# **OrbixOTM 3.0 for Windows Installation Guide**

#### Orbix is a Registered Trademark of IONA Technologies PLC.

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.

Java is a trademark of Sun Microsystems, Inc.

#### 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 © 1991-1999 by 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.

M 2 3 I 9

# **Contents**

Introduction	I
Platform	I
License Code	I
Prerequisites	2
Installation Instructions	2
Installation Notes	4
Orbix and OrbixNames	4
Orbix Code Generation Toolkit	5
OrbixCOMet	5
Orbix Wonderwall	5
Other OTM Components	6
SSL Support for Orbix Wonderwall	6
<b>Structure of Installed Directories</b>	7
Post-Installation Notes	9
OrbixCOMet	9
OrbixManager	9
OrbixOTS	9
OrbixSSL	9
Orbix Wonderwall	10
Testing the Installation	10
Uninstalling	11

## Introduction

This document provides instructions for installing each of the components of OrbixOTM 3.0 on the Windows platform. The components of OrbixOTM 3.0 are as follows:

Component	Version
Orbix	3.0.1
Orbix Code Generation Toolkit	3.0.1
OrbixCOMet Desktop	3.0.1
OrbixNames	3.0.1
Orbix Wonderwall	3.0.1
OrbixEvents	3.0
OrbixManager	3.0
OrbixOTS	3.0
OrbixSSL	3.0

## **Platform**

Windows NT 4.0 (Service Pack 4), Microsoft Visual C++ 6.0 (service pack 2).

## **License Code**

You must have a valid license code from IONA Technologies to install OrbixOTM 3.0. The code is a long text string taking the general form:

00000000-11111111-2222222-33333333-4444444

Your license number should be included in a loose sheet in your OrbixOTM 3.0 pack. If you do not have a license, contact IONA before proceeding any further.

There is a separate valid license code for OrbixCOMet that should be included in your product package. You must use this code when installing OrbixCOMet. Refer to the *OrbixCOMet Desktop Getting Started* for more details.

## **Prerequisites**

You must have Microsoft Visual C++ 6.0 (service pack 2) installed.

You must have a Java Development Kit (JDK) or Java run-time environment installed in order to run the Orbix Wonderwall utilities. However, the installation of Orbix includes a Java run-time environment. Therefore, if you install Orbix first, it is not necessary to install a separate JDK or Java run-time environment before installing Orbix Wonderwall.

To take advantage of the Java functionality of OrbixOTM, you must install OrbixWeb 3.2, available as a separate product. The Java functionality includes support for developing Java applications with OrbixManager, OrbixOTS, OrbixSSL, and Orbix Wonderwall. If you do not intend to develop Java applications with OrbixOTM, it is not necessary to install OrbixWeb 3.2.

## Installation Instructions

The components of OrbixOTM are supplied on two CD-ROMs; an OrbixSSL CD-ROM, and an OrbixOTM CD-ROM.

Begin the installation by inserting the OrbixOTM CD-ROM into the drive.

To install OrbixOTM 3.0 from the CD-ROM:

- 1. From the root directory of the CD-ROM, run AutoRunC. exe. This opens the screen shown in Figure 1 on page 3.
- 2. Select the button corresponding to the OrbixOTM 3.0 component that you wish to install.
  - OrbixNames and Orbix GUI Tools are automatically installed when you install the Orbix component.
  - If you are installing OrbixCOMet, refer to the *OrbixCOMet Desktop Getting Started* for more details.
- 3. Follow the on-screen instructions.

Note: If you encounter 'libeay32.dll Not Found' errors while installing 'Other OTM Components', click OK on the dialog boxes until the installation proceeds to completion. This will not affect your OrbixOTM installation.

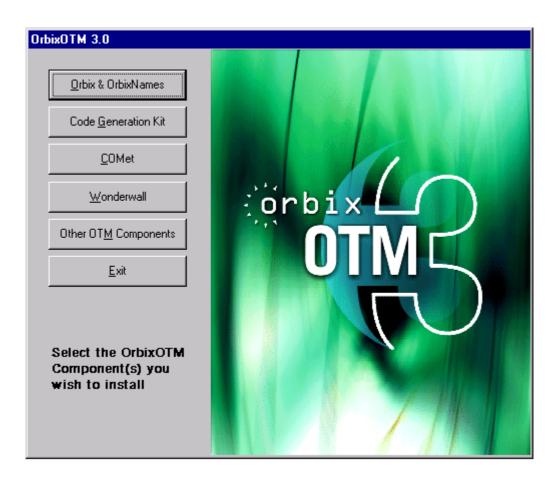


Figure 1: Installing OrbixOTM 3.0 Components

## **Installation Notes**

The default location of your Orbix installation is C:\Iona.

