



Orbix™ 3.3

SSL Installation Guide

Service Pack 8, February 2006

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Installing OrbixSSL 3.3 SP8

This document provides instructions for installing OrbixSSL 3.3 SP 8 on Red Hat Linux AS 3.0, Windows 2003 Server, Tru64, AIX 5.2 and AIX 5.3. In this case, OrbixSSL 3.3 SP 8 requires an existing installation of Orbix 3.3 SP 8 Core Services.

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Introduction

Product sets

This document provides instructions for installing OrbixSSL 3.3 SP 8. OrbixSSL 3.3 SP 8 requires an existing installation of Orbix 3.3 SP 8. OrbixSSL 3.3 SP 8 is enabled by license codes for Orbix 3.3 SP 8 Java Edition or Orbix 3.3 SP 8 C++ Edition.

Note: Due to legal restrictions in some countries, the OrbixSSL 3.3 SP 8 CD-ROM is not supplied with Orbix 3.3 SP 8.

JRE requirements

The OrbixSSL 3.3 SP 8 installation was built with InstallAnywhere, which is a Java application. The installer requires a JRE (Java Runtime Environment). You should provide the JRE yourself (see Installation Prerequisites), or use a pre-installed JRE or JDK before launching the installer. The Windows Installer includes a JRE.

Installation steps

To install OrbixSSL 3.3 SP 8 follow these steps:

- Check the Prerequisites to Installing OrbixSSL 3.3 SP 8.
 - Install OrbixSSL 3.3 SP 8 on Your Host Machine.
 - Verify Your Installation.
-

Before You Begin Your Installation

Before you install OrbixSSL 3.3 SP 8, we recommend that you visit the OrbixSSL 3.3 SP 8 Documentation Web Page at <http://www.ibm.com/support/docs/orbix/orbix33.xml> to read the latest version of the OrbixSSL 3.3 SP 8 Release Notes , and check for any updates to this Installation Guide.

Note: OrbixSSL 3.3 SP 8 cannot be installed on machines that do not support 256 (8 bit) colors, because the Orbix installer is a Java application built on the Java platform which does not support 16 colors. For more information see <http://java.sun.com/products/jdk/1.2/changes.html#2D>.

Note: When installing OrbixSSL 3.3 SP 8 using PCAnywhere (that is via a remote client) the following display information must be followed: "Display resolution of type VGA (640 x 480). For more information see ftp://ftp.symantec.com/public/english_us_canada/products/pcanywhere/pcanywhere32/ver10.5/manuals/pca_105_user.pdf.

Orbix 3.3 SP 8 License Codes

You must have a valid license code from IONA to install OrbixSSL 3.3 SP 8 Java edition, OrbixSSL 3.3 SP 8 C++ edition, and OrbixOTS. All other components of OrbixSSL 3.3 SP 8 are activated by these license codes. The code is a long numeric string taking the general form:

00000000-11111111-22222222-33333333-44444444

Your license code should be included in a loose sheet in your OrbixSSL 3.3 SP 8 pack. Otherwise, as OrbixSSL 3.3 SP 8 is a service pack release of Orbix 3.3, the license codes provided for Orbix 3.3 are valid for OrbixSSL 3.3 SP 8. If you do not have any license codes, please contact IONA before proceeding any further.

Prerequisites to Installing Orbix 3.3 SP 8

Existing Orbix Installations

You must install OrbixSSL 3.3 SP 8 into the same location as an existing Orbix 3.3 SP 8 Core Services Java Edition or Orbix 3.3 SP 8 Core Services C++ Edition installation. The existing installation is updated by the OrbixSSL 3.3 SP 8 installation.

Note: Do not install OrbixSSL 3.3 SP 8 onto an older version of Orbix.

