

webMethods EntireX 9.10 Readme

April 2016

This file contains important information you must read before using webMethods EntireX 9.10. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- EXX-7206
With the COBOL Mapping Editor, it is currently not possible to remove a previously extracted interface using the context menu action COBOL > Modify Interface.
- EXX-7213
IMS RPC Server: runtime error '1001 0009: Invalid format buffer'; IMS specific PCB pointers are part of the server-side mapping file.
- EXX-7453
Micro Focus RPC server sporadically gets the error "Inconsistency detected by ld.so" during runtime scenario with Java client.
- EXX-8589
Delete no longer needed resources (delete routine BROKER2, deallocate stub work area, delete task-specific name/token entry) on request by RPC server. This is required to avoid memory leaks and to avoid error 'CEE3536S Not enough storage was available for the WSA'.
- EXX-8584
Run stub without UNIX System Services if NET transport was requested.
- EXX-8561
SYNCPOINT LAST is slow and Broker is creating dumps.
- EXX-8539
ACI Program using API Version 1 gets error '00020002 - User does not exist' on the RECEIVE function.
- EXX-8536
CONVERSION=SAGTRPC writes trace output to the broker log although there is no trace level defined for CONVERSION if Arabic shaping (codepages 1256, 420, utf8) is in effect.
- EXX-8456
XML RPC Server/XML Listener: Array of groups within XML elements containing an attribute definition may result in internal error '20000087 (OMException)' depending on setting of null value suppression.
- EXX-8338
Correct the default wait time for inactive broker to 15 minutes.
- EXX-8320
Installation of a EntireX Core fix may reset the property "Autostart" of local Brokers.

- EXX-8476
Compile error (Visual Studio 2010) during DCOM Wrapper generation using Workbench.
- EXX-8540
ETBINFO does not find profile files in an exclusive "EntireX Administration and Monitoring" package installation.

3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- The EntireX Broker communication model Publish and Subscribe is no longer supported. You therefore need to remove the broker attribute `PUBLISH-AND-SUBSCRIBE` from your broker attribute file, otherwise error `ETBE0023 Unknown attribute PUBLISH-AND-SUBSCRIBE` is returned.

4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

Release 9.10

- | | |
|-------------------------|-------------------------------|
| ▪ EXX_9.9_Core_Fix2 | Fix 2 for EntireX Core |
| ▪ EXX_9.9_SPM_Fix3 | Fix 3 for SPM |
| ▪ EXX_9.9_Designer_Fix5 | Fix 5 for Eclipse |
| ▪ EXB990L006 | Fix 6 for z/OS |
| ▪ EXX990L006 | Fix 6 for z/OS |
| ▪ XAI_9.9_Fix2 | Fix 2 for the EntireX Adapter |

Release 9.9

- | | |
|----------------------------|---|
| ▪ EXX_9.7.0_Fix10 | Fix 10 for EntireX Core |
| ▪ XAI_9.7.0_Fix10 | Fix 10 for EntireX Adapter |
| ▪ EXX_9.7.0_Designer_Fix15 | Fix 15 for Eclipse
(if Natural ONE is installed, must be version 8.3.5 or above) |
| ▪ EXX_9.7.0_Fix11 | Fix 11 for EntireX Runtime |
| ▪ EXX970L019 | Fix 19 for z/OS |
| ▪ EXP970P020 | Fix 20 for z/OS |

Release 9.7

- EXB960P001 Fix 1 for z/OS
- EXX960P001 Fix 1 for z/OS

5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

Release 9.7

- EXX-6228
Under UNIX and Windows, you can now keep the current and the previous four Broker log files.
- EXX-6303
For COBOL RPC clients, performance for marshalling has been enhanced.
- EXX-6519
Some errors (e.g. error 0148) in the stub log did not contain the error class (e.g. 0215).
Stub log now contains the error class to identify the error.
- EXX-7019
Description of broker attribute `HEAP-SIZE` and dynamic memory management has been enhanced.

6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

Release 9.10

- Web Services Stack
Multiple sections of the EntireX documentation reference the separate Web Services Stack documentation. Since webMethods Suite 9.8, this documentation is part of the *Software AG Infrastructure Administrator's Guide*, also available under <http://documentation.softwareag.com> > *Guides for Tools Shared by Software AG Products*.

Release 9.9

- Software AG documentation is no longer available on the Software AG installer. You can access all Software AG documentation on the [Documentation website](#).

- Documentation for EntireX Adapter is now incorporated in the EntireX documentation for ease of use. A standalone PDF file of the Adapter documentation is also provided for your convenience.
- For platform z/VSE, sections have been added to set up ATLS (Automatic Transport Layer Security).

Release 9.7

- COBOL Mapping Editor documentation thoroughly reworked. Functions documented for each interface type.
- Scenario “Calling Integration Server from COBOL” expanded.
- New documentation section Installing EntireX RPC Servers under IMS.
- Application Transparent Transport Layer Security (AT-TLS): various sections dealing with SSL or TLS support have been reworked and also include sections on how to set up AT-TLS.