When the OrbixOTM installer is restarted, after installing one or more OrbixOTM components, the previously chosen root directory is automatically read from the Windows Registry. It is recommended that you install all OrbixOTM components under the same root directory.

Note: If Orbix 3.0 or Orbix 3.0.1 has already been installed on your machine, the OrbixOTM installer will read the old license key from the Windows registry and supply this value as a default when you reach the licensing step of the installation. Do not use this old license key. Replace the value in the license field with the OrbixOTM 3.0 license key appearing on a loose sheet in your OrbixOTM 3.0 pack.

## **Orbix and OrbixNames**

During the installation of Orbix and OrbixNames, you are given a choice of the following setup types:

Custom A custom installation lets you select

individual parts of the Orbix installation. Recommended for advanced users.

Full Development Install Complete installation. Recommended for

normal installation.

Runtime Install A minimum set of files suitable for runtime

deployment of Orbix.

When the installation is finished, a dialog box asks whether you want to reboot your machine. It is recommended that you reboot before installing the other components of OrbixOTM.

#### **Orbix Code Generation Toolkit**

No special steps are required during the installation of the Orbix Code Generation Toolkit.

#### **OrbixCOMet**

During the installation of OrbixCOMet you can specify which parts to install:

Runtime Files The binaries that constitute the bridge.

Documents On-line technical documentation.

Development Utilities Command line tools and the type store GUI

tool

Demos Sample programs that show how to use the

bridge.

DCOM Installation Validation An application to test whether DCOM is

correctly installed.

Standard IDL Standard COM/CORBA interfaces

implemented by OrbixCOMet.

Orbix Runtime Files Orbix runtime DLLs and configuration files.

By default, all components except the Orbix runtime files are selected. You do not need the Orbix runtime files if Orbix is already installed.

## **Orbix Wonderwall**

During the installation of Orbix Wonderwall you will be asked to specify the install directories for Orbix, OrbixWeb, and a Java Development Kit. These products are needed only for the demonstration applications that come with Orbix Wonderwall. If you do not intend to use the Wonderwall demonstration applications, the values of these install directories are unimportant.

## **Other OTM Components**

The remaining components of OrbixOTM 3.0 are installed in this step. You can select some or all of the following components for installation:

OrbixOTS The CORBA Object Transaction Service.

OrbixEvents The CORBA Event Service.

OrbixManager Support for application management of

CORBA applications.

OrbixSSL Security Service implemented using Secure

Socket Layer technology.

#### Insecure Installation

If you choose not to install OrbixSSL, you must de-select the OrbixSSL option. While installing the other selected components you may encounter a warning telling you that libeay32.dll is not found. The warning indicates that OrbixSSL security is not enabled for these components. Ignore these warning messages and proceed with the installation.

#### Secure Installation

OrbixSSL is supplied on a separate CD-ROM. During the installation, the install application will ask you to insert the OrbixSSL CD-ROM into the drive before continuing.

You should be aware that OrbixSSL security is initially disabled after installation. Consult *OrbixSSL C++ Programmer's and Administrator's Guide* and *OrbixSSL Java Programmer's and Administrator's Guide* for instructions on how to enable security in OrbixOTM 3.0.

## **SSL Support for Orbix Wonderwall**

To enable Orbix Wonderwall to handle secure SSL connections you must install Orbix Wonderwall's SSL components from the Wonderwall directory on the OrbixSSL CD-ROM.

To install Orbix Wonderwall SSL support:

- I. From the OrbixSSL CD-ROM, copy the libraries iiopproxy301\_ssl.dll, libeay32.dll, and ssleay32.dll to the bin directory of your Orbix Wonderwall installation \Wonderwall\bin.
- 2. Update the Orbix Wonderwall SSL library with the pass phrase used to encrypt the Orbix Wonderwall private key. To do this, use the wwwpdate tool located on the OrbixSSL CD-ROM, for example:

```
wwwpdate C:\Iona\Wonderwall\bin\iiopproxy301_ssl.dll
    "pass_phrase"
```

The value of *pass\_phrase* depends on which certificate and private key Orbix Wonderwall uses. Refer to the OrbixSSL documentation for more information.

The Orbix Wonderwall SSL library can only be updated once. If you wish to change the pass phrase that is used to encrypt Orbix Wonderwall's private key file, you must install a new copy of the library from the OrbixSSL CD-ROM and update this with the new pass phrase.

### Configuring Orbix Wonderwall for SSL

After you install Orbix Wonderwall's SSL components, you must update the Orbix Wonderwall configuration file to add the new SSL configuration variables that complete Orbix Wonderwall's SSL setup. These variables can be added using the SSL tab on the Orbix Wonderwall Configuration Tool. Additional SSL ACL variables are also available. For details of the SSL configuration variables, refer to Appendix B of the *Orbix Wonderwall Administrator's Guide*.