Installation Prerequisites

Prerequisite	Notes
Privileges	<p>General</p> <p>To install in a non-default location, you must have permission to create files and directories in that location.</p> <p>Windows</p> <p>To install in the default location, Windows users must have administrator privileges.</p> <p>UNIX</p> <p>To install into the default location, UNIX users must have root privileges.</p>

Prerequisite	Notes
UNIX DISPLAY	<p>The Installer was built using InstallAnywhere, which is a GUI application. To install OrbixSSL 3.3 SP 8 without the GUI, follow the instructions in Installing Orbix 3.3 SP 8 Without the GUI.</p> <p>For a GUI application to run on UNIX you will need to install on a UNIX host with X and a windowing environment configured. You will need to ensure your display environment variable is set to the workstation you are logged into. For example, set the following environment variable, substituting the full Domain Name System (DNS) name of your workstation for <code>imaginary.dublin.iona.ie</code>:</p> <pre>export DISPLAY=imaginary.dublin.iona.ie:0.0</pre> <p>Contact your system administrator if you require assistance with this.</p>

Prerequisite	Notes
JRE	<p>The Installer was built using InstallAnywhere, which is a Java application. For it to run it needs a JRE (Java Runtime Environment). You are also required to provide the location of the JRE in order for the installation to run. The versions mentioned here are those built and tested on the operating system. (Be sure to install all required patches for all UNIX-based platforms.)</p> <p>Windows JRE</p> <p>The Windows Installer includes a JRE (version 1.5.0_03).</p> <p>Solaris JRE</p> <p>Solaris users can obtain the JRE version 1.3.1_16 from: http://java.sun.com/products/archive/</p> <p>HP-UX JRE</p> <p>HP-UX users can obtain the JRE version 1.3.1_16 from: http://www.hp.com/products1/unix/java/</p> <p>HP-UX IA64</p> <p>HP-UX users can obtain the JRE version 1.3.1.16 from: http://www.hp.com/products1/unix/java/</p> <p>AIX</p> <p>http://www-128.ibm.com/developerworks/java/jdk/aix/service.html</p> <p>Be sure to install all required patches.</p> <p>TRU64</p> <p>http://www.compaq.com/java/download/index.html</p> <p>Be sure to install all required patches.</p>

Prerequisite	Notes
Domain Name	The installer requires your domain name for OrbixSSL 3.3 SP 8 configuration. The Domain Name System (DNS) to resolve Internet or Unix computer names. Contact your network administrator to obtain the domain name for your TCP/IP internet prior to installing Orbix 3.3 SP 8.

You need access on all platforms to an existing JRE (or JDK) or you should obtain and install the JRE yourself on your system prior to running the Installer. See the above table for details on obtaining the JRE.

Operating Systems

In regard to the operating system patches listed in this install guide, OrbixSSL 3.3 SP 8 may work perfectly well without installing all the patches for a particular operating system, but IONA advises that they be installed to reduce the possibility of OrbixSSL 3.3 SP 8 not operating properly because they were not installed.

Please consult the Web sites of specific vendor for more information on patches.

OrbixSSL 3.3 SP 8 runs on the following operating systems:

Operating System	Required Operating System Patches
Red Hat Linux AS 3.0	<p>These patches can be displayed with the following commands:</p> <p>Linux kernel:</p> <p>Command: <code>rpm -q kernel</code></p> <p>Required version: <code>kernel-2.4.21-32.0.1.EL</code></p> <p>GCC 3.2.3 runtime and development environment:</p> <p>Command: <code>rpm -q gcc</code></p> <p>Required version: <code>gcc-3.2.3-52</code></p> <p>Command: <code>rpm -q gcc-c++</code></p> <p>Required version: <code>gcc-c++-3.2.3-52</code></p> <p>Command: <code>rpm -q libstdc++</code></p> <p>Required version: <code>libstdc++-3.2.3-52</code></p> <p>Command: <code>rpm -q libgcc</code></p> <p>Required version: <code>libgcc-3.2.3-52</code></p> <p>Command: <code>rpm -q binutils</code></p> <p>Required version: <code>binutils-2.14.90.0.4-37</code></p> <p>Note: It is recommended to update the system to the latest available packages through the Red Hat Update Agent, which can be executed by typing the command <code>up2date</code> from a shell prompt.</p>
MS Windows 2003 Server	Service Pack 1

