

Artix™

Installation Guide

Version 3.0, October 2005

Making Software Work Together™

IONA Technologies PLC and/or its subsidiaries may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this publication. Except as expressly provided in any written license agreement from IONA Technologies PLC, the furnishing of this publication does not give you any license to these patents, trademarks, copyrights, or other intellectual property. Any rights not expressly granted herein are reserved.

IONA, IONA Technologies, the IONA logo, Orbix, Orbix Mainframe, Orbix Connect, Artix, Artix Mainframe, Artix Mainframe Developer, Mobile Orchestrator, Orbix/E, Orbacus, Enterprise Integrator, Adaptive Runtime Technology, and Making Software Work Together are trademarks or registered trademarks of IONA Technologies PLC and/or its subsidiaries.

Java and J2EE are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.

CORBA is a trademark or registered trademark of the Object Management Group, Inc. in the United States and other countries. All other trademarks that appear herein are the property of their respective owners.

IONA Technologies PLC and/or its subsidiaries make no warranty of any kind to this material, including, but not limited to, the implied warranties of merchantability, title, non-infringement and fitness for a particular purpose. IONA Technologies PLC and/or its subsidiaries shall not be liable for errors contained herein, or for exemplary, incidental, special, pecuniary or consequential damages (including, but not limited to, damages for business interruption, loss of profits, or loss of data) in connection with the furnishing, performance or use of this material.

COPYRIGHT NOTICE

No part of this publication may be reproduced, republished, distributed, displayed, stored in a retrieval system or transmitted, in any form or by any means, photocopying, recording or otherwise, without prior written consent of IONA Technologies PLC. No third party intellectual property right liability is assumed with respect to the use of the information contained herein. IONA Technologies PLC and/or its subsidiaries assume no responsibility for errors or omissions contained in this publication. This publication and features described herein are subject to change without notice.

Copyright © 1999-2006 IONA Technologies PLC. All rights reserved.

All products or services mentioned in this publication are covered by the trademarks, service marks, or product names as designated by the companies who market those products.

Updated: 21-Feb-2006

10012539

Contents

Preface	v
What is Covered in this Book	v
Who Should Read this Book	v
Finding Your Way Around the Library	v
Searching the Artix Library	vii
Online Help	vii
Additional Resources	vii
Document Conventions	viii
Chapter 1 Installation Prerequisites	1
Before You Begin	2
System Requirements	3
Disk Space Requirements	7
Using Artix with Other Products	8
Chapter 2 Installing Artix	11
Running the Artix Installer	12
Installing in GUI Mode	14
Installing in Console Mode	17
Installing in Silent Mode	18
Licensing Artix	21
Setting up the Artix Environment	23
Configuring Eclipse for Artix Designer	25
Installing Artix Designer into an Existing Eclipse Platform	26
Configuring Eclipse for C++ Development	30
Installing Artix with Orbix	31
Running Orbix and Artix applications	34
Chapter 3 Uninstalling Artix	35
Uninstalling Artix Designer	36
Uninstalling on Windows	37
Uninstalling on UNIX	38

CONTENTS

Index

Preface

What is Covered in this Book

This book describes the prerequisites for installing Artix and the procedures for installing Artix on supported systems.

Who Should Read this Book

This guide is intended for all users of Artix.

Finding Your Way Around the Library

The Artix library contains several books that provide assistance for any of the tasks you are trying to perform. The Artix library is listed here, with a short description of each book.

If you are new to Artix

You may be interested in reading:

- Release Notes contains release-specific information about Artix.
- Installation Guide describes the prerequisites for installing Artix and the procedures for installing Artix on supported systems.
- Getting Started with Artix describes basic Artix and WSDL concepts.

To design and develop Artix solutions

Read one or more of the following:

- Designing Artix Solutions provides detailed information about describing services in Artix contracts and using Artix services to solve problems.
- Developing Artix Applications in C++ discusses the technical aspects of programming applications using the C++ API.

- Developing Artix Plug-ins with C++ discusses the technical aspects of implementing plug-ins to the Artix bus using the C++ API.
- Developing Artix Applications in Java discusses the technical aspects of programming applications using the Java API.
- Artix for CORBA provides detailed information on using Artix in a CORBA environment.
- Artix for J2EE provides detailed information on using Artix to integrate with J2EE applications.
- Artix Technical Use Cases provides a number of step-by-step examples of building common Artix solutions.

To configure and manage your Artix solution

Read one or more of the following:

- Deploying and Managing Artix Solutions describes how to deploy Artix-enabled systems, and provides detailed examples for a number of typical use cases.
- Artix Configuration Guide explains how to configure your Artix environment. It also provides reference information on Artix configuration variables.
- IONA Tivoli Integration Guide explains how to integrate Artix with IBM Tivoli.
- IONA BMC Patrol Integration Guide explains how to integrate Artix with BMC Patrol.
- Artix Security Guide provides detailed information about using the security features of Artix.

Reference material

In addition to the technical guides, the Artix library includes the following reference manuals:

- Artix Command Line Reference
- Artix C++ API Reference
- Artix Java API Reference

Have you got the latest version?

The latest updates to the Artix documentation can be found at http://www.iona.com/support/docs.

Compare the version dates on the web page for your product version with the date printed on the copyright page of the PDF edition of the book you are reading.

