Installation Guide

Version 1.2, October 2003

Making Software Work Together™

Orbix, Artix Encompass, Artix Relay, IONA Enterprise Integrator, Enterprise Integrator, Orbix E2A Application Server, Orbix E2A XMLBus, XMLBus , are trademarks or registered trademarks of IONA Technologies PLC and/or its subsidiaries.

IONA, IONA Technologies, the IONA logo, Making Software Work Together, IONA e-Business Platform, and Total Business Integration 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.

While the information in this publication is believed to be accurate, IONA Technologies PLC makes no warranty of any kind to this material including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. IONA Technologies PLC shall not be liable for errors contained herein, or for incidental or consequential damages in connection with the furnishing, performance or use of this material.

COPYRIGHT NOTICE

No part of this publication may be reproduced, 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 assumes no responsibility for errors or omissions contained in this book. This publication and features described herein are subject to change without notice.

Copyright © 2001–2003 IONA Technologies PLC. All rights reserved.

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

Updated: 13-Oct-2003

M 3 1 1 2

10009281

Contents

Chapter 1 Installing Artix 1
- Before You Begin 2
- Prerequisites 3
- Installing Artix 7
- Licensing Artix Manually 10
- Setting up the Artix Environment 11
- Installing Artix With IONA Application Server Platform 12

CHAPTER 1

Installing Artix

This chapter describes the prerequisites for successful installation of Artix.

In this chapter

This chapter discusses the following topics:

Prerequisites	page 3
Installing Artix	page 7
Licensing Artix Manually	page 10
Setting up the Artix Environment	page 11

Before You Begin

Read the Release Notes

Before installing IONA Artix, visit the Documentation Web Page at:

http://www.iona.com/support/docs/artix/1.2/index.xml

and 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.

Saving your license

You should receive your license file by e-mail. Save this file to a location on your hard drive. During installation, the installer will prompt for the location of this file.

Make sure the license file is accessible by all systems where Artix processes run.

If you have other IONA products installed, your existing license file will be appended with the contents of the new Artix license file.

Prerequisites

Operating Systems

Table 1 shows the required patches and C++ and Java Runtimes for all supported Operating Systems:

Table 1: *Supported Operating Systems*

Platform	Required OS Patches; C++/Java Runtime Environment
x86/Windows NT 4.0	SP6a; C++ drivers `msvcrt.dll`, `msvcirt.dll`, and `msvcp60.dll`; Java (JRE or SDK) 1.4.1
x86/Windows 2000	SP3; C++ drivers `msvcrt.dll`, `msvcirt.dll`, and `msvcp60.dll`; Java (JRE or SDK) 1.4.1
x86/Windows XP	C++ drivers `msvcrt.dll`, `msvcirt.dll`, and `msvcp60.dll`; Java (JRE or SDK) 1.4.1
SPARC/Solaris 8	108827-12; 108434-09: (32 bits C++ runtime); 108827-12 (libthread patch); Java (JRE or SDK) 1.4.1 and its recommended OS patches.
SPARC/Solaris 9	Java (JRE or SDK) 1.4.1 and its recommended OS patches.

Table 1: *Supported Operating Systems*

Platform	Required OS Patches; C++/Java Runtime Environment
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`; Java (JRE or SDK) 1.4.1 and its recommended OS patches.
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 Java (JRE or SDK) 1.4.1 and its recommended OS patches.
x86/RedHat Linux 7.2	GCC 3.2 runtime (`libstdc++.so.5` and `libgcc_s.so[.1]`); GCC 3.2 development; Java (JRE or SDK) 1.4.1
AIX 5.2	IBM JDK 1.4.1

Java Runtime Requirements

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

Artix supports Java 2 Platform, Standard Edition (J2SE) version 1.4.1 or higher for development on all supported platforms.

Be sure to set `JAVA_HOME` to point to your JDK installation.

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

Development Requirements

If you plan to use the Artix development tools or run any of the demos, you will need the following C++ compiler, depending on your platform:

Table 2: *C++ Compilers Supported by Artix*

Platform	C++ Compiler	Required Patches
Windows NT, 2000, and XP	Microsoft Visual C++ 6.0	SP 3
Windows NT, 2000, and XP	Microsoft Visual C++ 7.0	
HP-UX 11 and 11i	aC++ A.03.31	
Solaris 8 & 9	Sun C++ 5.3 (part of Forte 6 Update 2)	111685-01
Red Hat Linux	Binutils package 2.13[.9]	
AIX	Visual Age 6.0	

Additional Requirements

Artix has the following additional requirements:

- Running the demos and examples for IBM VisualAge MQSeries, BEA Tuxedo, or TIBCO/Rendezvous requires that those products be installed. Artix supports the following product versions:
  - BEA Tuxedo 7.1 or higher
  - IBM MQSeries 5.x or higher
  - TIBCO Rendevous 7.1 or higher
- Artix also supports the following transports:
  - SOAP 1.1
  - IIOP 1.1 and 1.2
- Artix support for the propagation of transaction contexts requires the presence of the IONA Application Server Platform (ASP), Standard or Enterprise Edition. Artix can use any version of ASP to provide this transaction functionality. ASP must be installed before Artix.

Disk space

A development installation of Artix takes the following disk space (plus about 40MB temporary disk space for unzipping the installer).

Platform	Without JVM	With JVM
Windows	122 MB	154 MB
Solaris	141 MB	196 MB
HP-UX	212 MB	319 MB
AIX	200 MB	300 MB

UNIX: If the required space is not available in `/tmp`, you can set a different partition for use by the InstallAnywhere installer by setting the environment variable `IATEMPDIR` to point to this partition.