## **Structure of Installed Directories**

When you have installed all of these packages you will have the following directory structure:

\bin Binary images for all components.

\config Repositories and configuration files for all components. \contrib Utilities contributed by IONA engineers and partners.

\demos Demonstrations for all products.

\docs Links to the latest information on OrbixOTM 3.0.

#### OrbixOTM 3.0 for Windows Installation Guide

\idl IDL files for all components.
\include Header files for all components.

\lib Library files for all components.

\tools All Orbix GUI tools.

\Orbix Demonstrations and documentation specific to the

Orbix component.

\OrbixNames Demonstrations and documentation specific to

OrbixNames.

\COMet Demonstrations and documentation specific to

OrbixCOMet Desktop.

\Wonderwall Demonstrations and documentation specific to Orbix

Wonderwall.

\IDLgen Demonstrations and documentation specific to Orbix

Code Generation Toolkit.

\OrbixManager Demonstrations and documentation specific to

OrbixManager, and SNMP-related files.

\OrbixEvents Demonstrations and documentation specific to

OrbixEvents.

\OrbixOTS Demonstrations and documentation specific to

OrbixOTS.

\OrbixSSL Demonstrations and documentation specific to

OrbixSSL, and files related to certificate management.

\OrbixOTM Demonstrations and documentation that give an

overview of the OrbixOTM product suite.

## **Post-Installation Notes**

After running the OrbixOTM installer, additional steps must be followed to complete the basic configuration of certain components. These post-installation steps are described in this section.

#### **OrbixCOMet**

If you did not install Orbix and reboot your machine before installing OrbixCOMet, you will have to register the OrbixCOMet binaries manually after installation. To carry out this step, check that Orbix is installed and that the Orbix \bin directory is in your PATH. Run the script \COMet\bin\RegCOMet.bat to perform the registration.

It is recommended that you test whether DCOM is functioning correctly, using the supplied DCOM validation test, before attempting to run the OrbixCOMet bridge. Consult *OrbixCOMet Desktop Getting Started* for details.

## **OrbixManager**

To access the Java functionality of OrbixManager you must edit the configuration file \config\common.cfg. Add the full pathname C:\Iona\lib\OrbixManager.jar to the variable Common.IT\_DEFAULT\_CLASSPATH in file common.cfg.

## **OrbixOTS**

To access the Java functionality of OrbixOTS you must edit the configuration file \config\common.cfg. Add the full pathname C:\Iona\lib\OrbixOTS.jar to the variable Common.IT\_DEFAULT\_CLASSPATH in file common.cfg.

## **OrbixSSL**

To access the Java functionality of OrbixSSL you must edit the configuration file \config\common.cfg. Add the full pathname C:\Iona\lib\OrbixSSL.jar to the variable Common.IT\_DEFAULT\_CLASSPATH in file common.cfg.

Security is disabled by default. Consult *OrbixSSL C++ Programmer's and Administrator's Guide* and *OrbixSSL Java Programmer's and Administrator's Guide* for instructions on how to enable security in OrbixOTM 3.0.

#### **Orbix Wonderwall**

If you are going to use Orbix Wonderwall with OrbixSSL you must ensure that you have executed the steps described in "SSL Support for Orbix Wonderwall" on page 6 to enable Orbix Wonderwall support for SSL.

# **Testing the Installation**

The following directory contains an integrated demonstration showing how Orbix, OrbixNames, OrbixEvents, OrbixManager, OrbixOTS, and OrbixSSL can be used together:

```
\OrbixOTM\demos
```

Consult the document *Introduction to OrbixOTM* for a description of this demonstration.

The following directories contain demonstrations specific to the component products:

```
\Orbix\demos
\OrbixNames\demos
\COMet\demos
\Wonderwall\demos
\IDLgen
\OrbixManager\demos
\OrbixEvents\demos
\OrbixOTS\demos
\OrbixSSL\demos
```

You can compile and run these applications to check your installation. Refer to the individual readme files for more details.

The \demos applications, in the root directory, demonstrate features of Orbix and OrbixNames. Refer to \demos\index.html for further details.

**Note:** Before running an existing application, developed with an older version of Orbix, recompile it using Orbix 3.0.1.

# Uninstalling

Some of the OrbixOTM 3.0 components share individual files that are removed by the uninstall programs. For this reason, if you need to reinstall one component, you should uninstall and reinstall the entire set of components. This ensures you have all files for all component programs.

## For Further Information

If you require further technical assistance in using this product, please contact support@iona.com.