Searching the Artix Library

You can search the online documentation by using the **Search** box at the top right of the documentation home page:

http://www.iona.com/support/docs

To search a particular library version, browse to the required index page, and use the **Search** box at the top right. For example:

http://www.iona.com/support/docs/artix/3.0/index.xml

You can also search within a particular book. To search within an HTML version of a book, use the **Search** box at the top left of the page. To search within a PDF version of a book, in Adobe Acrobat, select **Edit**|**Find**, and enter your search text.

Online Help

Artix Designer includes comprehensive online help, providing:

- Detailed step-by-step instructions on how to perform important tasks.
- A description of each screen.
- A comprehensive index, and glossary.
- A full search feature.
- Context-sensitive help.

There are two ways that you can access the online help:

- Click the Help button on the Artix Designer panel, or
- Select **Contents** from the Help menu

Additional Resources

The IONA Knowledge Base contains helpful articles written by IONA experts about Artix and other products.

The IONA Update Center contains the latest releases and patches for IONA products.

If you need help with this or any other IONA product, go to IONA Online Support.

Comments, corrections, and suggestions on IONA documentation can be sent to docs-support@iona.com.

Document Conventions

Typographical conventions

This book uses the following typographical conventions:

Fixed width	Fixed width (courier font) in normal text represents portions of code and literal names of items such as classes, functions, variables, and data structures. For example, text might refer to the IT_Bus::AnyType class.
	Constant width paragraphs represent code examples or information a system displays on the screen. For example:
	<pre>#include <stdio.h></stdio.h></pre>
Fixed width italic	Fixed width italic words or characters in code and commands represent variable values you must supply, such as arguments to commands or path names for your particular system. For example:
	% cd /users/YourUserName
Italic	Italic words in normal text represent <i>emphasis</i> and introduce <i>new terms</i> .
Bold	Bold words in normal text represent graphical user interface components such as menu commands and dialog boxes. For example: the User Preferences dialog.

Keying Conventions

This book uses the following keying conventions:

No prompt	When a command's format is the same for multiple platforms, the command prompt is not shown.
ş	A percent sign represents the UNIX command shell prompt for a command that does not require root privileges.
#	A number sign represents the UNIX command shell prompt for a command that requires root privileges.
>	The notation $>$ represents the MS-DOS or Windows command prompt.
···· · ·	Horizontal or vertical ellipses in format and syntax descriptions indicate that material has been eliminated to simplify a discussion.
[]	Brackets enclose optional items in format and syntax descriptions.
{}	Braces enclose a list from which you must choose an item in format and syntax descriptions.
I	In format and syntax descriptions, a vertical bar separates items in a list of choices enclosed in {} (braces).
	In graphical user interface descriptions, a vertical bar separates menu commands (for example, select File Open).

PREFACE

CHAPTER 1

Installation Prerequisites

Before you install Artix 3.0, check the system requirements and familiarize yourself with the steps involved in installing the product.

This chapter discusses the following topics:

Before You Begin	page 2
System Requirements	page 3
Disk Space Requirements	page 7
Using Artix with Other Products	page 8

In this chapter

Before You Begin

Read the release notes

Before installing Artix:

- Visit the IONA Product Documentation web page at: http://www.iona.com/support/docs/artix/3.0/index.xml
- Read the *Artix Release Notes* for late-breaking information on new features, known problems, and other release-specific information.

There may also be updates to this *Installation Guide* available at the Web address above.

Saving your license

You will receive your Artix license file by e-mail. When the e-mail arrives, save the attached license file to a safe location on your hard drive. During installation, the Artix installer prompts for the location of the license file.

System Requirements

Platforms and patches

Artix 3.0 is supported on both Windows and UNIX. Table 1 shows the supported platforms and their required patches and C++ runtimes.

Hardware	Platform	OS Patches and C++ Drivers/Runtimes
x86	Windows 2000	SP3
x86	Windows XP	SP1
x86	Windows Server 2003	
SPARC	Solaris 8	108827-12; 108434-09 (32-bit C++ runtime); 108827-12 (libthread patch)
SPARC	Solaris 8 64-bit	
SPARC	Solaris 9	
SPARC	Solaris 9 64-bit	
SPARC	Solaris 10	
SPARC	Solaris 10 64-bit	
PA-RISC	HP-UX 11	PHSS_25170 (aCC runtime); PHSS_24627 (aCC runtime); PHSS_21075 (varargs.h and +DA2.0W); PHSS_23699 (libcl); PHSS_24303 (dld); PHCO_24148 (libc); PHSS_26559

Hardware	Platform	OS Patches and C++ Drivers/Runtimes		
PA-RISC	HP-UX 11i	PHSS_24638 (aCC runtime); PHCO_24402 (1.0 libc cumulative header file patch 60); PHCO_25452 (1.0 libc cumulative patch 23632); PHSS_24304 (1.0 ld(1) and linker tools cumulative patch 21234)		
x86	Red Hat Linux 8	GCC 3.2 runtime (libstdc++.so.5 and libgcc_s.so[.1])		
x86	Red Hat Linux 9	GCC 3.2 runtime (libstdc++.so.5 and libgcc_s.so[.1])		
x86	Red Hat Enterprise Linux Advanced Server 3.0	GCC 3.2 runtime (libstdc++.so.5 and libgcc_s.so[.1])		
AMD64, EMT64	Red Hat Enterprise Linux Advanced Server 3.0			
AMD64, EMT64	SUSE Linux Enterprise Server 9	SP1		
POWER, PowerPC	AIX 5.2	Fix for IY57576		

 Table 1:
 Supported Platforms (Continued)

Java runtime requirements

The Artix installer allows you either to install a Java virtual machine along with Artix, or to use a previously installed JVM.

