

Artix™ ESB

Installation Guide

Version 5.1, December 2007

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Contents

List of Figures	5
List of Tables	7
Preface	9
What This Book Covers	9
Who Should Read This Book	9
How to Use This Book	9
Artix Documentation Library	10
Chapter 1 Pre-Installation Tasks	11
Reading the Release Notes	12
Saving Your License File	13
Chapter 2 Pre-Installation Considerations	15
Supported Platforms, C++ Compilers, JREs, and JDKs	16
Operating System Patch Requirements	18
C++ Compiler Requirements	20
Java JRE and JDK Requirements	21
Artix Designer Requirements	24
Interoperability	25
RAM Requirements	27
Disk Space Requirements	28
Chapter 3 Installing Artix	31
Running the Artix Installer	32
Installing in GUI Mode	34
Installing in Console Mode	36
Installing in Silent Mode	38
Installing Artix License Keys	46
Installing Artix Designer into an Existing Eclipse Platform	48

Chapter 4 Configuring Artix						
Setting the JAVA HOME Environment Variable	56					
Configuring the Artix Command-Line Environment Configuring the Artix C++ Development Environment Configuring the Artix Visual C++ Environment						
					Starting and Logging Considerations for Artix Designer	64
					Workspace Considerations for Artix Designer	66
Configuring the Import-Samples Feature of Artix Designer	67					
Configuring 64-bit Linux on 64-bit Hardware	69					
More Memory for Java Components of C++/JAX-RPC on AIX						
Chapter 5 Uninstalling Artix	71					
Uninstalling Artix Designer	72					
Uninstalling on Windows	73					
Uninstalling on UNIX	74					
Index	75					

List of Figures

Figure 1: Feature Updates Panel	49
Figure 2: Update Sites to Visit Panel	50
Figure 3: Search Results Panel	51
Figure 4: Common Artix Settings in Eclipse Preferences	52

LIST OF FIGURES

List of Tables

Table 1: Supported Platforms and Compilers	16
Table 2: Required OS Patches	18
Table 3: Microsoft Products That Interoperate with Artix	26
Table 4: Disk Space Used by Artix Installations (Megabytes)	28
Table 5: Disk Space Used by the Artix Installer and JRE (Megabytes)	28
Table 6: Artix Installation Packages	32
Table 7: Artix Installation Options	34
Table 8: Properties File Variables	38
Table 9: CHOSEN_INSTALL_FEATURE_LIST Feature Codes	40

Preface

What This Book Covers

This book discusses the prerequisites for installing Artix and the procedures for installing, configuring, updating, and uninstalling Artix.

Who Should Read This Book

This book is written for those responsible for installing Artix and assumes familiarity with:

- The hardware and software Artix interacts with.
- The user interfaces, graphical and character, used by Artix and by the hardware and software Artix interacts with.

How to Use This Book

This book contains the following chapters:

- Chapter 1, Pre-Installation Tasks, discusses the things you should do before installing Artix.
- Chapter 2, Pre-Installation Considerations, discusses the things you should think about before installing Artix.
- Chapter 3, Installing Artix, describes several ways of installing Artix and your Artix license.
- Chapter 4, Configuring Artix, discusses the things you might have to do or think about after installing Artix.
- Chapter 5, Uninstalling Artix, describes several ways of uninstalling Artix.

Artix Documentation Library

For information on the entire Artix Documentation Library, including organization, contents, conventions, and reading paths, see Using the Artix Library.

Pre-Installation Tasks

This chapter discusses the things you should do before installing Artix.

In this chapter

This chapter includes following sections:

Reading the Release Notes	page 12
Saving Your License File	page 13

Reading the Release Notes

Before installing Artix:

- Visit the IONA Product Documentation Web page, http://www.iona.com/support/docs/artix/5.1/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 File

Your Artix license file will arrive by e-mail. When the e-mail arrives, save the attached license file to a safe location on a local or network disk. You must specify the location of the license file to the Artix installer during installation.

CHAPTER 1 | Pre-Installation Tasks

Pre-Installation Considerations

This chapter discusses the things you should think about before installing Artix.

In this chapter

This chapter contains the following sections:

Supported Platforms, C++ Compilers, JREs, and JDKs	page 16
Operating System Patch Requirements	page 18
C++ Compiler Requirements	page 20
Java JRE and JDK Requirements	page 21
Artix Designer Requirements	page 24
Interoperability	page 25
RAM Requirements	page 27
Disk Space Requirements	page 28

Supported Platforms, C++ Compilers, JREs, and JDKs

Platforms and patches

Artix 5.1 is supported on Windows, Linux, and UNIX. Table 1 shows the supported operating systems, hardware platforms, C++ compilers, JREs, and JDKs.

For the latest version of this information, see http://www.iona.com/products/artix/platforms.htm.

 Table 1:
 Supported Platforms and Compilers

Operating System	Hardware	C++ Compilers	JDK/JRE ¹
Windows Server 2003	x86_32 ²	Visual C++ 6.0 SP3	1.5.0_11 or higher
Windows XP	x86_32	Visual C++ .NET 2003 (7.1) Visual C++ .NET 2005 (8.0)	(For Artix runtime, 1.4.2_13 or higher, or 1.5.0 or higher)
Red Hat Enterprise Linux AS 4.0 (32-bit)	x86_32, x86_64		1.5.0_10 (32-bit) or higher (For Artix runtime, 1.4.2_13 or higher, or 1.5.0 or higher)
Red Hat Enterprise Linux AS 4.0 (64-bit)	x86_64	GCC 3.4.x	1.5.0_10 (32-bit and 64-bit) or higher ³ (For Artix runtime, 1.4.2_13 or higher, or 1.5.0 or higher)
Red Hat Enterprise Linux AS 3.0 (32-bit)	x86_32, x86_64		1.5.0_10 (32-bit) or higher (For Artix runtime, 1.4.2_13 or higher, or 1.5.0 or higher)
Red Hat Enterprise Linux AS 3.0 (64-bit)	x86_64	GCC 3.2.3	1.5.0_10 (32-bit and 64-bit) or higher ³ (For Artix runtime, 1.4.2_13 or higher, or 1.5.0 or higher)

 Table 1:
 Supported Platforms and Compilers (Continued)

Operating System	Hardware	C++ Compilers	JDK/JRE ¹
SuSE Linux Enterprise Server 9 (32-bit)	x86_64		1.5.0_10 (32-bit) or higher (For Artix runtime, 1.4.2_13 or higher, or 1.5.0 or higher)
SuSE Linux Enterprise Server 9 (64-bit)	x86_64	GCC 3.3.3	1.5.0_10 (32-bit and 64-bit) or higher ³ (For Artix runtime, 1.4.2_13 or higher, or 1.5.0 or higher)
Solaris 10 (32-bit)		Sun Studio 8, C++ 5.5, Sun Studio 11, C++ 5.8	1.5.0_09 (32-bit) or higher
Solaris 9 (32-bit)	SPARC	Sun Studio 8, C++ 5.5	(For Artix runtime, 1.4.2_13 or higher, or 32-bit 1.5.0 or
Solaris 8 (32-bit)		Sun Studio 8, C++ 5.5, Sun Studio 11, C++ 5.8	higher)
Solaris 10 (64-bit)		Sun Studio 8, C++ 5.5, Sun Studio 11, C++ 5.8	1.5.0_012 (64-bit) or higher
Solaris 9 (64-bit)	SPARC	Sun Studio 8, C++ 5.5	(For Artix runtime, 1.4.2_13 or higher, or 32-bit 1.5.0 or
Solaris 8 (64-bit)		Sun Studio 8, C++ 5.5, Sun Studio 11, C++ 5.8	higher)
AIX 5.3	D	Visual Age 6.0.2 (32-bit)	IBM JDK 1.5.0 or higher
AIX 5.2	PowerPC		(For Artix runtime, IBM JDK 1.5.0 or higher)
HP-UX 11i ⁴	PA-RISC	aCC 3.56, aCC 3.73	HP JDK 5.0.05 or higher (For Artix runtime, HP JDK 1.4.2.12 or higher, or HP JDK 5.0.05 or higher)

^{1.} Artix Designer 5.1 requires a Java 1.5.x JRE to run. The Artix Java JAX-WS runtime requires a 1.5.x JDK for development and a 1.5.x JRE for running applications. The Artix C++/JAX-RPC runtime for hosting containers and services can run with a 1.4.2 or 32-bit 1.5.x JRE. See "C++ Compiler Requirements" on page 20 for more information.

