

Orbix 6.3.11

Release Notes

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Orbix 6.3.11 Release Notes

These release notes contain information about the Orbix 6.3.11 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 6.3.11 includes the following new features and enhancements:

- [Java 11 support](#)
- [Enhanced default cipher suites](#)

Java 11 support

Orbix now supports Java 11.

Note: See [Known Issues](#) for details of changes in cipher suites and certificates needed for Java 11.

Enhanced default cipher suites

In order to help customers who are moving to modern JDKs, Micro Focus have updated the default cipher suites deployed to include:

- RSA_WITH_AES_256_CBC_SHA256
- RSA_WITH_AES_128_CBC_SHA256

The addition of these ciphers may cause an issue if using older JDKs. See [Known Issues](#) for details.

See [Legacy cipher suites](#) for information on cipher suites no longer supported; and see the **Orbix 6.3.11 Security Guide** for more information on cipher suites.

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 6.3.11, see <http://supportline.microfocus.com/prodavail.aspx>

Unsupported Platforms

Note that HP PA-RISC was deprecated at Orbix 6.3.9. At Orbix 6.3.11, it is no longer supported.

Unsupported Features

The following features are no longer supported by Orbix 6.3.11:

- [Legacy cipher suites](#)

Legacy cipher suites

Advances in cryptanalysis mean that many older encryption methods can no longer be considered secure, and cipher suites using such methods cannot be recommended and may even not be supported by recent JDK versions. Therefore, Orbix 6.3.11 no longer supports the following:

- Any null-encryption cipher suites
- Any export-strength cipher suites

See the **Orbix 6.3.11 Security Guide** for more information on cipher suites.

Migration from Previous Versions

To upgrade to Orbix 6.3.11 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 6.3.11 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 6.3.11 may be affected by the following known issues:

- [Java 11 and security](#)
- [Using TLS with older JDKs](#)
- [Microsoft Visual Studio 2015 compiler](#)
- [Older security algorithms with recent JDKs](#)
- [Benign Warning when Launching the Windows Installer](#)
- [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](#)

Java 11 and security

Java 11 also includes a number of security updates, and for older applications the current deployed security certificates may not work out of the box (for example, the key size, or signature algorithm strength may not satisfy the default security configuration of the JDK). Where feasible Micro Focus recommends upgrading any security certificates and cipher suites to work with the default security configuration in Java 11.

Using TLS with older JDKs

Older JDKs (JDK7 and versions of JDK8 before update 162) do not install the Java Cryptography Extension (JCE) Unlimited Strength Jurisdiction Policy Files by default.

These files are needed to support the SHA-256 ciphers which are recommended for greater security and as such are now enabled in Orbix by default, so Micro Focus recommends that you download and install these unlimited strength .jar files.

If for some reason you do not wish to install these files on top of older JDKs then you will need to make the following change:

1. Remove the *256* ciphers from their cipher suite lists, this would involve updating the `tls.xml` file in `$OrbixInstallDir/asp/6.3/etc/conf/tls.xml` for future deployments.
2. If you wish to deploy the secure configuration repository (CFR) and the security service, then in addition to the above change you must also add a cipher list which omits the stronger ciphers. Add this under the "is2_inFile" section in the same `tls.xml`.

For example:

```
<configData>
  <dataId>policies:mechanism_policy:ciphersuites</dataId>
  <dataType>list</dataType>
  <dataValue>RSA_WITH_RC4_128_SHA</dataValue>
  <dataValue>RSA_WITH_RC4_128_MD5</dataValue>
  <dataValue>RSA_WITH_DES_CBC_SHA</dataValue>
```

```
<dataValue>RSA_WITH_3DES_EDE_CBC_SHA</dataValue>  
<dataValue>RSA_WITH_AES_128_CBC_SHA</dataValue>  
</configData>
```

Microsoft Visual Studio 2015 compiler

Orbix 6.3.11 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.

Older security algorithms with recent JDKs

Recent JDKs may by default disable the use of what are considered legacy algorithms. This includes older protocols, ciphers, digests and also may include insisting that key sizes used are above a certain size. This is due to progress in cryptanalysis which has rendered some of these older algorithms no longer strong enough.

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

Benign Warning when Launching the Windows Installer

When installing Orbix 6.3.11 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.

Oracle Solaris Studio 12.4 and 12.5 compiler

Oracle Solaris Studio 12.4 and 12.5 compiler is not certified with Orbix 6.3.11. 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 6.3.11 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 6.3.11.

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.

- Orbix 6.3 now supports Java 11.

636136
- The list of supported cipher suites in the *Security Guide* has been corrected.

1115494 (3172947)

Issues resolved in previous HotFixes

This section includes issues that were fixed in HotFixes to Orbix 6.3 SP10, and are now incorporated into SP11.

- The `it_response_time_logger` plugin no longer crashes when used with a `SINGLE_THREAD_MODEL` POA.

1114178 (3147981)

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>