You can install the JVM as part of the Java Runtime Environment (JRE) or as part of the Java 2 Platform, Standard Edition (J2SE) Software Development Kit (SDK).

For information on installing J2SE or the required patches, see Sun Microsystems' Java site at http://java.sun.com/j2se.

Table 2 shows the Java requirements for the various supported operating systems.

Operating System	Java Runtime or Development Kit
Windows	JRE 1.4.2_04 or J2SE SDK 1.4.2_04
Solaris	JRE 1.4.2_04 or J2SE SDK 1.4.2_04 and all recommended OS patches
HP-UX	JRE 1.4.2_05 or J2SE SDK 1.4.2_05 and all recommended OS patches
Red Hat Linux 8 and 9	JRE 1.4.2_04 or J2SE SDK 1.4.2_04
Red Hat Enterprise Linux AS 3.0	JDK 1.4.2_04 (32-bit) JDK 1.5.0_03 (64-bit) ¹
SUSE Linux Enterprise Server 9	JDK 1.4.2_04 (32-bit) JDK 1.5.0_03 (64-bit) ¹
AIX	IBM JDK 1.4.2

 Table 2:
 Supported Java Runtimes

1. Both JDKs are required for 64-bit Linux.

Note: Unless you plan to use the JVM that ships with Artix, set your system's JAVA_HOME environment variable to point to your Java SDK (JDK) installation.

Since 64-bit Linux requires both 32-bit and 64-bit compilers, you must set $_{\rm JAVA_HOME_32}$ and $_{\rm JAVA_HOME_64}$ environment variables and point them to the correct JDK.

Java development requirements

If you plan to develop Artix applications in Java or if you want to run any of the Artix Java demos, you must have a Java Development Kit installed on your machine. For each supported operating system, Artix supports the same versions for Java Development Kits as for Java Runtime Environments, as shown in Table 2.

C++ development requirements

If you plan to develop Artix applications in C++ or if you want to run any of the Artix C++ demos, you must have a C++ compiler installed on your machine. Table 3 shows the compilers supported by Artix:

 Table 3:
 C++ Compilers Supported by Artix

Operating System	C++ Compiler
Windows 2000, Windows XP, Windows Server 2003	Microsoft Visual C++ 6.0 SP3 Microsoft Visual C++ 7.1
HP-UX	aCC 3.56
Solaris (32-bit and 64-bit)	Sun C++ 5.5 (part of Sun ONE Studio 8)
AIX	Visual Age 6.0.2 (32-bit)
Red Hat Linux (32-bit)	GCC 3.2
Red Hat Linux (64-bit)	GCC 3.2.3
SUSE Linux (64-bit)	GCC 3.3.3

Artix Designer requirements

The Artix Designer development tool ships as a series of plug-ins to the Eclipse open source framework.

Note: Artix Designer is only available with the Windows and Linux versions of Artix.

The Artix installer installs the Eclipse platform, the Artix Designer plug-ins, and all necessary supporting plug-ins into the following directory:

InstallDir\artix\3.0\eclipse

If you are already an Eclipse user, you can add the Artix Designer plug-ins to your existing Eclipse installation, as described in "Configuring Eclipse for Artix Designer" on page 25.

Disk Space Requirements

Overview

This section lists the approximate amount of disk space in megabytes required to install Artix 3.0.3. In all cases, the calculation includes an Artix-installed JRE.

Artix Standard

The disk requirements for Artix Standard are shown in Table 4.

Table 4: Disk Space in MB used by Artix Standard	ł
--	---

Installation Type	Windows	Solaris	Linux	HP-UX	AIX
Artix Standard Runtime	202	379	317	535	524
Artix Standard Development and Runtime	438	429	492	644	644
Artix Standard Development and Runtime with SOAPScope	458	n/a	n/a	n/a	n/a

Artix Advanced

The disk requirements for Artix Advanced are shown in Table 5.

Table 5:	Disk Space in	MB used by Artix	Advanced
----------	---------------	------------------	----------

Installation Type	Windows	Solaris	Linux	HP-UX	AIX
Artix Advanced Runtime	209	394	328	560	558
Artix Advanced Development and Runtime	454	450	509	681	637
Artix Advanced Development and Runtime with SOAPScope	474	n/a	n/a	n/a	n/a

Temporary space

You will also need approximately 30 MB of temporary work space for the installer.

On UNIX, if the required temporary space is not available on /tmp, you can specify a different partition for the Artix installer by setting the IATEMPDIR environment variable. For example: IATEMPDIR=/local2; export IATEMPDIR.

Using Artix with Other Products

This section outlines the Artix support for third-party products and protocols. This information helps you plan for running some of the Artix demos and examples.

This section includes important information on installing Artix on a machine that hosts other IONA products.