^{2.} In the Hardware column, X86_32 refers to the 32-bit Pentium architecture, while X86_64 includes the AMD64 (Opteron, Athlon 64), Intel Pentium Extreme Edition 64-bit, and Intel EMT64 (Xeon, Core 2) architectures.

^{3.} When running 64-bit Linux on x86_64 64-bit hardware, you must have both 32-bit and 64-bit Sun JDKs installed and configured as described in "Configuring 64-bit Linux on 64-bit Hardware" on page 69.

^{4.} The Artix 5.1 C++/JAX-RPC runtime libraries support applications built with both the HP-UX Standard and Classic C++ runtimes.

Operating System Patch Requirements

Table 2 shows the operating system patches and runtime components for C++ and Java required to run Artix for the supported platforms.

Note: See also the Operating System/Compiler Patch Policy Web page.

 Table 2:
 Required OS Patches

Operating System ¹	Hardware ²	OS Patches; C++/Java Runtime Environment
Windows Server 2003	x86_32	No patches required.
Windows XP	x86_32	SP2
Red Hat Enterprise Linux Advanced Server 4.0	x86_32	No patabas required
Red Hat Enterprise Linux Advanced Server 4.0	x86_64	No patches required.
Red Hat Enterprise Linux Advanced Server 3.0	x86_32	GCC 3.2 runtime (libstdc++.so.5 and libgcc_s.so[.1])
Red Hat Enterprise Linux Advanced Server 3.0	x86_64	No patches required.
SUSE Linux Enterprise Server 9	x86_64	SP1
Solaris 10 (32-bit version on 64-bit-capable hardware)	SPARC	
Solaris 9 (32-bit version on 64-bit-capable hardware)	SPARC	111685-01 patch
Solaris 8 (32-bit version on 64-bit-capable hardware)	SPARC	108827-12; 108434-09 (32-bit C++ runtime); 108827-12 (libthread patch); 111685-01 patch

 Table 2:
 Required OS Patches (Continued)

Operating System ¹	Hardware ²	OS Patches; C++/Java Runtime Environment
Solaris 10 (64-bit version on 64-bit hardware)	SPARC	
Solaris 9 (64-bit version on 64-bit hardware)	SPARC	
Solaris 8 (64-bit version on 64-bit hardware)	SPARC	No patches required.
AIX 5.3	PowerPC	
AIX 5.2	PowerPC	Fix for IY57576
HP-UX 11i	PA-RISC	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)

^{1.} In the Operating System column, "32-bit" refers to an installation of the 32-bit version of Linux or Solaris onto 64-bit capable hardware. "64-bit" refers to an installation of the 64-bit version of Linux or Solaris onto 64-bit hardware.

In the Hardware column, X86_32 refers to the 32-bit Pentium architecture, while X86_64 includes both AMD64 (Opteron and Athlon 64) and Intel EMT64 (Xeon and Core 2) architectures.

C++ Compiler Requirements

C++ development requirements

If you plan to develop Artix applications in C++, or if you want to compile and run any of the Artix C++ samples, you must have a C++ compiler installed on the target machine. Table 1 on page 16 shows the C++ compilers supported by Artix.

When using Visual C++ with Artix on Windows, the Visual C++ environment must be set before starting Artix Designer, as described in "Configuring the Artix Visual C++ Environment" on page 61.

First run of artix env script

Certain Artix-specific makefile settings are generated and set up the first time you run the artix_env[.bat] script, as described in "Configuring the Artix C++ Development Environment" on page 60.

JDK not needed for C++ only

If you will develop only in C++ (or in a language supported by Artix Mainframe), you can install a Java JRE, not JDK, such as the one supplied by the Artix installer. In this case, installing a Java JDK is not required.

Exception: in the case of 64-bit Linux running on x86_64 64-bit hardware, you must install two JDKs, even if you will only develop in C++. See "Configuring 64-bit Linux on 64-bit Hardware" on page 69.

Exception: to run the Artix Orchestration BPEL server, you must specify a JDK, not just a JRE.

Java JRE and JDK Requirements

Artix Designer Java requirements

Artix Designer 5.1 requires a Java 1.5.x JRE to run.

The Eclipse environment that hosts Artix Designer uses an internal Java compiler, and can generate and compile Java code without the presence of a Java Development Kit (JDK). However, a JDK is still required for other Artix purposes, as described in "Java JDK requirements".

JRE bundled with Artix installer (and alternatives)

A 32-bit 1.5.0.x Java Runtime Environment (JRE) is bundled with Artix for optional installation. The installer also allows you to instead specify the location of a previously installed system JRE or JDK.

Note: Developing programs for the Artix 5.1 Java JAX-WS runtime requires a 1.5.x JDK, not just a JRE. If you intend to use the Java JAX-WS runtime, do not allow the installer to install a JRE. Instead, point the installer toward an existing JDK.

If you decline to install the bundled JRE, then you must specify the location of an existing JRE or JDK during Artix installation. Make sure the one you specify is at the required release level for your operating system, as specified in Table 1 on page 16.

If, during Artix installation, you specify the location of an existing JRE or JDK, you may also need to specify its location in the JAVA_HOME environment variable. See the discussion in "Setting the JAVA_HOME Environment Variable" on page 56.

Note: The Artix installer offers to install a 32-bit JRE even when installing on 64-bit platforms. In most cases, this is not a conflict, but there is a special case described in "Configuring 64-bit Linux on 64-bit Hardware" on page 69.

Java JDK requirements

You must install a JDK to use with Artix in these cases:

- To compile and run the Artix Java sample code from the shell command line or when imported into Artix Designer.
- To compile your own Java code at the shell command line.
- To run certain Artix command-line tools.

A JDK at release level 1.5.x is:

- required when developing for the Java JAX-WS runtime
- strongly recommended when developing Java applications for the C++/JAX-RPC runtime

The C++/JAX-RPC runtime for hosting containers and services can run with a 1.4.2 or 32-bit 1.5.x JRE. If you are developing Java code for use with existing 1.4.2-based Artix services, you can optionally develop with a 1.4.2 JDK.

Specific Java suppliers supported

Artix supports the specific JRE and JDK versions listed in Table 1 on page 16. In particular, Table 1 specifies:

Java supplier	Operating system
Sun Microsystems	Windows, Linux, Solaris
IBM	AIX
HP	HP-UX

Licensing restrictions from Sun Microsystems prevent IONA from including a JDK with Artix installations. You must download and install a JDK from Sun Microsystems, or from the operating system's vendor. You must install a separate JDK even if you allow the Artix installer to install a dedicated JRE for use with Artix Designer.

