MICRO FOCUS

Orbix 3.3.14

SSL Installation Guide

Contents

Installing OrbixSSL 3.3 SP 14

This document provides instructions for installing OrbixSSL 3.3 SP 14 on all supported platforms. OrbixSSL 3.3 SP 14 requires an existing installation of Orbix 3.3 SP 14.

Introduction

This document provides instructions for installing OrbixSSL 3.3 SP 14 on the following platforms:

- Windows 7
- Windows 8.1
- Windows 10
- Windows Server 2012 R2
- Windows Server 2016
- Red Hat Enterprise Linux 5, 6 and 7
- SUSE Linux 12
- Solaris 10 (SPARC and Intel)
- Solaris 11 (SPARC and Intel)
- AIX 6.1
- AIX 7.1
- HP-UX 11i v3 (11.31 Standard & Classic) Itanium

OrbixSSL 3.3 SP 14 requires an existing installation of Orbix 3.3 SP 14. OrbixSSL 3.3 SP 14 is enabled by license codes for Orbix 3.3 SP 14 Java Edition or Orbix 3.3 SP 14 C++ Edition.

> **Note:** Due to legal restrictions in some countries, the OrbixSSL 3.3 SP 14 CD-ROM is not supplied with Orbix 3.3 SP 14.

For a full list of supported platforms, see
http://supportline.microfocus.com/prodavail.aspx

JRE requirements

The OrbixSSL 3.3 SP 14 installation was built with the Java-based InstallAnywhere, and requires a JRE (Java Runtime Environment). You should provide the JRE yourself (see), or use a pre-installed JRE or JDK before launching the installer.

Installation steps

To install OrbixSSL 3.3 SP 14, follow these steps:

1. Check the prerequisites to installing OrbixSSL 3.3 SP 14.
2. Install OrbixSSL 3.3 SP 14 on your host machine.
3. Verify your installation.

Before you begin your installation

Before installing OrbixSSL 3.3 SP 14, see the Orbix 3.3 documentation web page at
https://supportline.microfocus.com/productdoc.aspx

You should read the latest version of the ***Orbix 3.3.14 Release Notes***, and check for any updates to this installation guide.

> **Note:** OrbixSSL 3.3 SP 14 cannot be installed using the installer GUI on machines that do not support 256 (8-bit) colors.

> **Note:** When installing OrbixSSL 3.3 SP 14 over a PCAnywhere remote client, use a display resolution of type VGA (640 x 480).

Orbix 3.3 SP 14 license codes

You must have a valid license code to install OrbixSSL 3.3 SP 14 Java Edition, OrbixSSL 3.3 SP 14 C++ Edition, and OrbixNames. All other components of OrbixSSL 3.3 SP 14 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 14 pack. Otherwise, because OrbixSSL 3.3 SP 14 is a service pack release of Orbix 3.3, the license codes provided for Orbix 3.3 are valid for OrbixSSL 3.3 SP 14. If you do not have any license codes, please contact Support before proceeding any further.

Prerequisites to Installing OrbixSSL 3.3 SP 14

Existing Orbix installations

You must install OrbixSSL 3.3 SP 14 into the same location as an existing Orbix 3.3 SP 14 Java Edition or C++ Edition installation. The existing installation is updated by the OrbixSSL 3.3 SP 14 installation.

> **Note:** Do not install OrbixSSL 3.3 SP 14 on to an older version of Orbix.

Installation prerequisites

The installation prerequisites are as follows:

Prerequisite	Notes
Privileges	**General** To install in a non-default location, you must have permission to create files and directories in that location. **Windows** To install in the default location, Windows users must have administrator privileges. **UNIX** To install into the default location, UNIX users must have root privileges.
UNIX DISPLAY	The installer was built using InstallAnywhere, which is a GUI application. To install without the GUI, see "Installing OrbixSSL 3.3 SP 14 without the GUI". For a GUI application to run on UNIX, you need to install on a UNIX host with X and a windowing environment configured. 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 `orbix-dev.microfocus.com`: `export DISPLAY=orbix-dev.microfocus.com:0.0` Contact your system administrator if you require assistance.
JRE	The installer was built using InstallAnywhere, which is a Java application, and requires a JRE (Java Runtime Environment). You must provide the location of the JRE for the installation to run. You need access on all platforms to an existing JRE (or JDK). Alternatively, you should obtain and install the JRE yourself on your system before running the installer. When installing a JRE, install all required patches on all platforms.
Domain name	The installer requires your domain name for OrbixSSL 3.3 SP 14 configuration. The Domain Name System (DNS) is used to resolve Internet or UNIX computer names. Contact your network administrator to obtain the domain name for your TCP/IP internet before installing OrbixSSL 3.3 SP 14.