Messaging Artix supports the following messaging product versions: IBM WebSphere MQ 5.3 • **BEA Tuxedo** 6.5 on Windows and HP-UX • 8.1 on all supported platforms except AIX ٠ TIBCO Rendezvous 7.2 . SonicMQ 5.x, 6.x Transports Artix supports these transports: • SOAP 1.1 • IIOP 1.1 and 1.2 . HTTP Application servers The Artix J2EE Connector supports the following application servers: • JBoss 4.0.1 ٠ BEA WebLogic 8.1 SP3 ٠ IBM WebSphere 5.1 Security Artix supports the following security products and protocols: • SiteMinder 4.6.1, 5.5

- Kerberos 5
- LDAP 3.0

8

Web services	 Artix supports these web services products and protocols: Apache Axis 1.2 RC3 jUDDI 0.9rc3
Artix and Microsoft .NET	Artix ships with an assembly that developers can use to build interactions between Artix and Microsoft .NET. The assembly provides a set of helper libraries that facilitate interaction between the Artix session manager and locator services, and an IS2 Kerberos adapter, using Microsoft Active Directory.
	The Microsoft environments supported for .NET integration are:
	 Development environment: Visual Studio .NET 2003
	Runtime environment: .NET Framework 1.1
	 Operating systems: Windows 2000, Windows XP, and Windows Server 2003
	For further information, see the <i>Artix and .NET</i> technical note on the Artix Tech Zone at http://www.iona.com/devcenter/artix/notes.htm.
Installing Artix with other IONA products	If you have another IONA product installed on the machine where you are installing Artix 3.0, remember the following:
	 Do not install Artix 3.0 under the same directory tree as an existing Artix installation. Either uninstall the existing version, or install Artix 3.0 under a separate directory structure.
	• Do not install Artix 3.0 under the same directory tree as any other IONA product, except Orbix 6.2.
	• Do not allow the Artix installer to set or update the IT_PRODUCT_DIR or PATH environment variables.
	• If you are installing Artix 3.0 on the same machine as Orbix 6.2, first read "Installing Artix with Orbix" on page 31.

CHAPTER 1 | Installation Prerequisites

CHAPTER 2

Installing Artix

This chapter describes how to install Artix.

In this chapter

This chapter discusses the following topics:

Running the Artix Installer	page 12
Licensing Artix	page 21
Setting up the Artix Environment	page 23
Configuring Eclipse for Artix Designer	page 25
Installing Artix with Orbix	page 31

Running the Artix Installer

Downloading the installation package

The Artix 3.0 installation package is available for download from the IONA Product Download Center at http://www.iona.com/downloads/. The following installation packages are available:

Platform	Installation Package
Windows	artix_version_Windows.zip
HP-UX	artix_version_HP-UX.tar
Solaris	artix_version_SunOS.tar
Linux	artix_version_Linux.tar
AIX	artix_version_AIX.tar

 Table 6:
 Artix Installation Packages

In this table's installation package names, *version* is replaced by the currently shipping version number. For example: artix_3.0.3_SunOS.tar

Download the package for your platform and extract its contents to a temporary directory on your hard drive.

Installation issues

The following are known issues with the installation of Artix 3.0:

- Artix 3.0 cannot be installed in the same directory tree as Artix 1.x or 2.x. We recommend that you remove any 1.x or 2.x installations from your system before installing Artix 3.0.
- When installing Artix 3.0 on Windows Server 2003, you must run the installer in XP compatibility mode.
- When installing Artix 3.0 on Windows platforms, do not install into a top-level folder whose pathname contains a space. For example, do <u>not</u> install into C:\Program Files\IONA. If you do, the settings of PATH and CLASSPATH in the artix_env.bat file, and the demo build scripts will be incorrect.

Installation modes

You can run the Artix installer in three modes, as described in the following topics:

Installing in GUI Mode	page 14
Installing in Console Mode	page 17
Installing in Silent Mode	page 18

Installing in GUI Mode

Overview	You can run the Artix installer in graphical user interface mode on all supported platforms.		
Running the installer	To install Artix in GUI mode:		
	1. Go to the directory into which you extracted the installation package and run the installer:		
	Windows		
	artix.exe		
	UNIX		
	./artix.bin		
	2. Click Next to begin the installation.		
	 Accept the license agreement by selecting the I accept the terms of the License Agreement button and click Next. 		
	 Enter the name of the folder into which you want to install Artix and click Next. For Windows systems, enter a pathname that contains no spaces, such as C:\IONA 		
	Note: If other IONA products are already installed on your machine, refer to "Installing Artix with other IONA products" on page 9.		
	 On Windows systems, you are prompted to select where on the Start menu to place shortcuts. Select a location and click Next. 		
	 Choose whether you want to install the Standard or Advanced version of Artix. 		
	Note: Be sure you install the version for which you have a license. For details of the differences between the Standard and Advanced		

versions, refer to the Artix features list.

- 7. Choose the type of installation you want and click **Next**:
 - Developer Tools and Runtime
 - Runtime Tools Only (If you choose this option, skip to step 12.)
- 8. Choose to install a JVM or select a previously installed JRE or JDK.

Note: If you are running 64-bit Linux and plan to do 64-bit development, do not allow the Artix installer to install a JVM.

Instead, select your locally installed 64-bit JVM. After Artix is installed, set the $_{\rm JAVA_HOME_32}$ environment variable to point to your 32-bit JVM.

- 9. **UNIX**: Specify the root folder for all of your Artix projects. You must have read and write access for the specified location. Click **Next**.
- 10. **Windows**: Specify whether you want to set the following system environment variables for all users on this system, for the current user only, or not at all. Then click **Next**:
 - IT PRODUCT DIR specifies the root folder of your Artix installation
 - The Artix bin directories are prepended to the PATH variable

WARNING: Do not allow the installer to set these variables if you have other IONA products already installed on your machine.

These environment variables are set for you when you run the artix_env script. You must run this script manually before doing Artix development from the command line, and the script is run automatically when you launch Artix Designer. (See "Setting up the Artix Environment" on page 23 for more details.)

11. **Windows**: You are prompted for permission to install the Mindreef SOAPscope web services diagnostic tool. Make your selection, then click **Next**.

Note: If you already have SOAPscope installed on your machine, do not re-install it.