For more information on Java from Sun, see Sun Microsystems' Java site at http://java.sun.com.

Override default JRE for Red Hat systems

Red Hat Enterprise Linux ships with a GCC-based Java compiler, gjc, which is set up by default to provide the system default java and javac commands. Artix command-line tools and Artix Designer do not support the gjc compiler, so you must install a Sun JDK and must take steps to ensure that its java and javac commands are used by Artix.

The simplest override method is to install a supported Sun JDK in its installer's default location, and then specify the location of the Sun JDK during Artix installation.

You can also manage your Sun JDK installation with one or more of the following methods:

- Specify the Sun JDK's location in a global JAVA_HOME environment variable, as described in "Setting the JAVA_HOME Environment Variable" on page 56.
- Replace the default Java-related symbolic links in /etc/alternatives.
- Integrate the Sun JDK into Red Hat's alternatives system, as described in the alternatives(1) man page.

See also the special case settings described in "Configuring 64-bit Linux on 64-bit Hardware" on page 69.

Artix Designer Requirements

Artix Designer as installed with Artix

The Artix Designer development tool ships as a set of plug-ins for the Eclipse open source development environment. Artix Designer is shipped with the Windows, Linux, and Solaris versions of Artix.

Unlike previous releases, Artix Designer 5.1 requires a Java 1.5.x JRE or JDK to run, as described in "Java JRE and JDK Requirements" on page 21.

The Artix installer installs an Eclipse 3.2.2 environment, the Artix Designer plug-ins, and all necessary supporting plug-ins into the following directory:

ArtixInstallDir\tools\eclipse

Solaris and Linux requirements for Artix Designer

To run Artix Designer on Solaris, you must have GTK 2.0 or later installed, as well as the prerequisites of GTK, which are ATK, glib, libgcc (or GCC), libiconv, libintl, and Pango. Install GTK and its prerequisites using the method defined by Sun Microsystems for your version of Solaris.

Running Artix Designer on Linux has the same requirement for GTK 2.0 or later and its prerequisites. For the supported versions of Linux, these subsystems are already installed in the default configuration.

Using Artix Designer in your existing Eclipse

If you have other Eclipse-based tools and you want to add Artix Designer to that environment, you can add the Artix Designer plug-ins to your existing Eclipse installation as described in "Installing Artix Designer into an Existing Eclipse Platform" on page 48.

Interoperability

Overview

This section describes how Artix components interoperate with other Artix components and with third-party products.

Artix JAX-WS runtime

The Artix JAX-WS runtime interoperates with the following:

- Artix C++/JAX-RPC runtime
- .NET Framework 1.x/2.x runtime
- BEA AquaLogic Service Bus 2.6

Messaging

Artix supports the following messaging products:

- IBM WebSphere MQ 5.3 and 6.0
- BEA Tuxedo
 - 6.5 on Windows and HP-UX
 - 8.1 on all supported platforms except AIX
- TIBCO Rendezvous 7.2
- SonicMQ 5.x, 6.x

Transports

Artix supports the following transports:

- SOAP 1.1 and 1.2 (MTOM is not supported for SOAP 1.2)
- IIOP 1.1 and 1.2
- HTTP
- RMI

Application servers

The Artix J2EE Connector (JAX-RPC) supports the following application servers:

- JBoss 4.0.1
- BEA WebLogic 8.1 SP3
- BEA WebLogic 9.0
- IBM WebSphere 5.1
- IBM WebSphere 6.0
- IBM WebSphere 6.1

The Artix J2EE Connector (JAX-WS) supports the following application servers:

- JBoss 4.0.1
- IBM WebSphere 6.1

The JAX-RPC and JAX-WS application server support applies to the operating systems that are supported by both Artix and the relevant application server.

Security

Artix supports the following security products and protocols:

- SiteMinder 4.6.1, 5.5
- Kerberos 5
- LDAP 3.0

Web services

Artix supports the following Web services products and protocols:

- Apache Axis 1.3
- 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.

Artix supports .NET integration by interoperating with the Microsoft products listed in Table 3.

Table 3: Microsoft Products that Interoperate with Artix

Product Type	Product
Development environment	Visual Studio .NET 2003 and 2005
Runtime environment	.NET Framework 1.1
Operating system	Windows XP Windows Server 2003

RAM Requirements

RAM requirements for development tools

Artix is a development environment that is used in conjunction with other development tools, such as compilers. As such, the Artix tools do not consume more RAM than the associated toolset.

Check with the vendor of the compiler and JDK for your operating system for their minimum RAM requirements. A typical minimum RAM requirement for compilers and JDKs is 512 MB.

RAM requirements for Artix Designer

Artix Designer is set by default to use a minimum of 128 MB, up to at least 256 MB of RAM. Thus, a practical minimum requirement for running Artix Designer is 512 MB.

RAM used by Artix container and servers

The Artix container for the C++/JAX-RPC runtime, it_container[.exe], is lightweight, and consumes about 21 KB (Windows) or 43 KB (Linux) on first start. Each hosted server adds another few KB (Windows) or 20+ KB (Linux). A complex Artix bus with many containers and services might consume several hundred KB of RAM. Memory consumption for Solaris, AIX, and HP-UX is comparable to the Linux numbers.

Disk Space Requirements

Overview

This section lists the amount of permanent and temporary disk space required for different installations of Artix 5.1.

Artix installation disk space

The disk space requirements for Artix depend on the installation options selected. Table 4 shows the approximate disk space in megabytes for full and runtime only installations. These numbers include the bundled JRE optionally installed with Artix.

 Table 4:
 Disk Space Used by Artix Installations (Megabytes)

Installation Type	Windows	Linux	Linux 64	Solaris	AIX	HP-UX
Artix full installation	706	790	798	884	1005	904
Artix C++/JAX-RPC runtime-only installation ¹	273	417	441	527	864	784
Artix Java JAX-WS runtime-only installation ²	158	176	155	177	155	209

^{1.} This means selecting everything under the "C++ / JAX-RPC" installation option except "Development libraries and samples," with all other option check boxes blank.

^{2.} This means selecting everything under the "Java JAX-WS" installation option except "Development libraries and samples," with all other option check boxes blank.

Artix installer disk space

The disk space used by Artix installer package is shown in Table 5. This table also shows the disk space used by the Java runtime environment installed with Artix. The JRE numbers are included in the totals in Table 4.

 Table 5:
 Disk Space Used by the Artix Installer and JRE (Megabytes)

Installation Type	Windows	Linux	Linux 64	Solaris	AIX	HP-UX
Artix installer	487	534	525	551	416	418
Dedicated JRE installed with Artix	71	86	68	90	68	121

Temporary disk space

In addition to the requirements in Table 4 and Table 5, you will need 30 to 50 megabytes of temporary work space for the installer. By default, this work space is the Windows TEMP directory or the UNIX /tmp directory.

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/tmp
export IATEMPDIR

Installing Artix

This chapter describes several ways of installing Artix and your Artix license.

In this chapter

This chapter contains the following sections:

Running the Artix Installer	page 32
Installing Artix License Keys	page 46
Installing Artix Designer into an Existing Eclipse Platform	page 48

Running the Artix Installer

Downloading an installation package

The Artix 5.1 installation package is available for download from the IONA Product Download Center at http://www.iona.com/downloads/.