Installing Artix

Notes

- On UNIX platforms, the installer can be run in console mode if no windowing environment is available. To run in console mode use the `-i console` command line option.
- Artix can be installed into the same directory tree as other IONA products, but installing the IONA Application Server Platform 6.0 after installing Artix may cause Artix to become unstable. (See "Installing Artix With IONA Application Server Platform" on page 12 for more details).

Procedure

To install Artix complete the following steps:

1. Download the appropriate package file for your platform and uncompress it.

Table 3: *Artix Installation Packages*

Platform	Installation Package
Windows	`artix_12_Windows.zip`
HP-UX	`artix_12_HP-UX.tar`
Solaris	`artix_12_SunOS.tar`
Red Hat Linux	`artix_12_Linux.tar`
AIX	`artix_12_AIX.tar`

Note: If you copy the installer files to another location make sure and copy both the installer file and the associated folder for your platform.

2. Go to the folder into which you uncompressed the installation package and run the installer:

Windows

```
artix.exe
```

UNIX

```
artix.bin
```

or for console mode:

```
artix.bin - i console
```

3. Click **Next** to begin the installation.
4. Read the license agreement.
5. Accept the licensing agreement by selecting "I accept the terms of the License Agreement" and click **Next**.
6. Enter the name of the folder into which you want Artix installed and click **Next**.

   Note: It is strongly recommended that you install Artix into the same directory tree as your other IONA products.

7. On Windows systems, you will be asked to select where on the **Start** menu to place shortcuts. Select a location and click **Next**.
8. Choose what type of installation you want and click **Next**:
   - **Developer Tools and Runtime**
   - **Runtime Tools Only**
9. **UNIX**: Specify the root folder for all of your Artix projects. You should have read and write access to this location. Click **Next**.
10. **Windows**: Specify if you want to set the system environment variables `IT_PRODUCT_DIR` and `PATH` for all users on this system, just the current user, or not at all. Click **Next**.
    - `IT_PRODUCT_DIR` specifies the root folder of your Artix installation.
    - `PATH` is appended with the Artix bin directories.
11. Specify if you would like to associate `.iap` files with Artix Designer. `.iap` files are the project files used by Artix to store project information. Click **Next**.

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 `<installationDirectory>\etc\licenses.txt`.

    If you have another IONA product installed, the license installer will append your Artix licenses automatically to your existing IONA license file. If you wish to install the licenses by hand click Cancel. For more information see "Licensing Artix Manually" on page 10.
14. Click Done to finish the installer.

Licensing Artix Manually

Installing the license file to the default location

To install the license file to the default location, copy the license file here:

Windows

```
%IT_PRODUCT_DIR%\etc\licenses.txt
```

UNIX

```
/etc/opt/iona/licenses.txt
```

Installing the license file to an alternative location

You can save your license file anywhere on your drive, as long as you set `IT_LICENSE_FILE` to point at your license file.

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. Please see "Adding Artix licenses to an existing license file" on page 10.

Adding Artix licenses to an existing license file

If you already have licensed IONA products you will have a valid license file. To ensure that your existing licenses are not overwritten by the Artix Licenses, you can use a text editor to append the Artix licenses to your existing license file.

Setting up the Artix Environment

Setting the Artix 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

```
> cd %IT_PRODUCT_DIR%\artix\1.2\bin
> artix_env
```

UNIX

```
% cd $IT_PRODUCT_DIR/artix/1.2/bin
% . artix_env
```

This script modifies the system path so that the Artix bin directory is in the path and also modifies the shared library path to include the Artix shared library directory.

Verifying the environment

To verify that the Artix environment is correctly set up, cd to `IT_PRODUCT_DIR` and type the command:

```
wsdltocpp
```

You should see the following:

```
WSDL URL has to be specifed!
WSDLToCPP Usage:

java artix.WSDLToCppClient [options] { WSDL-URL }
  [-e Web-service-name] [-t port] [-b binding-name] [-i
   portType-name]
  [-d output-directory] [-n namespace]
  [-impl [-m {NMAKE | UNIX} ] | -jp plugin-class-name] [-f]
  [-sample]
  [-v] [-license] [-declspec declspec] [-all] [-?] [-flags]
```

Installing Artix With IONA Application Server Platform

Installation

It is recommended that you install Artix into the same directory tree as Application Server Platform 6.0. You should install Application Server Platform 6.0 first.

Also, if you are going to apply Application Server Pack 6.0 service pack 1, you should install it before installing Artix.

Environment variables

All IONA products use two environment variables to get their configuration and licensing information: `IT_PRODUCT_DIR` and `IT_LICENSE_FILE`. If you accept all installer defaults and follow the procedure to add your Artix license to your existing license file ("Adding Artix licenses to an existing license file" on page 10), there will be no conflicts.

However, if you choose to install Artix in a different directory tree than Application Server Platform 6.0 or choose to keep your Artix licenses separate from your ASP licenses, you will need to set `IT_PRODUCT_DIR` and `IT_LICENSE_FILE` to point to the correct locations.

IDL compiler

Currently, the Artix IDL compiler and the Application Server Platform 6.0 IDL compiler use separate configuration files. It is suggested that you set your environment to Artix using the `artix_env` script to use the Artix IDL compiler. To use the Application Server Platform IDL compiler, set your environment for an Application Server Platform domain.

You can merge the configuration files for the two IDL compilers, but that is not supported at this time.