CD-ROM Location of installers

If you install from CD-ROM, note that the OrbixSSL 3.3 SP 14 installers on the CD-ROM are located in a specific directory for each platform. Browse the CD-ROM to find the installer for your platform.

Mounting the CD-ROM

The following example commands can be used to mount the CD-ROM:

Platform	Command
Windows	No command required
Linux	`mount -t iso9660 /dev/cdrom /cdrom`
Solaris	`mount -r -F hsfs /dev/c0t0d0s2 /cdrom`
AIX	`mount -o ro -v cdrfs /dev/cd0 /cdrom`
HP-UX	`mount -t cdfs -o cdcase /dev/dsk/c3t2d0 /cdrom`

The commands used to mount the CD-ROM will vary depending on your system configuration. For example, `/cdrom` might need to be replaced with a different mount point. Contact your system administrator if you require assistance.

In addition, you can simplify this process using tools such as vold on Solaris and Linux, or smitty on AIX.

Obtaining the installers

Ensure that you have the correct installers for your platform. The table below shows the installer file names for each platform.

Platform	orbixSSL installer
AIX	`microfocus_orbix_ssl_3_3_14_aix.bin`
Solaris (Sparc)	`microfocus_orbix_ssl_3_3_14_solaris.bin`
Solaris (x86)	`microfocus_orbix_ssl_3_3_14_solaris_x86.bin`
Solaris (x64)	`microfocus_orbix_ssl_3_3_14_solaris_x64.bin`
HP-UX ia64 11v31 (classic 32-bit)	`microfocus_orbix_ssl_3_3_14_hpux_ia_classic.bin`
HP-UX ia64 11v31 (classic 64-bit)	`microfocus_orbix_ssl_3_3_14_hpux_ia_64_classic.bin`
HP-UX ia64 11v31 (standard 32-bit)	`microfocus_orbix_ssl_3_3_14_hpux_ia_standard.bin`
HP-UX ia64 11v31 (standard 64-bit)	`microfocus_orbix_ssl_3_3_14_hpux_ia_64_standard.bin`
Linux (x86)	`microfocus_orbix_ssl_3_3_14_linux.bin`
Linux (x64)	`microfocus_orbix_ssl_3_3_14_linux_x64.bin`
Windows Visual Studio 2010 (32-bit)	`microfocus_orbix_ssl_3_3_14_win_32_vs2010.exe`
Windows Visual Studio 2010 (64-bit)	`microfocus_orbix_ssl_3_3_14_win_64_vs2010.exe`
Windows Visual Studio 2012 (32-bit)	`microfocus_orbix_ssl_3_3_14_win_32_vs2012.exe`
Windows Visual Studio 2012 (64-bit)	`microfocus_orbix_ssl_3_3_14_win_64_vs2012.exe`
Windows Visual Studio 2013 (32-bit)	`microfocus_orbix_ssl_3_3_14_win_32_vs2013.exe`
Windows Visual Studio 2013 (64-bit)	`microfocus_orbix_ssl_3_3_14_win_64_vs2013.exe`
Windows Visual Studio 2015 (32-bit)	`microfocus_orbix_ssl_3_3_14_win_32_vs2015.exe`
Windows Visual Studio 2015 (64-bit)	`microfocus_orbix_ssl_3_3_14_win_64_vs2015.exe`

Operating systems and compilers

Please refer to the following web page for the latest information on platforms supported by OrbixSSL 3.3 SP 14:

http://supportline.microfocus.com/prodavail.aspx

Disk space requirements

The OrbixSSL 3.3 files take up approximately 30 MB of disk space on all platforms. The installer also requires approximately 50 MB of temporary work space.

> **Note:** On Windows, ensure that you have enough disk space before starting the installation.

Default location

Install OrbixSSL 3.3 SP 14 into the same location as an existing Orbix 3.3 SP 14 installation.

The default location of your Orbix 3.3 installation is as follows:

Platform	Default Location
UNIX main installation	`/opt/microfocus/orbix33`
Windows	`C:\Program Files\Micro Focus\Orbix 3.3 SP14 for Windows`
Windows (installing 32-bit kit on a 64-bit Windows)	`C:\Program Files (x86)\Micro Focus\Orbix 3.3 SP14 for Windows`

> **Note:** OrbixSSL 3.3 SP 14 installs in a fixed location relative to the path you specify. Installing into a non-default location creates a copy of the default location path relative to the non-default location.

Installing OrbixSSL 3.3 SP 14 without the GUI

Installing OrbixSSL 3.3 SP 14 in 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.