The following installation packages are available:

 Table 6:
 Artix Installation Packages

Platform	Use with		
Windows	Windows XP and Server 2003		
Linux	Supported distributions of 32-bit Linux installed on 32-bit or 64-bit hardware		
Linux 64-bit	Supported distributions of 64-bit Linux installed on 64-bit hardware		
Solaris	Solaris 10, 9, 8		
AIX	AIX 5.3, 5.2		
HP-UX	HP-UX 11i		

Installer issues

The Artix 5.1 installer has the following issues:

 You must not install Artix 5.1 and another IONA product into the same directory.

Note: Although you can install particular pre-5.1 versions of Artix and other IONA products into the same directory, this is *not* true of Artix 5.1.

- You must not load Artix libraries and Orbix libraries into the same process-space.
- When installing Artix 5.1 on Windows Server 2003, you must run the installer in Windows XP compatibility mode.
- When installing Artix 5.1 on Windows platforms, you must 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 sample build
 scripts will be incorrect.
- When installing Artix 5.1 on UNIX using console mode, the only installation options available are Full and Runtime-Only.

Installation modes

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

Installing in GUI Mode	page 34
Installing in Console Mode	page 36
Installing in Silent Mode	page 38

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. Navigate to the directory into which you extracted the installation package and run the installer:

Windows

artix platform.exe

UNIX

./artix platform.bin

2. Follow the onscreen instructions and respond to each prompt. Use the information in Table 7 as a guide when selecting installation options as the installation proceeds.

Table 7: Artix Installation Options

Platform	Installation Option	Default	Notes
All	Top-level directory for your Artix installation	Windows: C:\IONA\artix_50 UNIX: /opt/iona/artix_50	On Windows, do <i>not</i> specify a directory whose pathname contains spaces, For example, do not specify a directory under C:\Program Files. On UNIX, specify the absolute path to a directory in which your current login name has full read and write permissions. Do not use the ~ abbreviation for home directory.
Windows only	Location for product icons	The Start (All) Programs IONA menu for all users	You can select only one location. Some of the location options also allow you to select the Set for all system users checkbox. The default is to set up the shortcuts for the current user only.

 Table 7:
 Artix Installation Options (Continued)

Platform	Installation Option	Default	Notes
All	Full, Custom, or Runtime options	Full	Specify the runtime-only option when deploying an Artix service for testing or production on a system other than your development system. See Table 9 on page 40 for help in deciding which options to install.
AII	Install or select a JVM	Install a bundled JRE for use by Artix	Java JRE and JDK issues are discussed in "C++ Compiler Requirements" on page 20.
	Designer.	The installer may not identify all JVMs on your system. If you know the exact location of your JRE or JDK, it is faster to navigate to that location than to let the installer search the entire disk.	
			Note: If you are running 64-bit Linux on 64-bit hardware, do not allow the Artix installer to install its 32-bit JRE. Instead, select your locally installed 64-bit JDK, and set the environment variables discussed in "Configuring 64-bit Linux on 64-bit Hardware" on page 69.
All	Save installation options?	No	Allows you to save a properties file containing entries for the installation you just completed. This properties file can be used with future automated or silent installations of Artix as described in "Installing in Silent Mode" on page 38.

3. When the installer finishes installing the Artix files, it prompts for the location of your Artix license file. Click **Browse** to locate the license file you saved, as described in "Saving Your License File" on page 13. The installer copies your license information into the file

ArtixInstallDir\etc\licenses.txt.

If you prefer to install the license later, click **Cancel**. For more information see "Installing Artix License Keys" on page 46.

4. Click **Done** to finish the installer.

Installing in Console Mode

Overview

UNIX users can run the Artix installer in console mode if no graphical-interface windowing environment is available.

Running the installer

To run the Artix installer in console mode:

 Go to the directory into which you extracted the installation package and run the installer as follows:

```
./artix platform.bin -i console
```

2. Follow the on-screen instructions and respond to option prompts. Use the information in Table 7 on page 34 as a guide when selecting installation options as the installation proceeds.

3. The installer prompts you to specify the options to install using a table like the one in Figure 1. By default, all options are specified, which is the same as a Full installation. To customize your installation, enter a list of numbers representing the group or feature you want to exclude from the installation. Use Table 9 on page 40 as a guide when deciding which group or feature options to install.

Example 1: Installation options menu in console installation mode

```
1- [X] C++ / JAX-RPC
 2- |-[X] Runtime
 3- |-[X] Development libraries and samples
 4- |-[X] Artix Locator
 5- |-[X] Security Framework
 6- |-[X] Artix Router
 7- |-[X] Transaction Manager
 8- |-[X] High Availability
 9- |-[X] Session Manager
10- [X] Java JAX-WS
11- |-[X] Runtime
12- |-[X] Development libraries and samples
13- |-[X] Artix Locator
14- |-[X] Security Framework
15- |-[X] Artix Router
16- [X] Mainframe
17- [X] Development Tools
18- |-[X] Artix Designer
19- |-[X] Command-line Tools
20- [X] Third-party Integrations
21- |-[X] EMS Integration
22- |-[X] Amberpoint
23- |-[X] CA-WSDM
```

WARNING: Console installation only works on UNIX systems. Using -i console when installing on Windows simply runs a silent installation with default options.

Installing in Silent Mode

Overview

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

In an interactive installation, the installer receives necessary user input in response to questions posed in a GUI or console. In a silent installation, you must provide the same information in a properties file.

Creating the properties file

First, create a properties file to contain the response values for the silent installation. You can use any name for your properties file and invoke it with the -f option when running the installer. Or you can use the reserved file name installer.properties, which is automatically used by the installer.

The easiest way to create a properties file is to go through the steps of an Artix installation, then save the properties of that installation to a file when so prompted at the end of the installation. You can then edit the saved properties file to adjust the way you want your silent installation to proceed.

You can also create a properties file with any text editor.

Contents of properties file

The properties file must contain entries for the variables listed in Table 8:

 Table 8:
 Properties File Variables

Variable	Description
JDK_HOME	The path to the root of a JDK or JRE installation. If this variable is set, the installation uses the JDK or JRE specified. If unset, the installation installs a dedicated JRE.
SILENT_ACCEPT_LICENSE_AGREEMENT	Set to true to accept the Artix license agreement
USER_INSTALL_DIR	Absolute path to the directory where Artix will be installed on the user's machine
INSTALLER_UI	Set to silent for a silent installation
USER_INPUT_SAVE_PROPERTIES_YES_NO	Set to No for a silent installation

 Table 8:
 Properties File Variables (Continued)

Variable	Description
CHOSEN_INSTALL_FEATURE_LIST	This entry must be one long string containing a comma-separated list of feature codes, with no spaces between entries. The valid feature codes for this variable, shown in Table 9, specify the Artix components you want to install. To specify a Full installation, you must list all group components in Table 9.
ECLIPSE_SUPPORT	Set to true to install Eclipse and the Artix Designer plug-ins ^a
MAINFRAME_SUPPORT	Set to true to install the Artix Mainframe component ^b

a. You must also add the ${\tt Designer}$ attribute in the ${\tt CHOSEN_INSTALL_FEATURE_LIST}$ variable to install Artix Designer.