12. Review your installation information, then click Install.

- 13. When the installer finishes installing the Artix files, it launches the License Installer. Click **Browse** to locate your license file. The licenses are copied into the file *InstallDir*\etc\licenses.txt. If you prefer to install the license later, click **Cancel**. For more information see "Licensing Artix" on page 21.
- 14. Click **Done** to finish the installer.

Installing in Console Mode

Overview	UNIX users can run the Artix installer in console mode if no windowing environment is available. 		
Running the installer			
	1. Go to the directory into which you extracted the installation package and run the installer as follows:		
	./artix.bin -i console		
	 Complete the installation steps, as described in "Installing in GUI Mode" on page 14. 		

Installing in Silent Mode

Overview

Silent installations are installations that run without user intervention. Their main advantage is that they allow you to automate the process of installing on more than one machine.

In a non-silent installation, the installer receives necessary user input in the form of responses to questions posed in a GUI or console.

In a silent installation, you must provide this information in a properties file.

Creating the properties file

First, create a properties file to contain the values for the silent installation. Create the properties file in any text editor and save it as

installer.properties

The properties file should contain the following variables:

Table 7: Properties File Varial	bles
---	------

Variable	Description
USER_INSTALL_DIR	The directory where Artix will be installed on the user's machine
USER_INPUT_WHICH_PRODUCT	Takes one of the following values:• Artix Standard• Artix Advanced
CHOSEN_INSTALL_SET	Set to SWDev to install the Artix development tools and runtime. Set to SWDep to install the Artix runtime only.
SOAPSCOPE_INSTALL_SELECTED	Determines whether Mindreef SOAPscope is installed. Takes a value of Yes or No.

Variable	Description
SET_PATH	Allows you to set the system environment variables IT_PRODUCT_DIR and PATH for all users on this destination machine, just the current user, or not at all.
	Takes the following values:
	Do not set nowAll usersCurrent user
SILENT_ACCEPT_LICENSE_AGREEMENT	Set to true to accept the Artix license agreement
JDK_HOME	The path to the root of a JDK installation.
	This is only set if the chosen VM is a JDK. If it is not a JDK, then this variable will have a blank value.
INSTALLER_UI	Set to silent for a silent installation

 Table 7:
 Properties File Variables (Continued)

Note: When including directory paths in the installer.properties file, be sure to represent file separators in the format \$/\$.

An example of an installer.properties file is shown below:

```
USER_INSTALL_DIR=C:$/$IONA
USER_INPUT_WHICH_PRODUCT=Artix Standard
CHOSEN_INSTALL_SET=SwDev
JDK_HOME=C:$/$j2sdk1.4.2_06
SOAPSCOPE_INSTALL_SELECTED=No
SET_PATH=All users
SILENT_ACCEPT_LICENSE_AGREEMENT=true
INSTALLER_UI=silent
```

Running the installer	To rui 1. 3 2. 1	n the Artix installer in silent mode: Save the installer.properties file to the folder into which you extracted the installation package. From the same folder, run the Artix installer: Windows
		artix.exe UNIX
	When	./artix.bin the Artix installation is complete. you need to install the Artix license
	file. F	or more information see "Licensing Artix" on page 21.
Uninstalling a Silent Installation	As lor folder throug remov	ng as the installer.properties file is present in the installation both installing and uninstalling proceed silently. If you prefer to go gh an interactive uninstallation after installing silently, you must we or rename the installer.properties file.

Licensing Artix

Overview	Before you can begin using Artix, you must install a valid product license.		
	The license is a text file containing keys for the individual components that you have purchased.		
	Typically, you receive your Artix license from IONA by e-mail. Save it to a location on your hard drive and then install it in one of the following ways:		
	 automatically from the Artix installer (See "Installing in GUI Mode" on page 14) 		
	• by running the License Installer script (See below)		
	 by manually copying the license file to the default location (See 		
	"Installing the license file manually" on page 22		
	• by appending the Artix license to an existing IONA product license (See "Merging Artix and Orbix licenses" on page 32)		
Running the License Installer	If you didn't install the license while running the installer, you can use the License Installer script:		
	To install a license using the License Installer:		
	1. Run the License Installer as follows:		
	Windows		
	From the Windows Start menu, select (All) Programs IONA Artix 3.0 License Installer.		
	UNIX		
	Run the following script:		
	InstallDir/artix/3.0/bin/license_installer		
	2. In the Install Artix Licenses dialog box, click the Browse button.		
	3. Browse to the directory where you saved your license file.		
	4. Select the license file and then click Select .		
	5. The license file is added to the default license location. Click OK to close the License Installer.		

Installing the license file manually

You can install your license manually by copying the license file to the default location:

InstallDir\etc

If you want to save the license file to an alternative location on your hard drive, you must set the IT_LICENSE_FILE environment variable to point to the alternate location.

Windows

set IT_LICENSE_FILE=license_file_path

UNIX

export IT_LICENSE_FILE=license_file_path

WARNING: If you have other licensed IONA products installed, setting IT_LICENSE_FILE may cause your existing products to stop working. See "Merging Artix and Orbix licenses" on page 32.