Installing in silent mode

1. To install in silent mode, use the following command:

    `./<installer> -f /path/to/template.file`

    For example, to run the Solaris (Sparc) installer silently, issue the following command:

    `./microfocus_orbix_ssl_3_3_14_solaris.bin -f /path/to/template.file`

In this case, `template.file` contains the following information.

```
##Specimen properties with operating system licence codes.
##-------------------------------------------------------------------
##C++ and Java
##-------------------------------------------------------------------
##Specify the directory where you want Orbix 3.3 SP 14 installed
USER_INSTALL_DIR=/local/install/dir
##Specify the location of your Java Developemnt Kit
JAVA_LOCATION=/local/java/install/dir
JAVA_VERSION=1.5
INSTALLER_UI=SILENT
##Specify the components of Orbix you want to install
PRODUCTS="Orbix 3.3 - Java Edition and C++ Edition"
## Specify your licence key: either the c++ or the java key can be used
LICENCE_KEY_1=<Licence Key>
##Specify the domain for the installation
DOMAIN=microfocus.com
##-------------------------------------------------------------------
```

Installing OrbixSSL 3.3 SP 14 with the GUI

This section describes how to install OrbixSSL 3.3. SP 14 using the GUI installer, which is based on InstallAnywhere.

Installation steps

To install OrbixSSL 3.3. SP 14 using the GUI, perform the following steps:

1. In the **Locate Orbix 3.3 Installation** screen, enter the file location that you wish to install OrbixSSL 3.3 SP 14 into, and click **Next** to continue.

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

2. In the **License Agreement** screen, click **Yes** to agree to the terms of the License Agreement, and click **Next** to continue.
3. In the **License Information** screen, enter your license code. Click **Next** to continue.
4. In the **Domain Information** screen, enter your domain information, and click **Next** to continue.
5. In the **JDK Configuration** screen, enter the location of your Java Development Kit. This is not required for OrbixSSL 3.3 SP 14 C++ Edition. Click **Install** to continue.
6. A progress bar is displayed while the files are installed.
7. After the installation is complete, the Orbix welcome page launches automatically.
8. In the **Reboot Computer** screen, choose whether to restart your computer now or later.
9. 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 OrbixSSL configuration files, to ensure that the specified directory paths and domain name match those for your site.

Platform	Location
UNIX	`$ORBIX_ROOT/config/orbixssl.cfg`
	`$ORBIX_ROOT/config/openssl.cnf`
Windows	`%ORBIX_ROOT%\config\orbixssl.cfg`
	`%ORBIX_ROOT%\config\openssl.cnf`

> **Note:** OrbixSSL security is disabled after installation because the default value of `IT_DISABLE_SSL` in `orbixssl.cfg` is `true`. See the chapter *Getting Started with OrbixSSL* in the **OrbixSSL C++ Programmer's and Administrator's Guide** or **OrbixSSL Java Programmer's and Administrator's Guide** for details on enabling security.

2. Read the **OrbixSSL 3.3 SP 14 Release Notes**.
3. For instructions on how to run the example applications with OrbixSSL security, see the chapter *Getting Started with OrbixSSL* in the **OrbixSSL C++ Programmer's and Administrator's Guide** or **OrbixSSL Java Programmer's and Administrator's Guide**

   The most up-to-date versions of all Orbix 3.3 documents are available on the Orbix 3.3 documentation Web page.

> **Note:** The certificates updated by the OrbixSSL update utility at installation time are for OrbixSSL example programs only. They should not be used for deployed applications. Creating and signing certificates is described in the chapter *Managing Certificates* in the **OrbixSSL C++ Programmer's and Administrator's Guide** or **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 14.

> **Note:** OrbixSSL 3.3 SP 14 is enabled with Orbix 3.3 SP 14 Java Edition or Orbix 3.3 SP 14 C++ Edition license codes.

Uninstalling OrbixSSL 3.3 SP 14

To uninstall OrbixSSL 3.3 SP 14, run the `UninstallOrbixSSL` file in the `UninstallOrbixSSL` directory of your OrbixSSL 3.3 SP 14 installation. The following are example locations:

Platform	Uninstall script
UNIX	`$ORBIX_ROOT/UninstallOrbixSSL/UninstallOrbixSSL`
Windows	`%ORBIX_ROOT%\UninstallOrbixSSL\UninstallOrbixSSL.exe`

Note: The uninstaller removes the complete installation of OrbixSSL 3.3 SP 14, but does not remove any files that were added or generated after installation (for example, log files, executables generated in demonstration runs, implementation repositories, and so on).

If you intend to uninstall Orbix completely, you should uninstall OrbixSSL 3.3 SP 14 before uninstalling Orbix 3.3 SP 14.

Further Information

Note: Once you have uninstalled OrbixSSL 3.3 SP 14 on UNIX, the remaining Orbix installation is no longer usable. To continue using Orbix 3.3.14 you must re-install it in the same location, following the instructions in the *Orbix 3.3.14 Installation Guide*.

Technical support

If you require further technical assistance with using this product, please see the following web page:

http://supportline.microfocus.com