CORBA Add-on for Cloud, Containers & Virtual Environments Release Notes

V1.3.0

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1. CORBA Add-on for Cloud, Containers & Virtual Environments 1.3.0 Release Notes

These release notes contain information about the Rocket Software CORBA Add-on for Cloud, Containers & Virtual Environments (CCVE) 1.3.0 release. They contain information that might not appear elsewhere in the documentation. Read them in their entirety before you install the product.

1.1 Installing CORBA Add-on for CCVE

For detailed instructions on installing this product, see the *CORBA Add-on for Cloud, Containers and Virtual Environments Installation and User Guide*.

1.2 CORBA HotFixes

CORBA Add-on for CCVE is complemented by HotFixes for supported Rocket Software CORBA products. The CORBA Add-on for CCVE installation wizard guides you through the HotFix installation process.

2. Platforms and Compilers

2.1 Operating Systems

- Windows 7, Windows 8.1, Windows 10, Windows Server 2008 R2, Windows Server 2012 R2, Windows Server 2016, Windows Server 2019 with Visual Studio 2008, 2010, 2012, 2013, 2015, 2017 and 2019.
- Linux on Intel platform support including Red Hat 5, 6, 7 and 8, SUSE 11, 12 and 15 Oracle Unbreakable Linux 6, Ubuntu, CentOS and Fedora.

2.2 JDKs

- Oracle JDK 7, 8, and 11.
- Open JDK 8 and 11.

2.3 Kubernetes

Kubernetes support can be either:

- An on-premise cluster located within your enterprise.
- A cloud provider cluster, running in an environment such as Amazon AWS, Microsoft Azure, or Google Cloud.

3. New Features

3.1 The I-DBC Proxy Engine Supports TLSv1.3

The I-DBC proxy engine provides support for connections using the TLSv1.3 protocol. TLSv1.3 is enabled by default, and as it is the highest protocol, it will be attempted first before potentially dropping back to lower protocols. If you want to disable TLSv1.3 for connections to the I-DBC proxy engine, please see the Installation and Configuration guide for further details.

TLSv1.3 support requires the certificates used by the SSL Profiles SSLClient/SSLServer to meet certain criteria:

- Only RSA and ECC certificate types are supported by TLSv1.3.
- Each certificate type has minimum key size requirements.
- The signing algorithm used by the certificate must support TLSv1.3.

Ensure your certificates are compatible with TLSv1.3 before using this protocol.

3.2 I-DBC uses Orbacus 4.3.6 for Control Connections

Prior versions of I-DBC used Orbacus version 3.3.4 for its control connections between:

- The SPS and the Node Manager.
- The SPS and other SPS instances in a cluster.
- The SPS and the AdminConsole.

  This has been upgraded to Orbacus 4.3.6, which provides:
- A POA based ORB.
- An ORB that supports TLS 1.3

Orbacus provides support for the control connections in I-DBC components other than the I-DBC AdminConsole.

TLSv1.3 and its ciphersuites are now enabled by default in I-DBC for the control connections. If you wish to disable TLSv1.3 and continue to use TLSv1.2 and below for the control connections, please view the Installation and Configuration guide for details on how to do this.

As noted above, TLSv1.3 requires the certificates used by the control connections to meet certain criteria. Ensure your certificates are compatible with TLSv1.3 before using this protocol.

3.3 I-DBC Uses OpenSSL 1.1.1k

Both the I-DBC proxy engine and Orbacus 4.3.6 use OpenSSL 1.1.1k. This OpenSSL upgrade provides the TLSv1.3 support for the I-DBC components other than the I-DBC AdminConsole.

3.4 The I-DBC Admin Console Supports Java 11

The I-DBC AdminConsole can be run using JDK 11.

3.5 The I-DBC AdminConsole Supports TLSv1.3

The I-DBC AdminConsole supports TLS v1.3 by leveraging the features for the latest JDKs in Java8 and Java11.

As noted above, TLSv1.3 requires the certificates used by the AdminConsole to meet certain criteria. Ensure your certificates are compatible with TLSv1.3 before using this protocol.

4. Migration from Previous Versions

To upgrade to Micro Focus® CORBA® Add-on for Cloud, Containers & Virtual Environments 1.3.0 from existing version 1.0, 1.1 or 1.2 installations:

- Back up your existing installations before you upgrade.
- Run the new installer and install in the previous installation directory to upgrade. See the *Micro Focus® CORBA® Add-on for Cloud, Containers & Virtual Environments Installation and Configuration Guide* for details of the installer.

