Installation Guide

Version 2.0, March 2004

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CHAPTER 1

Installing Artix

This chapter describes the prerequisites for successful installation of Artix.

In this chapter

This chapter discusses the following topics:

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Before You Begin

Read the Release Notes

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

http://www.iona.com/support/docs/artix/2.0/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 or higher
x86/Windows 2000	SP3; C++ drivers `msvcrt.dll`, `msvcirt.dll`, and `msvcp60.dll`; Java (JRE or SDK) 1.4.1 or higher
x86/Windows XP	C++ drivers `msvcrt.dll`, `msvcirt.dll`, and `msvcp60.dll`; Java (JRE or SDK) 1.4.1 or higher
SPARC/Solaris 8	108827-12; 108434-09: (32 bits C++ runtime); 108827-12 (libthread patch); Java (JRE or SDK) 1.4.1 or higher and its recommended OS patches.
SPARC/Solaris 9	Java (JRE or SDK) 1.4.1 or higher 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`; PHSS_26559; Java (JRE or SDK) 1.4.1 or higher 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 or higher and its recommended OS patches.
x86/RedHat Linux 8	GCC 3.2 runtime (`libstdc++.so.5` and `libgcc_s.so[.1]`); GCC 3.2 development; Java (JRE or SDK) 1.4.2
x86/RedHat Linux 9	GCC 3.2 runtime (`libstdc++.so.5` and `libgcc_s.so[.1]`); GCC 3.2 development; Java (JRE or SDK) 1.4.2
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 and higher
HP-UX 11 and 11i	aC++ A.03.31	
Solaris 8 & 9	Sun C++ 5.3 (part of Forte 6 Update 2)	111685-01
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 WebSphere MQ (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 IONA Orbix Standard or Enterprise Edition version 6.1. Artix can use any version of Orbix to provide this transaction functionality. Orbix must be installed before Artix.

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 IONA Orbix 6.1 after installing Artix may cause Artix to become unstable. (See "Installing Artix With IONA Orbix" on page 11 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_20_Windows.zip`
HP-UX	`artix_20_HP-UX.tar`
Solaris	`artix_20_SunOS.tar`
Red Hat Linux	`artix_20_Linux.tar`
AIX	`artix_20_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 which version of Artix you wish to install.

> **Note:** Artix is available as three products, Standard, Advanced and Enterprise. The installer can install any of these. Make sure you install the version for which you have a license.

9. Choose what type of installation you want and click **Next**:
   - **Developer Tools and Runtime**
   - **Runtime Tools Only** (If you choose this skip to step 14)
10. Choose to install a JVM or select a previously installed JDK.

> **Note:** Installing a JVM supports Artix Java runtime but not development. Using an installed JDK is required for Artix Java development. Either approach satisfies the Artix Designer GUI's requirements.

11. **UNIX**: Specify the root folder for all of your Artix projects. You should have read and write access to this location. Click **Next**.

12. **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.

    Note: Artix will still work without setting these values. They make it easier to navigate to the Artix installation directory and will allow you to run some of the Artix utilities in a command window.

    When doing Artix development from the command line, you will need to set the Artix environment using the `artix_env` script, which sets these values for you. (On Windows the menu items automatically run this script).

    Note however that if you have other IONA products installed, such as Orbix, you should be careful about letting the installer set these variables since those other products may rely on these variables being set to point to some other directory.

13. 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**.
14. Review your installation information then click **Install**.
15. 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 9.
16. 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 9.

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\2.0\bin
> artix_env
```

UNIX

```
% cd $IT_PRODUCT_DIR/artix/2.0/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 | SCHEMA-URL }
  [-e Web-service-name] [-t port] [-b binding-name] [-i
   portType-name]
  [-d output-directory] [-n namespace]
  [-nimport namespace_for_imported_schema]
  [-impl [-m {NMAKE | UNIX} ] | -jp plugin-class-name] [-f]
   [-server] [-client]
  [-sample]
  [-v] [-license] [-declspec declspec] [-all] [-?] [-flags]
```

Installing Artix With IONA Orbix

Installation

It is recommended that you install Artix into the same directory tree as Orbix 6.1. You should install Orbix 6.1 first.

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 9), there will be no conflicts.

However, if you choose to install Artix in a different directory tree than Orbix 6.1 or choose to keep your Artix licenses separate from your Orbix 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 Orbix 6.1 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 Orbix IDL compiler, set your environment for an Orbix domain.

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