 $[\]hbox{b. You must also add the $\tt Mainfra$ attribute in the $\tt CHOSEN$ INSTALL $\tt FEATURE$ LIST variable to install Artix Mainframe.}$

The valid values for the <code>CHOSEN_INSTALL_FEATURE_LIST</code> variable are shown in Table 9.

Note: The codes in Table 9 are either group codes or individual feature codes. If you specify a group code, you specify all features in that group.

 Table 9:
 CHOSEN_INSTALL_FEATURE_LIST Feature Codes

Feature Code	Group	Feature	Description
CXXCore	C++/ JAX-RPC		Specify options in the C++/JAX-RPC category to develop Java services compatible with previous releases of Artix, or to develop all C++ services, and all client applications for Artix Mainframe services.
CXXRT		Runtime	The infrastructure based on the C++ / JAX-RPC runtime that allows services and service consumers to interact in a distributed environment. This includes a bus, which handles the delivery of messages between different middleware systems; support for Artix containers; and support for the transports and payload formats supported by this version of Artix.
CXXDev		Development libraries and samples	The standard foundation classes, XML Schema-based type system, WSDL API, and sample code that allow you to build Web service applications or to service-enable existing applications, based on the C++/JAX-RPC runtime.
CXXLocator		Artix Locator	An Artix service that allows clients to locate registered services independent of their deployed location.
CXXSecurity		Security Framework	The IONA Security Framework, which includes support for the WS-Security SOAP header format; support for single sign-on and mutual authentication; the IONA Security Service, which provides role-based access control and authentication; and plug-ins to support File Adapter, Netegrity, and LDAP.

 Table 9:
 CHOSEN_INSTALL_FEATURE_LIST Feature Codes (Continued)

Feature Code	Group	Feature	Description
CXXRouter		Artix Router	An Artix intermediary service that redirects messages based on rules defined in the router's contract. An Artix router can be used as a bridge between different communication protocols.
CXXTX		Transaction Manager	An Artix plug-in that supports interoperability with a CORBA OTS transaction system.
СХХНА		High Availability	Support for service replication, which allows services to remain operational despite hardware or communication failures.
CXXSM		Session Manager	A group of Artix plug-ins that work together to control the number of clients that can access a group of services concurrently. The session manager can be used to ensure a given instance is used by only one client at a time, which is useful for service-enabling single-threaded applications.

 Table 9:
 CHOSEN_INSTALL_FEATURE_LIST Feature Codes (Continued)

Feature Code	Group	Feature	Description
r cature code	•	i catule	Description
JavaCore	Java JAX-WS		Choose options in the Java JAX-WS category to support newly developed Java applications based on the JAX-WS compliant runtime introduced in Artix 5.0.
JavaRT		Runtime	The infrastructure based on the Java JAX-WS runtime that allows services and service consumers to interact in a distributed environment. This includes a bus, which handles the delivery of messages between different middleware systems; support for containers; and support for the transports and payload formats supported by this version of Artix.
JavaDev		Development libraries and samples	The classes, XML Schema-based type system, WSDL API, and sample code that allow you to build Web service applications or to service-enable existing applications, based on the Java JAX-WS runtime.
JavaLocator		Artix Locator	An Artix service that allows clients to locate registered services independent of their deployed location.
JavaSecurity		Security Framework	The IONA Security Framework, which includes support for the WS-Security SOAP header format; support for single sign-on and mutual authentication; the IONA Security Service, which provides role-based access control and authentication; and plug-ins to support File Adapter, Netegrity, and LDAP.
JavaRouter		Artix Router	An Artix intermediary service that redirects messages based on rules defined in the router's contract. An Artix router can be used as a bridge between different communication protocols.
Mainfra ^a	Mainframe		Tool and Artix Designer support for creating clients that communicate with Artix Mainframe services.

 Table 9:
 CHOSEN_INSTALL_FEATURE_LIST Feature Codes (Continued)

Feature Code	Group	Feature	Description
Develop	Development Tools		Tools and utilities for developers of Artix applications, including command-line tools and the Eclipse-based tool suite, Artix Designer (for supported operating systems).
Designer ^b		Artix Designer	A suite of GUI tools for creating and editing WSDL contracts, and for generating code to implement the consumer and server sides of the WSDL contract. Artix Designer is integrated into the Eclipse development environment.
Command		Command-line Tools	Tools used at the shell prompt to generate code from WSDL contracts, and to generate WSDL from code.
Third-p	Third-party Integrations		Support for integrating Artix with Enterprise Management Systems from several vendors. (Support for SNMP traps is already included in the base installation.)
EMS		EMS Integration	Support for the following separately licensed components: Operational logging; integration with IBM Tivoli and BMC Patrol.
Amber		AmberPoint Integration	Support for integrating Artix with the AmberPoint SOA Management System.
CAWSDM		CA-WSDM Integration	Support for integrating Artix with the Computer Associates Web Services Distributed Management system (CA WSDM).

a. You must also set the ${\tt MAINFRAME_SUPPORT}$ variable to ${\tt true}$ to install the Artix Mainframe component.

b. You must also set the ECLIPSE SUPPORT variable to true to install Artix Designer.

Example properties file

An example of a properties file is shown below:

```
JDK_HOME=
SET_PATH=
SILENT_ACCEPT_LICENSE_AGREEMENT=true
USER_INSTALL_DIR=C\:\\IONA\\artix_5.1
CHOSEN_INSTALL_FEATURE_LIST=CXXCore, JavaCore, Designer, Command, CX
    XLocator, CXXSecurity, CXXHA, CXXRouter, CXXTX, CXXSM, EMS, Amber, CA
    WSDM, Mainfra, Develop, Third-p, CXXRT, CXXDev, JavaRT, JavaDev, Java
    Locator, JavaSecurity, JavaRouter
USER_INPUT_SAVE_PROPERTIES_YES_NO=No
INSTALLER_UI=silent
```

Note: When including directory paths in the properties file, you can represent path separators in the format \$/\$. This is read by the Artix installer as the correct path separator independent of operating system convention. For example: C:\$/\$IONA

If you instead use backslashes in a properties file targeted for Windows systems, you must escape the backslashes by doubling them, and escape the colon in drive letters with a backslash. For example: C\:\\IONA

Running the installer

To run the Artix installer in silent mode:

- Save the properties file to the directory into which you extracted the installation package.
- 2. From the same directory, run the Artix installer with its -f option:

Windows

artix platform.exe -f your properties file

UNIX

./artix platform.bin -f your properties file

As an alternative, if you used the reserved file name installer.properties, you do not need to use the -f option:

Windows

artix platform.exe

UNIX

./artix platform.bin

When the Artix installation is complete, you need to install the Artix license file. For more information see "Installing Artix License Keys" on page 46.

Uninstalling a silent installation

After performing a silent installation, the next uninstallation also runs silently.

Note: When running a silent uninstallation in Windows, the Add/Remove Control Panel's dialog box may appear to be hung. In fact, the silent uninstallation is proceeding silently. Control is returned to the dialog box when the uninstallation completes.

Installing Artix License Keys

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. A 30-day evaluation installation also requires a license file.

Typically, you receive your Artix license from IONA by e-mail. Save it to a disk location accessible from the machine on which you are installing Artix. Then install your licenses in one of the following ways:

- Automatically, from within the Artix installer. See "Installing in GUI Mode" on page 34.
- 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 47.

Running the license installer

If you did not install your license keys during Artix installation, 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 5.1 | License Installer.