Setting up the Artix Environment

Setting the runtime environment	Before you can run any Artix-based processes you must set up the runtime environment. To set the runtime environment do the following:	
	Windows	
	<pre>> cd InstallDir\artix\3.0\bin > artix_env</pre>	
	UNIX	
	% cd <i>InstallDir</i> /artix/3.0/bin %/artix_env	
	This script modifies the system path to include the Artix bin directory and edits the shared library path to include the Artix shared library directory.	
Setting the environment for Visual C++ 7.1	The default Artix for Windows installation presumes the compiler in use is Visual C++ 6.0. If you are using Visual C++ 7.1 (Visual C++ .NET 2003) as your compiler, you must run a one-time setup command to configure the runtime environment.	
	To set the runtime environment to use Visual $C++7.1$, open a new command prompt session (that is, one in which you have not already run the artix_env script) and run the following:	
	<pre>> cd InstallDir\artix\3.0\bin > artix_env -compiler vc71</pre>	
	Note: You only need to use the <i>-compiler</i> switch one time when switching compilers. Once the compiler version is set, you can run the artix_env script normally, without the switch.	
Resetting the environment for Visual C++ 6.0	To reset the Artix runtime environment for Visual C++ 6.0, run the following from a new command prompt:	
	<pre>> cd InstallDir\artix\3.0\bin > artix_env -compiler vc60</pre>	

Setting the environment for 64-bit development	If you are running 64-bit Linux and plan to do 64-bit development you must set the Artix environment accordingly. To set the runtime environment for 64-bit development, open a command prompt in which you have not already run the <code>artix_env</code> script and run the following:
	<pre>> cd InstallDir\artix\3.0\bin > ./artix_env -bits 64</pre>
	Note: You only need to include the -bits switch once when running the artix_env script.
Verifying the environment	To verify that the Artix environment is correctly set up, open a command prompt and run the following:
	Windows
	cd %IT_ARTIX_BASE_DIR%
	UNIX
	cd \$IT_ARTIX_BASE_DIR

Your working directory should change to the directory where you installed Artix.

Configuring Eclipse for Artix Designer

In this section

Depending on how you have set up your development environment, you may need to do some further Eclipse configuration.

This section contains the following topics:

Installing Artix Designer into an Existing Eclipse Platform	page 26
Configuring Eclipse for C++ Development	page 30

Installing Artix Designer into an Existing Eclipse Platform

Overview	The Artix installer by default installs a new Eclipse framework, including the Artix Designer plug-ins, onto your machine. However, you may want to use Artix Designer with an existing Eclipse platform.
	Note: Artix Designer 3.0 must be used with Eclipse 3.0.2. Eclipse 3.1 is <i>not</i> supported.
	To install and use Artix Designer in your own instance of Eclipse, you must have:
	• Eclipse 3.0.2, including the Java Development Tools (JDT).
	• The C/C++ Development Tools plug-in (CDT), if you plan to develop with C++. CDT 2.1.1 is the latest version supported with Eclipse 3.0.2.
	• A licensed installation of Artix 3.0 on the same machine.
	There are two ways of adding the Artix Designer plug-ins to an existing instance of Eclipse:
	Using the Eclipse update mechanism
	• Extracting the Artix Designer archives
Using the Eclipse update mechanism	By using the Eclipse update mechanism, you can always be sure that you are installing the most up-to-date version of Artix Designer.

To add Artix Designer to Eclipse via the update mechanism:

- 1. In Eclipse, select **Help|Software Updates|Find and Install**. The Install/Update wizard launches.
- Figure 1: The Feature Updates Panel of the Install/Update Wizard

🚟 Install/Update	
Feature Updates Choose the way you want to search for features to install	
 C Search for <u>up</u>dates of the currently installed features ● Search for new features to install 	
< Back Next > Einish	Cancel

- 2. In the Feature Updates panel, select **Search for new features to install** and then click **Next**.
- 3. In the Update Sites to Visit panel, click the **New Remote Site** button.
- 4. Enter the following details in the New Update Site dialog box:
 - Name: Artix Designer
 - URL: http://www.iona.com/downloads/artix/eclipse
- 5. Click OK.

- 6. Select the Artix Designer check box and click Next.
- Figure 2: The Update Sites to Visit Panel

🔚 Install	X
Update sites to visit Select update sites to visit while looking for new features.	
Sites to include in search:	
	New Remote Site
	New Local Site
	New Archived Site
	Edit
	Remove
Ignore features not applicable to this environment	
< <u>B</u> ack	nish Cancel

- 7. In the Search Results panel, select the check boxes beside each of the Artix Designer plug-ins and click **Next**.
- 8. Click **Finish** to begin the install.

The Artix 3.0 installer places an archive file containing the Artix Designer plug-ins onto your hard disk.

To add the Artix Designer plug-ins to your existing Eclipse installation:

1. Browse to the following directory:

ArtixInstallDir/artix/3.0/eclipse

2. Extract the contents of the ArtixDesignerPlugin.zip file to the root of your *EclipseInstallDir* directory.

Extracting from this archive file places files in the following locations:

• The Artix Designer plug-ins are placed in the Eclipse plugins directory.

