -Xms10m -Xmx256m
    ```

    and click Apply.

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

3. Execute the JRE script for Solaris.

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

4. Configure JRE 1.3:

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

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

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

    ```
    setenv NPX_PLUGIN_PATH <JRE Installation
    Directory>/plugin/sparc/ns4
    setenv NPX_JRE_PATH <JRE Installation Directory>
    ```

    c. Source the .cshrc file:

    ```
    source .cshrc
    ```

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

Installing ArcIMS Viewer on a remote Sun Solaris computer

Internet clients only

1. Once you have installed JRE and configured JPI, close your browser to clear the cache and reopen it.

2. Type the URL to the ArcIMS Web site:
    ```
    http://<hostname>/Website/<name>/default.htm
    ```

3. At the ESRI ArcIMS Viewer screen, click Download installer for Unix.

4. In the Save As window, select a location to save the Viewer installer: AEJava.bin. Click OK.

5. Make sure that AEJava.bin has execute permissions. If not, type:
    ```
    chmod 755 AEJava.bin
    ```

6. Execute the Viewer installer:
    ```
    ./AEJava.bin
    ```

7. At the language screen, choose a language and click OK.

8. At the Location of JRE screen, choose the location where you installed JRE 1.3. This should be the same as what your $NPX_JRE_PATH variable is set to in Step 4 of Installing JRE 1.3 on a remote Solaris computer. Click Next.

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

9. At the Introduction screen, click Next.

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

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

11. At the Install Complete screen, click Done.

12. Close the browser to clear the cache, and reopen it.

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

Intranet clients only

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

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

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

2. Add $AEJHOME/lib to your LD_LIBRARY_PATH in your .cshrc file:

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

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

Setting up ArcExplorer—Java Edition on a remote UNIX computer

Intranet and Internet clients

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

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

    ```
    setenv AEJHOME <ArcExplorer Installation Directory>/aej40exe
    ```

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

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

    or

    ```
    alias aejava $AEJHOME/bin/aejava
    ```

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

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

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.