UNIX

Run the following script:

ArtixInstallDir/artix_version/cxx_java/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, then click **Select**.
- 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:

ArtixInstallDir/etc

If you want to save the license file to an alternative location on a local disk, you must set the ${\tt IT_LICENSE_FILE}$ environment variable to point to the alternate location.

Windows

set IT LICENSE FILE=path\license filename.txt

UNIX

export IT LICENSE FILE=path/license filename.txt

Installing Artix Designer into an Existing Eclipse Platform

Overview

By default, the Artix installer installs a new Eclipse framework, including the Artix Designer plug-ins, on your machine. However, you may want to use Artix Designer with an existing Eclipse platform.

Note: Artix Designer 5.1 must be used with Eclipse 3.2.2.

Eclipse prerequisites

To install and use the Artix plug-ins in your own instance of Eclipse, you must have:

- A licensed installation of Artix 5.1 on the same machine
- Eclipse 3.2.2, with the following features installed:
 - ◆ Java Development Tools (JDT) 3.2.1
 - C/C++ Development Tools (CDT) 3.1.1, if you plan to develop with C++
 - Graphical Modeling Framework (GMF) 1.0.2
 - ◆ Eclipse Modeling Framework (EMF) 2.2.1
 - EMF Service Data Objects (SDO) runtime 2.2.1
 - XML Schema Infoset Model (XSD) 2.2.1
 - ◆ Java EMF Model (JEM) 1.2.1
 - Graphical Editor Framework (GEF) runtime 3.2
 - Data Tools Platform (DTP) 1.0
 - Web Standard Tools (WST) runtime 1.5.2
 - ◆ SOA Tools Platform (STP) 0.6

Use Eclipse's **Help | About Eclipse SDK | Feature Details** button to confirm that you have the necessary Eclipse prerequisites.

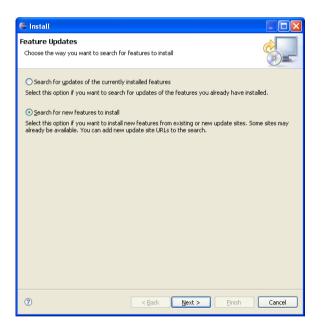
Using the Eclipse update mechanism

Use the Eclipse update mechanism to download and install the Artix plug-ins. This method ensures that the Artix plug-ins you use are the most up-to-date versions.

To add the Artix plug-ins to Eclipse, follow these steps:

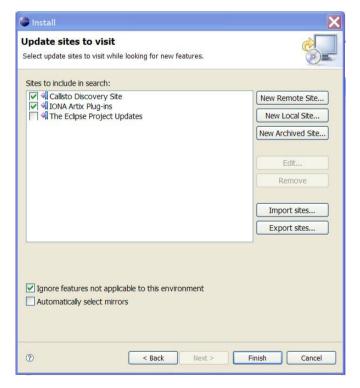
- In Eclipse, select Help | Software Updates | Find and Install. The Install/Update wizard launches.
- 2. In the **Feature Updates** panel, select **Search for new features to install**, then click **Next**.

Figure 1: Feature Updates Panel



- 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: IONA Artix Plug-ins
 - ♦ URL: http://www.iona.com/downloads/artix/eclipse/5.1
- 5. Click OK.
- Select the Eclipse Callisto Discovery Site and IONA Artix Plug-ins check boxes, and unselect all other boxes in the Sites to Include section.
- 7. Check the Ignore Features checkbox and click Finish.

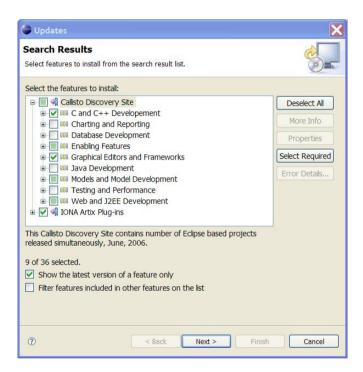
Figure 2: Update Sites to Visit Panel



Eclipse contacts the specified sites and returns with a list of available Eclipse plug-ins at those sites.

- 8. In the **Search Results** panel, select the check box beside the **IONA Artix Plug-ins** node.
- 9. Expand the **Callisto Discovery Site** node, then click **Select Required**. This automatically selects any required Eclipse 3.2.2 plug-ins.

Figure 3: Search Results Panel



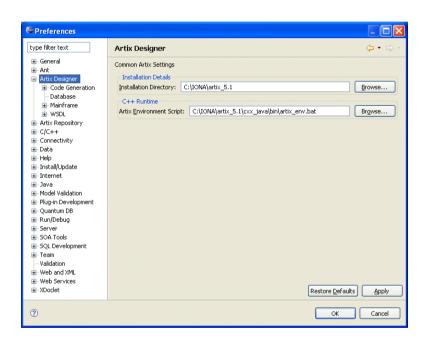
- 10. Click Next.
- 11. Accept the license agreement and click **Next**.
- 12. In the **Installation** panel, confirm the target installation location, and click **Finish** to begin the installation.

Setup with Artix Designer

When the Artix Designer plug-ins are downloaded and installed, you must set up the paths to your Artix installation in the Eclipse **Preferences** dialog:

- 1. In Eclipse, invoke Window | Preferences.
- 2. Click the Artix Designer item in the left side menu.
- 3. Fill in the path to your Artix 5.1 top-level installation directory and the path to the artix env[.bat] script.
- 4. Click OK.

Figure 4: Common Artix Settings in Eclipse Preferences



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 5.1 on the same machine. The Artix libraries and sample files are used from the Artix 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, the same features are present as in the versions installed by the Artix installer. This includes the Artix perspectives, the Artix Designer menu, and the Artix additions to the help system, tutorials, and cheat sheets.

CHAPTER 3 | Installing Artix

Configuring Artix

This chapter discusses the things you might have to do or think about after installing Artix.

In this chapter

This chapter contains the following sections:

Setting the JAVA_HOME Environment Variable	page 56	
Configuring the Artix Command-Line Environment	page 58	
Configuring the Artix C++ Development Environment	page 60	
Configuring the Artix Visual C++ Environment	page 61	
Starting and Logging Considerations for Artix Designer	page 64	
Workspace Considerations for Artix Designer	page 66	
Configuring the Import-Samples Feature of Artix Designer	page 67	
Configuring 64-bit Linux on 64-bit Hardware	page 69	
More Memory for Java Components of C++/JAX-RPC on AIX page 70		

Setting the JAVA_HOME Environment Variable

Windows and JAVA_HOME

Set the JAVA_HOME environment variable before running Artix Designer, or before running the artix_env.bat or artix_java_env.bat scripts to set up your command-line development environment.

If you opted to have the bundled JRE installed by the Artix installer, then the JAVA_HOME variable in the artix_env.bat file points to the bundled JRE, not to a JDK. You must set the global environment variable JAVA_HOME to point to a your JDK installation.

To set the JAVA_HOME environment variable globally for your Windows system, use the **System** Control Panel, **Advanced** tab, **Environment Variables** button. It is not enough to set the variable at the Windows command prompt. Use the 8.3 version of space-containing directory names.

For example:

JAVA HOME=C:\Progra~1\Java\jdk1.5.0 11

To determine the 8.3 version of a file or directory name, use the dir/x command at a Windows command prompt.

Note: The JRE and JDK installers from Sun Microsystems do *not* set the JAVA HOME environment variable.