Operating System	Required Operating System Patches
AIX 5.2	<p>Required for JDK 1.3.1</p> <p>These patches can be displayed with the following commands:</p> <pre> lslpp -l grep vacpp lslpp -l grep -i java vacpp.cmp.aix50.lib 6.0.0.0 C F VisualAge C++ Libraries for AIX vacpp.cmp.aix50.tools 6.0.0.0 C F VisualAge C++ Tools for AIX vacpp.cmp.core 6.0.0.0 C F VisualAge C++ Compiler vacpp.cmp.include 6.0.0.0 C F VisualAge C++ Compiler Include vacpp.cmp.lib 6.0.0.0 C F VisualAge C++ Libraries vacpp.cmp.rte 6.0.0.0 C F VisualAge C++ Compiler vacpp.cmp.tools 6.0.0.0 C F VisualAge C++ Tools xlC.cpp 5.0.2.0 C F C for AIX Preprocessor bos.rte.streams 5.2.0.30 C F Streams Libraries bos.rte.tty 5.2.0.40 C F Base TTY Support and Commands </pre>

Operating System	Required Operating System Patches
AIX 5.3	<p>Required for JDK 1.3.1</p> <p>These patches can be displayed with the following commands:</p> <pre> lslpp -l grep vacpp lslpp -l grep -i java vacpp.cmp.aix50.lib 6.0.0.0 C F VisualAge C++ Libraries for AIX vacpp.cmp.aix50.tools 6.0.0.0 C F VisualAge C++ Tools for AIX vacpp.cmp.core 6.0.0.0 C F VisualAge C++ Compiler vacpp.cmp.include 6.0.0.0 C F VisualAge C++ Compiler Include vacpp.cmp.lib 6.0.0.0 C F VisualAge C++ Libraries vacpp.cmp.rte 6.0.0.0 C F VisualAge C++ Compiler vacpp.cmp.tools 6.0.0.0 C F VisualAge C++ Tools xlC.cpp 6.0.0.0 C F C for AIX Preprocessor bos.rte.streams 5.3.0.0 C F Streams Libraries bos.rte.tty 5.3.0.10 C F Base TTY Support and Commands </pre>

Development Environment Prerequisites

Java Development

Orbix 3.3 SP 8 was built and tested with the following JDK versions.

Platform	Built on (JDK version)	Tested on (JDK version)
Red Hat Linux AS 3.0	1.3.1_16	1.4.2, 5.0
Tru64	1.3.1_16	1.3.1_16, 1.4.2
AIX 5.2	1.3.1_16	1.3.1_16, 1.4.2
AIX 5.3	1.3.1_16	1.3.1_16, 1.4.2
Windows 2003 Server	1.3.1_16	1.3.1_16, 1.4.2, 5.0

C++ Development

Orbix 3.3 SP 8 was built and tested with the following C++ compilers.

Platform	Compiler Built on	Compiler Tested on
Red Hat Linux AS 3.0	g++ (GCC) 3.2.3	g++ (GCC) 3.2.3
Tru64	Compaq C++ v6.2 v6.2-024 (64 bit)	Compaq C++ v6.2 v6.2-024 (64 bit)
AIX 5.2	IBM VisualAge C++ v6.0 PTF2	IBM VisualAge C++ v6.0 PTF2
AIX 5.3	-	IBM VisualAge C++ v6.0 PTF2
Windows 2003 Server	Microsoft Visual Studio .NET 2003 C/C++ Optimizing Compiler Version 13.10.3077	Microsoft Visual Studio .NET 2003 C/C++ Optimizing Compiler Version 13.10.3077

Disk Space Requirements

The following table lists the approximate amount of disk space taken up by the Orbix 3.3 files. The install program also requires approximately 50MB of temporary work space.