Extracting the Artix Designer archives

	 Two Eclipse Modeling Framework (EMF) plug-ins are placed in the Eclipse plugins directory. A start_eclipse script is placed at the root of <i>EclipseInstallDir</i>. This script sets the Artix environment and contains additional parameters that launch Eclipse with the Artix Designer plug-ins loaded.
Starting Eclipse	To start Eclipse with Artix Designer loaded:
	1. From a command prompt, change to your <i>EclipseInstallDir</i> directory.
	2. Inspect the start_eclipse script and check for site-specific settings you might need to change. For example, if you installed Artix 3.0 in a directory other than the Artix installer's suggested default, then change all instances in the script of "C:\lona" (Windows) or /opt/iona (Linux) to the directory you specified during installation.
	3. Run the start_eclipse script.
Differences when running self-installed Artix Designer	To run the Artix Designer plug-ins in your own copy of Eclipse, you must have a licensed installation of Artix 3.0 on the same machine. The EclipseInstallDir\start_eclipse script calls the environment setting script from the Artix 3.0 installation. The Artix libraries and demo files are used from the Artix 3.0 installation.
	You can have two or more instances of Eclipse on the same machine without conflict. There is no need to remove the Artix-installed instance of Eclipse if you prefer to use Artix Designer integrated in your own instance of Eclipse.
	When you use Artix Designer in your own Eclipse instance, only the Eclipse Welcome page is different. The other features of Artix Designer are all present in the self-installed version, including the Artix perspective, the Artix Designer menu, and the Artix additions to the help system, tutorials, and

cheat sheets.

Sourcing Visual C+ in the

start_eclipse script

Configuring Eclipse for C++ Development

Overview

This step applies if you are running Artix Designer on Windows and you plan to create C++ applications. This step applies equally when running Artix Designer:

- within the Eclipse platform installed by the Artix installer
- within a separately installed Eclipse

The start_eclipse.bat script contains additional parameters needed to launch Eclipse with the Artix Designer plug-ins loaded.

You must source your version of Visual C++ in the start_eclipse.bat script before you start any C++ development with Artix Designer.

To edit the start eclipse script:

 Using a text editor, open the start_eclipse.bat file from either of the following locations:

Artix-installed Eclipse

ArtixInstallDir/artix/3.0/bin

Existing Eclipse

EclipseInstallDir

2. Add the following line before the call to artix_env.bat:

Visual C++ 6.0

call "C:\Program Files\Microsoft Visual Studio\vc98\bin\vcvars32.bat"

Visual C++ 7.1

```
call "C:\Program Files\Microsoft Visual Studio .NET
2003\Common7\Tools\vsvars32.bat"
```

If you installed Visual C++ in a non-default location, then adjust the $_{call}$ line as appropriate for your machine.

Once you have edited the start_eclipse script, shut down Eclipse and run the script again to relaunch Artix Designer.

Installing Artix with Orbix

Overview

There are two possible reasons for installing Artix on the same machine as Orbix:

- To allow Orbix applications to use Artix functionality. For example, you may want to embed the Artix routing plug-in into an Orbix application.
- To enable Artix applications to use Orbix enterprise features, such as the Name Service.

Choosing an installation directory

There are two ways of installing Artix and Orbix on the same machine:

- Install both products in a common *InstallDir* directory, such as C:\IONA
- Install the products in separate directories

There are advantages and disadvantages to both approaches, as described in Table 8.

Table 8:	Installation	directory	comparison
----------	--------------	-----------	------------

Destination	Advantages	Disadvantages
Common directory	Merges license files in the InstallDir/etc directory.	Restricted to Artix 3.0 and Orbix 6.2.
	Overwrites and updates Orbix library files in the InstallDir/bin directory.	Orbix must be installed first.
	Allows you to set the IT_PRODUCT_DIR and PATH environment variables at install time.	

Destination	Advantages	Disadvantages
Separate directories	Can be used with Orbix 6.1 and earlier.	No merging of license files.
		Duplicates some libraries in each product's InstallDir/bin directory.
		IT_PRODUCT_DIR and PATH environment variables cannot be set at install time.

 Table 8:
 Installation directory (Continued)comparison

Merging Artix and Orbix licenses If you install Artix into the same top-level directory as Orbix 6.2, the Artix installer automatically appends the Artix license to the existing Orbix license in the InstallDir/etc directory. However, if you choose to install Artix and Orbix into separate directories, and you want your Orbix applications to access Artix functionality, you must merge the two license files using a text editor. IONA recommends that you preserve your existing Artix and Orbix license files, and save the merged license file in a new location. You then need to point to the location of the merged license in a SET IT LICENSE FILE= command in the DomainName env file for your Orbix application. **Combining Artix and Orbix** Once you have Artix and Orbix installed on the same machine, you need to configuration files reference the Artix configuration file from within the Orbix configuration file: You can do this in one of the following ways: 1. By adding the following include statement to the bottom of the Orbix configuration file: artix { include "ArtixInstallDir/artix/3.0/etc/domains/artix.cfg"; };

2. By adding a new scope containing the entire contents of the artix.cfg file to the bottom of the Orbix configuration file, as follows:

```
artix {
   ContentsOfArtixConfigFile
};
```

3. By adding the following include statement to the bottom of the Orbix configuration file:

include "ArtixInstallDir/artix/3.0/etc/domains/artix.cfg";

and then opening the <code>artix.cfg</code> file and adding an <code>artix</code> scope around the entire contents of the file, as follows:

```
artix {
   ContentsOfArtixConfigFile
};
```

Running Orbix and Artix applications

Overview	If you combine your Artix and Orbix configuration files, take into account the implications described in this section when running Orbix or Artix applications.	
Running an Orbix application in a pure Orbix environment	To run an Orbix application under a pure Orbix environment, use the DomainName_env file, which references the Orbix DomainName.cfg file. As long as your application's ORBname does not include artix as the initial scope name, the Artix configuration information is ignored.	
Running an Artix application in a pure Artix environment	To run an Artix application under a pure Artix environment, use the <pre>artix_env file, which references the artix.cfg file.</pre> If you used the third approach to combining the Artix and Orbix configuration files, all Artix applications will need to run under a scope that starts with artix.	
Running Artix/Orbix applications that use the other product's functionality	 To run either an Artix or an Orbix application that references the other product's functionality, create an application-specific environment file that: References the location of the Orbix <i>DomainName.cfg</i> file Includes artix as the initial scope of the application's ORBname Sets the location of the merged license file (IT_LICENSE_FILE) Sets the PATH environment variable, including the Artix directories first, then the Orbix directories The application reads all the Orbix configuration information first and then reads all of the Artix configuration information. If the same configuration entry is encountered twice, the Artix value takes precedence because it is contained in the nested scope. (All the Orbix entries are at global scope, whereas all the Artix entries are within the artix scope.) 	