UNIX/Linux and JAVA HOME

The Artix installer sets a value for the JAVA_HOME environment variable near the top of the <code>artix_env</code> and <code>artix_java_env</code> environment-setting scripts. The path value set is either the path to the bundled JRE, or the path to the alternate JRE or JDK you specified to the installer. Any setting of JAVA_HOME in the shell's global environment takes precedence over the setting in the <code>artix_env</code> script.

Red Hat Linux systems ship with a non-Sun Java JRE and JDK based on GCC gej. To avoid using the Red Hat default java and javac commands, you must specify the path to a Sun JRE or JDK during Artix installation, or you must override the path set by the installer by using the JAVA_HOME environment variable. See "Override default JRE for Red Hat systems" on page 23 for further information.

Special case for 64-bit Linux

For the case of 64-bit Linux installed on 64-bit x86_64 hardware, you must set three JAVA_HOME-related environment variables. See "Configuring 64-bit Linux on 64-bit Hardware" on page 69.

Configuring the Artix Command-Line Environment

Setting the Artix development environment for the C++/
JAX-RPC runtime

Before running command-line development tools for the C++/JAX-RPC runtime and before running any Artix container, service, or service consumer, you must set up the command-line environment. To do so, use the following commands:

Windows

```
> cd ArtixInstallDir\artix_version\cxx_java\bin
> artix env
```

UNIX

```
% cd ArtixInstallDir/artix_version/cxx_java/bin % . ./artix env
```

This script sets up several Artix-specific environment variables, appends the Artix bin directory to the system search path, and appends the Artix shared library directory to the shared library path.

Note: You do NOT need to run <code>artix_env</code> before starting Artix Designer. Artix Designer now sets up its own environment. However, see "Configuring the Artix C++ Development Environment" on page 60 for an exception.

Setting the Artix development environment for the Java JAX-WS runtime

There is a similar environment-setting script for using tools for the Java JAX-WS runtime.

Windows

```
> cd ArtixInstallDir\artix_version\java\bin
> artix_java_env
```

UNIX

```
% cd ArtixInstallDir/artix_version/java/bin
% ../artix_java_env
```

Configuring the Artix C++ Development Environment

First run of artix_env script

Certain Artix-specific makefile settings are generated and set up the first time you run the artix env[.bat] script.

Thus, even though it is not required to run <code>artix_env[.bat]</code> before starting Artix Designer, you must run <code>artix_env[.bat]</code> at least one time before Artix C++ development can proceed. This first run can be in a shell window that you close immediately afterward; that is, there is no need to start Artix Designer from the same shell prompt.

Configuring the Artix Visual C++ Environment

Windows C++ environment

Whether using Artix command-line tools or Artix Designer, you must set up Visual C++ environment variables and paths before running any Artix tools. There are two cases:

1. You allowed the Visual C++ installer to configure the global Windows environment.

In this case, you are ready for Artix development with Visual C++ with no further configuration:

- For Artix command-line development, run artix_env at the command prompt.
- ii. Start Artix Designer from the icon placed in the Start menu.
- 2. You did not allow the Visual C++ installer to configure the global Windows environment (for example, if your PC has more than one C++ development environment).

In this case, you must set the paths and environment variables for Visual C++ from a batch file, vcvars32.bat, provided by the Visual C++ installer:

- i. For Artix command-line development, run vcvars32.bat at the command prompt, and then run artix env.bat.
- ii. For Artix Designer, run vcvars32.bat at the command prompt, then start Artix Designer from the same prompt by specifying the path to eclipse.exe.
- As an alternative, you can set up a start script for Artix Designer, as described in the next section.

Start Script for Artix Designer

If your Visual C++ environment settings are not set in the global Windows environment, then you may find it convenient to create a start script for Artix Designer. Your start script replaces the Artix Designer icon set up by the Artix installer. Your start script should:

- Source the vcvars32.bat file.
- cd to the directory containing eclipse.exe.
- Start Artix Designer by invoking eclipse.exe.

Example 2 shows an example start script for Visual C++6.0:

Example 2: Start script for Artix Designer in Windows with Visual C++

```
@echo off
setlocal
call "C:\Program Files\Microsoft Visual Studio\vc98\bin\vcvars32.bat"
cd /d C:\IONA\artix_5.1\tools\eclipse
start .\eclipse.exe
endlocal
```

The following example start script is for Visual C++ .NET 2003:

```
@echo off
setlocal
call "C:\Program Files\Microsoft Visual Studio .NET 2003\Common7\Tools\vsvars32.bat"
cd /d C:\IONA\artix_5.1\tools\eclipse
start .\eclipse.exe
endlocal
```

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

Setting the environment for Visual C++6.0

The default Artix for Windows installation presumes the compiler in use is Visual C++7.1. If you are using Visual C++6.0 as your compiler, you must run a one-time setup command to configure the runtime environment.

To set the environment to use Visual C++6.0, open a new command prompt session (that is, one in which you have not already run the artix env script) and run the following:

```
> cd ArtixInstallDir\artix_5.1\cxx_java\bin
> artix env -compiler vc60
```

Note: You only need to use the <code>-compiler</code> switch one time to specify your compiler version. Once the compiler version is set, you can run the <code>artix env</code> script normally, without the switch.

Resetting the environment for Visual C++7.1

To reset the Artix runtime environment for Visual C++ .NET 2003 (7.1), run the following from a new command prompt:

```
> cd ArtixInstallDir\artix_5.1\cxx_java\bin
> artix env -compiler vc71
```

Starting and Logging Considerations for Artix Designer

Overview

Unlike previous releases, Artix Designer 5.1 does not start from a start eclipse script or batch file.

For UNIX and Linux, start Artix Designer directly by running the Eclipse executable. For example:

/opt/iona/artix 5.1/tools/eclipse/eclipse &

For 64-bit UNIX and Linux, you can also run a 64-bit version of Eclipse, as in this example:

/opt/iona/artix 5.1/tools/eclipse 64/eclipse &

For Windows, start Artix Designer from its icon in the Start menu: **Start |** (All) **Programs | IONA | Artix 5.1 | Artix Designer**.

Exception: depending on how your Visual C++ environment variables are set, you may need to start Artix Designer with a batch file as described in "Configuring the Artix Visual C++ Environment" on page 61.

Log files

Artix Designer writes a log file named ArtixDesigner.log to the current directory when the Eclipse executable is started. The log file is only created in the event of a program fault or error. Artix Designer also writes a housekeeping file, derby.log to the current directory.

You may wish to control where these files are written by controlling the current directory at the time you start Artix Designer. In UNIX and Linux, you might create a start script like this example:

cd ~/logs
~/iona/artix 5.1/tools/eclipse/eclipse &

For Windows, the Artix Designer start menu icon makes the current directory the eclipse directory before starting eclipse.exe. For example:

c:\IONA\artix 5.1\tools\eclipse

If you use a startup batch file for Visual C++ like Example 2 on page 62, be sure to include a line that changes to this directory before starting Eclipse, to keep the log files in the same place.

Workspace Considerations for Artix Designer

Avoid spaces in path to workspace

When you first start Artix Designer, you are prompted for the location of a workspace directory to contain your project files.

The default workspace in Linux and UNIX systems is:

~/workspace

For example:

/home/login-name/workspace

For Windows, the default workspace is:

C:\Documents and Settings\login-name\workspace

It is best to override the Windows default to avoid the spaces in the pathname. You can specify a pathname with no spaces in the path, or specify the 8.3 version of space-containing directory components. For example, either of the following examples are good choices:

C:\EclipseWS\workspace
C:\Docume~1\login-name\workspace

You can use the \dim /x command at the Windows command prompt to determine the 8.3 version of file and directory names.