Component	Linux	Windows	Tru64	AIX 5.2	AIX 5.3
OrbixSSL	30 MB	30 MB	30 MB	30 MB	30 MB

Note: On Windows, please check that you have enough disk space before starting the installation.

Default Location

Please install OrbixSSL 3.3 SP 8 into an existing Orbix 3.3 SP 8 installation. Select the same location as your Orbix 3.3 SP 8 Core Services installation. The default location of your Orbix 3.3 installation is as follows:

Platform	Default Location
Red Hat Linux AS 3.0 main installation	/opt/iona
Red Hat Linux AS 3.0 variable files	/var/opt/iona
Windows 2003 Server	C:\iona
Tru64 main installation	/opt/iona
Tru64 variable files	/var/opt/iona
AIX 5.2	C:\iona
AIX 5.3	C:\iona

Note: Orbix 3.3 SP 8 installs in a fixed location relative to the path you specify. Installing into a non-default location will create a copy of the default location path relative to the non-default location. Also we do not recommend installation into locations with spaces in their directory names.

Installing OrbixSSL 3.3 SP 8 Without the GUI

Overview

Installing OrbixSSL 3.3 SP 8 without a GUI (silent install mode) allows you to run the installer without using the GUI. The silent mode installer looks to a template file that provides the required information.

For more detailed information on using silent install mode, see Knowledge Base article 4087.633 on the IONA Web site.

Installing in Silent Mode

1. To install in silent mode

```
$ ./install.bin -f template.file
```

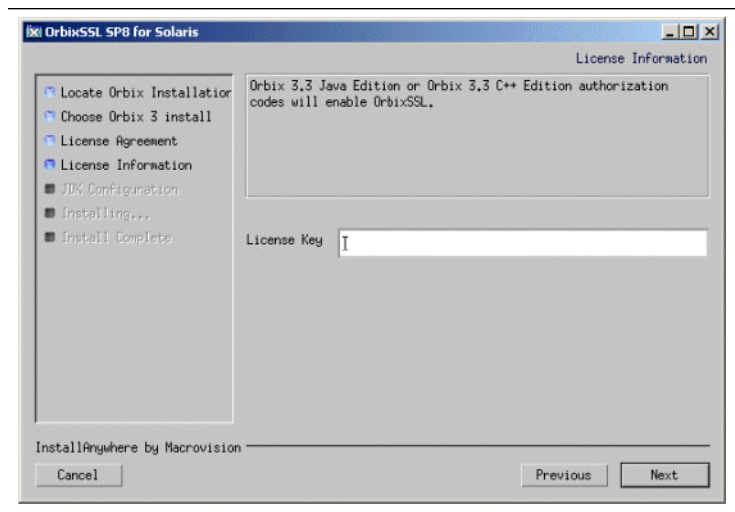
Where template.file contains the following information.

```
##Specimen properties with operating system Licence codes.
##Use on one combination as per requirement. The first section is in effect now.
##It will install Orbix 3.3 SP 8 Java and C++ edition with OTS
##-----
##C++, Java with OTS
##-----
##Choose the directory where you want OrbixSSL 3.3 SP 8 installed
USER_INSTALL_DIR=/local1/install_dir
##Choose the location of your Java Development Platform
JAVA_LOCATION=/usr/java
JAVA_VERSION=1.3
JAVA_VERSION_1=1.3
ISVALIDJDKPATH=TRUE
INSTALLER_UI=SILENT
##Choose the components of Orbix you want to install
PRODUCTS="Orbix 3.3 - Java Edition and C++ Edition with OrbixOTS 3.3"
## Licence key: c++, java , ots
LICENCE_KEY= "<c++ license key1>", "<java license key2>", "<ots license_key3>"
LICENCE_KEY_1=<Licence Key1>
LICENCE_KEY_2=<License Key2>
LICENCE_KEY_3=<License Key3>
DOMAIN=dublin.iona.ie ##Choose the domain for the installation
DOMAIN_1=dublin.iona.ie
##-----
```

