MICRO FOCUS

Orbix 6.3.10

Release Notes

Contents

Orbix 6.3.10 Release Notes

These release notes contain information about the Orbix 6.3.10 release from Micro Focus. They contain information that might not appear elsewhere in the documentation. Read them in their entirety before you install the product.

New Features and Enhancements

Orbix 6.3.10 includes the following new features and enhancements:

- Security Protocols

Security Protocols

This release adds TLS version 1.1 to the protocols supported by Orbix 6.3 (originally added at 6.3.9 HotFix 1). You can enable this protocol by setting the protocol version to "TLS_V1_1" as described in the *Orbix Security Guide*. For example:

```
mechanism_policy:protocol_version = ["TLS_V1_1"]
```

CORBA Compliance

Orbix 6.3 complies with the following specifications:

- CORBA 2.6
- GIOP 1.2 (default), 1.1, and 1.0
- C++ Language Mapping (formal/99-07-41)
- IDL-to-Java Language Mapping (formal/99-07-53)
- Object transaction service (OTS) 1.1 and 1.2

Platforms and Compilers

For a full list of platforms and compilers supported by Orbix 6.3.10, see http://supportline.microfocus.com/prodavail.aspx

Unsupported Platforms

Note that HP PA-RISC was deprecated at Orbix 6.3.9. As of Orbix 6.3.10, it is no longer supported.

Migration from Previous Versions

To upgrade to Orbix 6.3.10 from existing Orbix 6.3.x installations:

- Back up existing installations before you upgrade.
- Go to the Orbix 6.3.x directory and run the Orbix 6.3.10 installer. The Orbix installer overwrites the existing version.

For details on installing Orbix 6.3.x service packs, see the **Orbix Installation Guide**. For details on migrating from earlier Orbix versions, see the migration and upgrade documentation at https://supportline.microfocus.com/productdoc.aspx.

Known Issues

Orbix 6.3.10 includes the following known issues:

- Microsoft Visual Studio 2015 compiler
- TLS 1.2 with recent JDKs
- Disk Space Checking During Installation
- Benign Warning when Launching the Windows Installer
- Messages during UNIX installation
- Oracle Solaris Studio 12.4 and 12.5 compiler
- Deployment problem on Windows 7 or Windows 2008 R2 VM on VMWare
- Supported platforms for Actional
- Spaces in install path and itant
- Secure CFR domain with replicated services
- Compiling 64-bit C++ applications

Microsoft Visual Studio 2015 compiler

Orbix 6.3.10 supports Microsoft Visual Studio 2015 version 14.0.25431.01 Update 3 or later versions. Support is not provided for earlier versions than Microsoft Visual Studio 2015 version 14.0.25431.01 Update 3, because of compiler issues discovered during testing.

Micro Focus advises customers to install Visual Studio 2015 using the Visual Studio 2015 Web installer (not the ISO installer) so as to avail themselves of the latest fixes available from Microsoft.

TLS 1.2 with recent JDKs

Recent JDKs might by default disable the use of certificates signed with MD5 (MD5WithRSA).

This excerpt from the TLS 1.2 specification explains why MD5 should no longer be considered a safe hashing algorithm:

> **MD5**
> MD5 [MD5] is a hashing function that converts an arbitrarily long data stream into a hash of fixed size (16 bytes). Due to significant progress in cryptanalysis, at the time of publication of this document, MD5 no longer can be considered a 'secure' hashing function.

Micro Focus highly recommends that any certificates used in secure Orbix applications that are signed with an MD5 digest signature are regenerated to use at least a SHA-2 digest signature.

Disk Space Checking During Installation

When installing on a UNIX platform, a warning message might be issued indicating there is not enough space on the file system to install Orbix. This is due to an issue with InstallAnywhere, which may not be checking the disk space of the intended file system. Check that the file system does indeed have sufficient space to install Orbix, then set the following environment variable and re-run the installer:

```
export CHECK_DISK_SPACE=OFF
```

Benign Warning when Launching the Windows Installer

When installing Orbix 6.3.10 on Windows, the installer may issue a warning about a missing java.dll, or a registry key specifying the wrong version of Java. This is a benign warning and can be safely ignored.

This warning is issued because the installer does a thorough search across the system for a usable version of Java with which to launch the installer. When an incomplete installation is found, the warning may be issued.

Such an incomplete Java installation is typically a leftover install of Java JRE installed via the "Java Update" mechanism. In order to ensure that the installation is wiped properly, run the "Java Update" installer, and at the end of the installation, agree to uninstall previous older JRE installations.

Messages during UNIX installation

When installing on a UNIX platform, a message similar to the following may be issued:

```
microfocus_orbix_6.3.10_<platform>.bin[2827]: unzip: not
    found
Invalid unzip command found
```

When installing Orbix 6.3.10 with the installer in console mode, the following message may be outputted multiple times:

```
Please Wait
```

Both messages are due to known issues with InstallAnywhere. The messages can be ignored.