5. Known Issues

Micro Focus® CORBA® Add-on for Cloud, Containers & Virtual Environments may be affected by the following known issues:

- Configuring I-DBC in a cluster.
- Orbix 6 locator in a Kubernetes pod over a secure connection.
- Only Kubernetes service types of LoadBalancer are currently supported.
- No support for MiniKube.

5.1 Configuring I-DBC in a cluster

When configuring the I-DBC SPS and the I-DBC proxy to run in a cluster, be sure to configure both before saving the configuration. This differs from previous versions of I-DBC where the SPS could be configured and saved, and the proxy could be configured and saved in separate steps.

5.2 Orbix 6 locator in a Kubernetes pod over a secure connection

When a client running outside Kubernetes makes an invocation to a server running inside Kubernetes across a replicated set of pods, but the server is reached indirectly by the Orbix 6 locator running in each pod, all messages flows are required to occur over the same connection. When running insecurely, this can be achieved by using the `policies:per_request_lb="true"` configuration item. When running securely, running over a single connection is not guaranteed, and can lead to `OBJECT_NOT_EXIST` exceptions being thrown back to the client.

5.3 Only Kubernetes service types of LoadBalancer are currently supported

Kubernetes supports multiple service types, and multiple ways to access pods from clients running outside Kubernetes. Currently, only service types of *LoadBalancer* are supported. This requires the Kubernetes cluster to support an external load balancer.

5.4 No support for MiniKube

CORBA Add-on for CCVE supports CORBA applications in Kubernetes when using LoadBalancer service types. While the MiniKube tool supports LoadBalancer service types, the service will likely show `<pending>` for the `EXTERNAL-IP`. CORBA Add-on for CCVE requires an operational IP address or DNS name for the `EXTERNAL-IP`. For this reason, CORBA Add-on for CCVE does not provide support for running CORBA applications when using MiniKube.

6. Resolved Issues

The numbers that follow each issue are the defect numbers. Any defect numbers which are listed with no issue text are included to confirm that the issues have been fixed, and no further information is required for those issues.

6.1 Issues resolved in this Service Pack

- SSLv3 only configuration value.
- 195061
- I-DBC Logging: security version used to establish a connection.
- 195062
- Orbacus tracing is active in I-DBC 4.1.0
- Prior versions of I-DBC did not generate any Orbacus trace output regardless of the trace level.
- The I-DBC runiproxy.sh and runsps.sh scripts each contain the following:
- ORBtrace_connections 1
- This will now generate some Orbacus trace output for the I-DBC control connections in the proxy.log and sps.log files.
- If this tracing is not desired, the trace level in the scripts can be changed to:
- ORBtrace_connections 0
- 203028

6.2 Issues resolved in previous HotFixes

AdminConsole Java 7 support. 374962

7. Notices

7.1 Copyright

7.2 Trademarks

7.3 Examples

This information might contain examples of data and reports. The examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

7.4 License agreement

7.5 Corporate information

Rocket Software, Inc. develops enterprise infrastructure products in four key areas: storage, networks, and compliance; database servers and tools; business information and analytics; and application development, integration, and modernization.

Website: www.rocketsoftware.com

7.6 Contacting Technical Support

The Rocket Community is the primary method of obtaining support. If you have current support and maintenance agreements with Rocket Software, you can access the Rocket Community and report a problem, download an update, or read answers to FAQs. To log in to the Rocket Community or to request a Rocket Community account, go to www.rocketsoftware.com/support. In addition to using the Rocket Community to obtain support, you can use one of the telephone numbers that are listed above or send an email to support@rocketsoftware.com.

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USA

7.7 Country and Toll-free telephone number

To contact Rocket Software by telephone for any reason, including obtaining pre-sales information and technical support, use one of the following telephone numbers.

- United States: 1-855-577-4323
- Australia: 1-800-823-405
- Belgium: 0800-266-65
- Canada: 1-855-577-4323
- China: 400-120-9242
- France: 08-05-08-05-62
- Germany: 0800-180-0882
- Italy: 800-878-295
- Japan: 0800-170-5464
- Netherlands: 0-800-022-2961
- New Zealand: 0800-003210
- South Africa: 0-800-980-818
- United Kingdom: 0800-520-0439