Installing OrbixSSL 3.3 SP 8 With the GUI

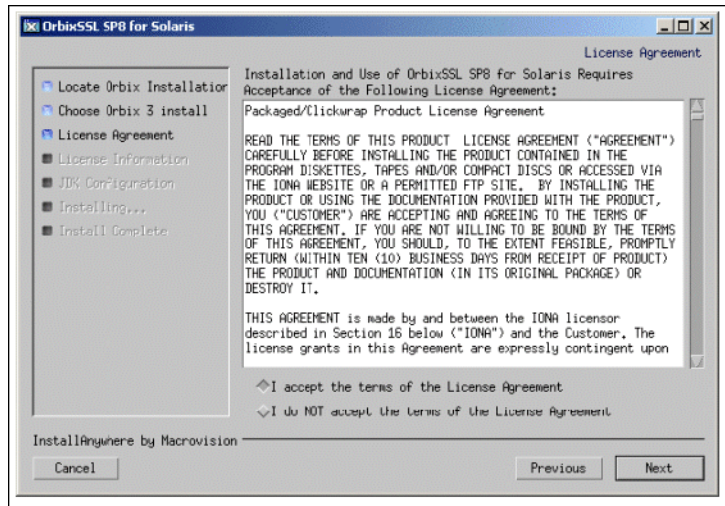
Installation steps

1. After the JRE is initialized, a progress bar is displayed as the installer prepares to begin the installation process.
2. In the **Select Product** screen, select the OrbixSSL 3.3 SP 8 product set that you purchased and click **Next** to continue.
3. In the **License Information** screen, enter the IONA license code(s) you have purchased in the appropriate text field(s). Click **Next** to continue.

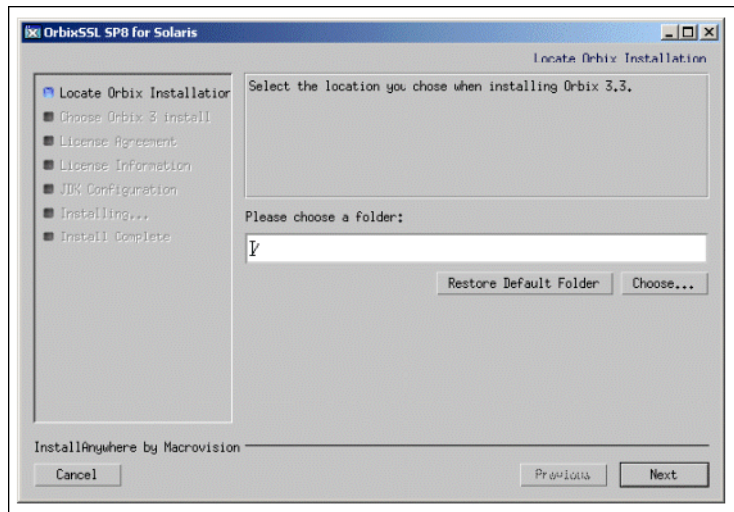


The license keys requested here will depend on the product set you selected in the previous screen.

4. In the **License Agreement** screen, click **Yes** to agree to the terms of the License Agreement then click **Next** to continue.



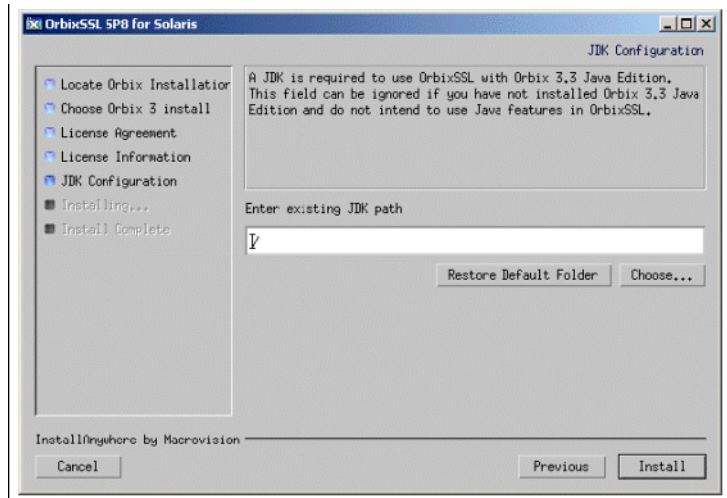
5. In the **Orbix Installation Folder** screen, enter the file location that you wish to install OrbixSSL 3.3 SP 8 into, and click **Next** to continue.