Oracle Solaris Studio 12.4 and 12.5 compiler

Oracle Solaris Studio 12.4 and 12.5 compiler is not certified with Orbix 6.3.10. A compiler issue was uncovered while certifying Orbix 6.3.8 with Studio 12.4. The compiler issue relates to an inconsistent behavior in mangling symbol names between Studio 12.4 and earlier compiler versions.

The compiler vendor fixed this defect in Studio 12.6 and Orbix 6.3.10 is certified to work with Studio 12.6.

Micro Focus advises customers to refrain from using Oracle Solaris Studio 12.4 and 12.5 with Orbix 6.3.10.

Deployment problem on Windows 7 or Windows 2008 R2 VM on VMWare

You might encounter an intermittent failure to deploy services on virtual machines with only 1 CPU. This problem does not occur when the virtual machine has 2 or more CPUs.

Supported platforms for Actional

Integration with the Aurea Actional® Application Performance Monitoring system is not supported by Orbix for:

- Microsoft Windows Visual Studio 2012 (32 and 64-bit)
- Microsoft Windows Visual Studio 2013 (32 and 64-bit)
- Microsoft Windows Visual Studio 2015 (32 and 64-bit)
- Microsoft Windows Visual Studio 2017 (32 and 64-bit)

Spaces in install path and itant

If your Orbix installation path contains spaces, and you use the `itant` tool to build the Java demos, the following message might appear in the console output:

```
C:\Program%20Files\Micro%20Focus\Orbix\asp\6.3\demos\corba\demo
    .xml could not be found
```

This is a benign message and can be ignored. The Java demos build successfully.

Secure CFR domain with replicated services

In a secure configuration repository (CFR)-based domain with replicated Orbix services, CFR replica sets can not be automatically shrunk. This issue does not occur in an insecure CFR-based domain. If you have to remove CFR replicas in a secure CFR-based domain, please contact Orbix technical support.

Compiling 64-bit C++ applications

When compiling 64-bit applications with the C++ Sun Studio 12 Update 2 compiler on a Solaris x86 platform, there may be issues relating to compiling certain demos delivered with Orbix. The issue

relates to a known compiler bug in the C++ compiler. Oracle is aware of this issue, and as a workaround suggests compiling the code with the -O1 flag instead of using the debug -g flag.

Resolved Issues

The resolved issues that customers have reported are listed in this section. The numbers that follow each issue are the Reported Problem Incident number followed by the Customer Incident Numbers (in parentheses). RPIs that have numbers only (and no text) are included to confirm that the RPIs have been fixed, since no further information is required.

Issues resolved in this Service Pack

This section includes issues that are resolved for the first time in this Service Pack.

* The Orbix naming service no longer crashes when a binding for a destroyed naming context is accessed.

  627494

* This fix addresses an issue where a malicious GIOP request may contain a string with a very large length encoded in the GIOP request. This was causing Denial of Service behavior.

  628943
  628944
  629786

* The documentation on setting up IPv6 has been clarified to specify that Orbix does not support the use of link local addresses.

  631041

* Applications compiled with -std=c++11 / -std=c++0x or higher could terminate abruptly under some circumstances when the application server or interceptor code raised exceptions. This no longer occurs.

  Note that:
  - You must recompile the user C++ application;
  - The g++ default is -std=c++14 from GCC 6 onwards.

  1110025 (3112105)

* The symbolic link now points to the correct file in these Orbix 6.3.10 installation packages:

  - HP-UX ia64
  - Linux
  - Solaris x86

  1111070 (3123204)

Issues resolved in previous HotFixes

This section includes issues that were fixed in HotFixes to Orbix 6.3 SP9, and are now incorporated into SP10.

- Added support for the TLS 1.1 protocol.

  626073
  629249

- With Orbix 6.3 Windows VC14/VS2015 kits, setting the `IT_SSL_TRACE` environment variable would terminate the process with a "`no OPENSSL_Applink`" error message. This no longer occurs.

  626407

- Orbix 6 Java now accepts configuration files which contain Japanese characters in comments.

  628564

- 628569

- In `OpenSSL_Toolkit::inquire_context()`, querying for AES128-GCM-SHA256 incorrectly returned TLS_DHE_RSA_WITH_AES_256_CBC_SHA256. This no longer occurs.

  629177

- Orbix 6.3 no longer creates unnecessary TCP connections when establishing multiple client-side bindings with the `CLIENT_LOAD_BALANCING_POLICY_ID` policy set.

  1109713 (3107033)

Other Resources

The following additional resources are available:

- For the latest information on supported platforms and compilers, see
  http://supportline.microfocus.com/prodavail.aspx

- The most up-to-date versions of Orbix technical documentation are available at:
  https://supportline.microfocus.com/productdoc.aspx

- The Orbix Knowledge Base is a database of articles that contain practical advice on specific development issues, contributed by developers, support specialists, and customers. This is available at:
  http://community.microfocus.com/microfocus/corba/orbix/w/knowledge_base/

- Contact Micro Focus technical support at:
  http://www.microfocus.com