CHAPTER 3

Uninstalling Artix

This chapter describes how to uninstall Artix.

In this chapter

This chapter contains the following sections:

Uninstalling Artix Designer	page 36
Uninstalling on Windows	page 37
Uninstalling on UNIX	page 38

Uninstalling Artix Designer

Uninstalling from the Artix Eclipse platform	If you are running Artix Designer from the Eclipse platform that was installed along with Artix, Eclipse is removed when you uninstall Artix.		
Uninstalling from an existing Eclipse platform	If you added the Artix Designer plug-ins to an existing Eclipse installation, you must delete the plug-ins manually.		
	To delete the Artix Designer plug-ins that you manually installed into		
	Eclip	Eclipse:	
	1.	Shut down Eclipse.	
	2.	Go to your <i>EclipseInstallDir</i> /plugins directory.	
	3.	Delete all the plug-in folders whose names begin with ${\tt com.iona.bus.}$	
	4.	Restart Eclipse.	

Uninstalling on Windows

Uninstalling Artix	To uninstall Artix on Windows: 1. From the Windows Start menu, select (All) Programs IONA Artix 3.0 Uninstall Artix.		
	2. Click Uninstall .		
	As an alternative, you can run the following from a command prompt:		
	InstallDir\artix\3.0\uninstall\uninstall_artix_3_0.exe		
Uninstalling SOAPscope	If you installed Mindreef SOAPscope along with Artix, SOAPscope is not removed by the Artix uninstaller.		
	However, since it relies on the Artix license, SOAPscope does not work after you have uninstalled Artix.		
	You can remove SOAPscope by running its own uninstaller. From the Windows Start menu, select (All) Programs Mindreef SOAPscope 3.0 Uninstall Mindreef SOAPscope 3.0. You can also use the Add/Remove Programs icon in the Windows Control Panel.		
	Installing SOAPscope automatically installs a driver named WinPcap. However, uninstalling SOAPscope does not uninstall WinPcap. After uninstalling SOAPscope, you can remove WinPcap by selecting WinPcap from the Add/Remove Programs control panel.		

Uninstalling on UNIX

Uninstalling Artix

To uninstall Artix on UNIX, run the following script:

InstallDir/artix/3.0/uninstall/Uninstall artix 3 0

Index

Symbols

.NET Framework 9

Numerics

64-bit Linux 15, 24 special installation step 5

Α

AIX 4 Apache Axis 9 Artix C++ compilers supported 6 console mode installation 17 disk space requirements 7 documentation v hardware supported 3 installing a JVM 4 J2EE Connector 8 Java versions supported 5 library v license file 2 licensing 21 perspective in Eclipse 29 silent installation 18 supported platforms 3 support for third-party products 8 temporary disk space 7 artix.cfg file 34 Artix Designer online help vii requirements 6 uninstalling 36 artix env file 24, 34

В

BEA Tuxedo 8 BEA WebLogic 8

С

C++ compilers supported by Artix 6 CDT 26 CLASSPATH 12 console mode installing Artix 17

D

disk space requirements 7

E

Eclipse Artix Designer requirements 6 more than one version installed 29 self-installing Artix Designer in 26 Welcome page 29 EMF plug-ins 29

G

GCC 4

Н

hardware supported by Artix 3 HP-UX 3 HTTP 8

I

IATEMPDIR 7 IBM WebSphere 8 IIOP 8 installer.properties file 18 IT_ARTIX_BASE_DIR 24 IT_LICENSE_FILE 22, 34 IT_PRODUCT_DIR 15, 31, 32

J

J2EE Connector 8 Java versions supported by Artix 5 Java virtual machine Artix prerequisite 4 JBoss 8 JDT 26 jUDDI 9 JVM 15 JVM see Java virtual machine

K

Kerberos 8

L

LDAP 8 library, Artix v license Artix 21 license file 2 Linux 4 64-bit, special installation step 5

Μ

Microsoft .NET 9 Mindreef SOAPscope installing 15 uninstalling 37

0

Orbix installing with Artix 9, 31

Ρ

PATH 12, 31, 32 perspective Artix, in Eclipse 29

R

Rendezvous 8

S

silent installation 18 SiteMinder 8 SOAP 8 SOAPscope 37 installing 15 uninstalling 37 Solaris 3 SonicMQ 8 start eclipse script 29, 30 supported platforms 3

Т

temporary disk space 7 TIBCO Rendezvous 8 Tuxedo 8

U

uninstalling Artix Designer plug-ins from Eclipse 36 Artix from UNIX 38 Artix on Windows 37 SOAPscope 37 WinPcap 37

V

Visual C++ .NET 2003 23 Visual C++ 6.0 23 Visual C++ 7.1 23 Visual Studio .NET 2003 9

W

WebLogic 8 WebSphere 8 Welcome page in Eclipse 29 Windows Server 2003 3 use XP compatibility mode 12 Windows versions 9 WinPcap 37

X

XP compatibility mode 12