Note: You must have permission to create files and directories in this location.

6. In the **Domain Information** screen, enter your domain information, and click **Next** to continue.

7. In the **JDK Configuration** screen, enter the location of your Java Development Kit. This is not required for OrbixSSL 3.3 SP 8 C++ edition.



- Click **Next** to continue.
8. In the **Get Java Version** screen, select the version of your Java Development Kit, and click **Next** to continue.
 9. A progress bar will be displayed while the files are installed.
 10. After the installation is complete the Orbix Welcome Page launches automatically.
 11. The **Install Complete** screen is displayed to confirm that the installation is finished. Click **Done** to finish the installation.

Verifying Your Installation

Configuration Checks

When the installation is complete, follow these steps to ensure correct operation:

1. Check the contents of the Orbix configuration files, to ensure that the specified directory paths and domain name match those for your site.

Platform	Location
UNIX	/opt/iona/config/orbixssl.cfg /opt/iona/config/ssleay.cnf
Windows	C:\iona\config\orbixssl.cfg C:\iona\config\ssleay.cnf

Note: You should be aware that OrbixSSL security is initially disabled after installation as the default value of `IT_DISABLE` in `orbixssl.cfg` is set to "true". Consult Chapter 2 "Getting Started with OrbixSSL" of the *OrbixSSL C++ Programmer's and Administrator's Guide* or the *OrbixSSL Java Programmer's and Administrator's Guide* for instructions on enabling OrbixSSL security.

2. Read the *OrbixSSL 3.3 SP 8 Release Notes*.
3. Consult Chapter 2 "Getting Started with OrbixSSL" of the *OrbixSSL C++ Programmer's and Administrator's Guide* or the *OrbixSSL Java Programmer's and Administrator's Guide* for instructions on how to run the example applications with OrbixSSL security. The most up-to-date versions of all Orbix 3.3 documents are available on IONA's Orbix 3.3 documentation Web page.

Note: The certificates updated by the OrbixSSL update utility at installation time are for use by OrbixSSL example programs only, they should not be used for deployed applications. The process of creating and signing certificates is described in detail in Chapter 4 of the *OrbixSSL C++ Programmer's and Administrator's Guide* or the *OrbixSSL Java Programmer's and Administrator's Guide*.

Reinstalling the License Code

If you entered the license authorization key incorrectly or left it blank during installation, you should reinstall OrbixSSL 3.3 SP 8.

Note: OrbixSSL 3.3 SP 8 is enabled with Orbix 3.3 SP 8 Java Edition or Orbix 3.3 SP 8 C++ Edition license codes.

Uninstalling OrbixSSL 3.3 SP 8

To uninstall OrbixSSL 3.3 SP 8 run the UninstallOrbix file in the UninstallOrbix directory of your OrbixSSL 3.3 SP 8 installation, examples are given below:

Platform	Uninstall script
UNIX	/opt/iona/UninstallOrbix/UninstallOrbix
Windows	C:\iona\UninstallOrbix\UninstallOrbix

Note: The Uninstaller will remove the complete installation of OrbixSSL 3.3 SP 8, but it will not remove any files that were added or generated after installation (for example, log files, executables generated in demo runs, implementation repositories, and so on). If OrbixSSL has been installed, it should be uninstalled first.

Further Information

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