LocalRepository directory created in workspace

When Artix Designer 5.1 creates the Eclipse workspace directory, it also creates a sub-directory named LocalRepository. This directory contains data used internally by Artix Designer but does not include any project-specific data. A new LocalRepository directory is created for you when you switch workspaces.

Configuring the Import-Samples Feature of Artix Designer

Import Samples feature within Artix Designer

Artix Designer includes an Import-Samples feature in the **Artix Designer** menu in Eclipse. The Artix samples were designed to run from the command line with Ant scripts and makefiles. The Import Samples feature lets you run a limited set of Artix samples from the Eclipse environment.

Setup step for Windows

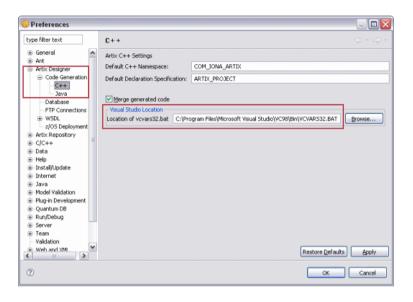
To use the C++ samples with the Import Samples feature in Windows, you must set the path to your Visual C++ $_{vcvars32.bat}$ file in the **Eclipse Preferences** dialog.

Note: The <code>vcvars32.bat</code> path setting for the **Import Samples** feature is distinct and separate from any environment settings you make to enable Visual C++ development in Artix as a whole. See "Configuring the Artix Visual C++ Environment" on page 61 for those instructions.

The setting described in this section is *only* to enable the **Import Samples** feature for C++.

- 1. In Eclipse, invoke Window | Preferences.
- 2. Click the **Artix Designer** item in the left side menu.
- Open the plus next to Artix Designer and navigate to Code Generation
 C++.
- 4. In the **Visual Studio location** field, fill in the path to your vcvars32.bat, as appropriate for your version of Visual C++.

5. Click OK.



Configuring 64-bit Linux on 64-bit Hardware

Overview

When running 64-bit Linux on x86_64 64-bit hardware, you must have both 32-bit and 64-bit Sun JDKs installed, and they must be identified with environment variables as described below.

This restriction is determined only by 64-bit Linux on 64-bit hardware. A 32-bit version of Linux follows 32-bit rules, even when installed on $x86_64$ hardware. This restriction applies equally to Java and C++ development, and equally to the development of 32-bit and 64-bit targets.

For a 64-bit JDK, use a 1.5.0.x version; for a 32-bit JDK, you can use 1.4.2 or 1.5.0. Sun JDK 1.6.x and non-Sun JDKs are not supported.

Environment variable settings

Set the JAVA_HOME_64 environment variable equal to the path to your 64-bit JDK's directory.

Set the JAVA_HOME_32 variable equal to the path to your 32-bit JDK's directory.

Then set JAVA_HOME to one of your JDKs, depending on whether you want a 32-bit or 64-bit runtime.

Setting the artix env -bits switch

If you set JAVA_HOME to point to a 64-bit JDK, then there is one further setting. Run the artix env script with the -bits 64 argument, as follows:

```
> cd ArtixInstallDir/artix_5.1/cxx_java/bin
> ./artix env -bits 64
```

Note: You only need to use the <code>-bits</code> switch one time to specify 64-bit development. Once the bit level is set, you can run the <code>artix_env</code> script without the switch to configure your shell environment.

More Memory for Java Components of C++/ JAX-RPC on AIX

On AIX, Java components within the Artix C++/JAX-RPC runtime might need additional heap space to function correctly. To increase the default heap space available to these components, set the following environment variable:

LDR CNTRL=MAXDATA=0x80000000@USERREGS

For more information on this issue, visit the following Web site: http://www.ibm.com/developerworks/eserver/articles/aix4java1.html

Uninstalling Artix

This chapter describes several ways of uninstalling Artix.

In this chapter

This chapter contains the following sections:

Uninstalling Artix Designer	page 72
Uninstalling on Windows	page 73
Uninstalling on UNIX	page 74

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 uninstall them.

To delete the Artix Designer plug-ins that you manually installed into Eclipse:

- 1. Shut down Eclipse.
- 2. Go to your EclipseInstallDir/plugins directory.
- 3. Delete all the plug-in folders whose names begin with com.iona.bus.
- 4. Restart Eclipse.

Uninstalling on Windows

Uninstalling Artix

To uninstall Artix from Windows:

- 1. From the Windows Start menu, select (All) Programs | IONA | Artix 5.0 | Uninstall IONA Artix 5.0.
- 2. In the resulting dialog, click **Uninstall**.

As an alternative, you can run the following from a command prompt:

ArtixInstallDir\artix version\uninstall\Uninstall artix version.exe

Note: Remember that after a silent installation, the next uninstallation is also run silently.

Uninstalling on UNIX

Uninstalling Artix

To uninstall Artix on UNIX, run the following script:

ArtixInstallDir/artix version/uninstall/Uninstall artix version

Note: Remember that after a silent installation, the next uninstallation is also run silently.

Index

Numerics 64-bit Linux 35, 69 8.3 version of long file and directory names 56, 66 A AIX 17, 19 Apache Axis 26 Artix console mode installation 36 disk space requirements 28 hardware supported 16 J2EE Connector 26 license file 13 licensing 46 perspective in Eclipse 53 silent installation 38 supported platforms 16 temporary disk space 29 Artix Designer requirements 24 uninstalling 72 artix_env 33, 52, 56, 57, 58, 59, 60, 61, 63 -bits switch 69	E Eclipse Artix Designer requirements 24 more than one version installed 53 self-installing Artix Designer in 48 eclipse.exe start Artix Designer with 61 G GCC 18 GCC 18 GCC 2cj 57 H hardware supported by Artix 16 HP-UX 17 HTTP 25 I IATEMPDIR 29 IBM WebSphere MQ 25 IIOP 25 installer.properties file 38
-compiler switch 63 run to set up C++ settings 60	IT_LICENSE_FILE 47
B BEA Tuxedo 25 BEA WebLogic 26 C CDT 48 CLASSPATH 33 console mode installing Artix 36	J J2EE Connector 26 JAVA_HOME 38, 56, 57, 69 JAVA_HOME_32 69 JAVA_HOME_64 69 JBoss 26 JDT 48 jUDDI 26 K
D	Kerberos 26
dir /x command 56, 66 disk space requirements 28	L LDAP 26 license Artix 46

INDEX

license file 13 Linux 16, 17, 18 64-bit 69 LocalRepository directory 66

M

Microsoft .NET 26

Ρ

PATH 33 perspective Artix, in Eclipse 53 properties file 38

R

Rendezvous 25

S

silent installation 38 SiteMinder 26 SOAP 25 Solaris 17, 18, 19 SonicMQ 25 supported platforms 16

T

temporary disk space 29 TIBCO Rendezvous 25 Tuxedo 25

U

uninstalling
Artix Designer plug-ins from Eclipse 72
Artix from UNIX 74
Artix on Windows 73

V

vcvars32.bat 61 Visual C++ 6.0 63 Visual C++ 7.1 63

W

WebLogic 26 WebSphere MQ 25 Windows Server 2003 16, 18 use XP compatibility mode 33

X

XP compatibility mode 33