Release 9.6

- Common Integration Scenarios section has been enhanced with regard to navigation. High-level, illustrated scenario descriptions lead to more detailed sections below.
- Documentation for mapping of fixed and unbounded arrays has been enhanced.
- Various sections dealing with SSL or TLS support have been reworked. See *Using SSL or TLS with the RPC Server* under CICS | Batch | IMS, and *SSL or TLS and Certificates with EntireX* in the Security documentation.
- A new section describes IBM Language Environment runtime options relevant for CICS, Batch and IMS RPC servers.

Release 9.5

- SVM File Handling
Documentation of SVM file handling has been enhanced for all supported RPC servers.
- CVM File Handling
Documentation of CVM file handling has been enhanced.
- Supported RPC Protocols
New section lists the RPC protocols supported by the different EntireX and Natural versions.
- Conversion Error Messages
All error messages of class 1003 have been reworked and several new messages have been added.

- Internationalization
The internationalization documentation has been thoroughly reworked.

7.0 Terminology Changes

A release is listed in this section only if changes occurred in that release.

Release 9.7

Old Term	New Term
SVM file	Server-side mapping file.
CVM file	Client-side mapping file.

8.0 Added, Removed, Deprecated, or Changed Items

This section lists features, functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

Release 9.10

Added Item	Description
Increased platform support	EntireX now supports z/OS version 2.2 and Windows 10 Professional and Enterprise 64-bit editions.
Workbench enhancements	<ul style="list-style-type: none">• COBOL program ID and Channel name can now be modified after extraction, using the COBOL Mapping Editor.• EntireX now uses Eclipse version 4.5.
EntireX Adapter	New connection type "COBOL Converter" introduced to convert IS data structures from/to a byte array representing the COBOL binary data.

Added Item	Description
Command Central	<p>Enhanced support for EntireX Broker instances running under UNIX or Windows. You can now perform the following operations on EntireX Broker in addition to the operations supported in EntireX version 9.9:</p> <ul style="list-style-type: none"> • Configure Application Monitoring • Configure EntireX Broker Persistent Store • Configure EntireX Broker Security • Enable and specify EntireX Broker Trace Level dynamically
KPIs for CPU time	<p>New KPIs are available with Command and Information Services interface for showing amount of CPU time consumed since Broker start. CPU time can also be shown in the Software AG product Optimize for Infrastructure.</p>
Support for Visual Studio 2012 and 2013	<p>The EntireX .NET Wrapper Wizard now supports Microsoft Visual Studio version 2012 and 2013 in addition to version 2010 already supported.</p>
Removed Item	Description
Windows 32-bit Operating Systems	<p>Software AG no longer supports Windows 32-bit operating systems. However, the following EntireX components are supported for 32-bit applications on Windows 64-bit operating systems:</p> <ul style="list-style-type: none"> • EntireX Mini Runtime • Transaction Object Editor of Broker ActiveX Control • .NET Wrapper Runtime
Java Message Service	<p>JMS support has been dropped.</p>
Publish and Subscribe	<p>The EntireX Broker communication model Publish and Subscribe is no longer supported. You therefore need to remove the broker attribute PUBLISH-AND-SUBSCRIBE from your broker attribute file, otherwise error ETBE0023 'Unknown attribute PUBLISH-AND-SUBSCRIBE ' is returned.</p>

Removed Item	Description
Swapping out New Units of Work	The ability to swap out new units of work that was provided in earlier EntireX versions is now no longer required. The corresponding broker attributes <code>SWAP-OUT-NEW-UOWS</code> and <code>MIN-UOW-CONVERSATIONS-IN-MEMORY</code> are no longer supported and will be ignored.
Library <i>broker.so</i>	Under UNIX, library <i>broker.so</i> has been replaced by library <i>libbroker.so</i> . Library <i>libbroker.so</i> was already delivered in earlier EntireX versions and is identical. Make sure you applications use only <i>libbroker.so</i> .
SMH Technical Information	The System Management Hub Technical Information Agent is no longer delivered.
SNMP	The SNMP (Simple Network Management Protocol) interface of the System Management Hub is no longer supported.

Deprecated Item	Description
Direct SSL/TLS Support for Broker Stubs under z/OS	Direct SSL/TLS support (using GSK) inside the broker stubs under z/OS will be dropped in the next version. We recommend using IBM's Application Transparent Transport Layer Security (AT-TLS) instead.
Administration using System Management Hub	Administration with SMH (including the batch interface <code>argbatch</code>) will be dropped in the next version of EntireX. The most important functionality will be provided by Command Central.
Encryption/decryption mechanism provided by EntireX Security	We strongly recommend using the Secure Sockets Layer/Transport Layer Security protocol.
Microsoft Visual Studio 2010, 2012, 2013	<p>With the next version of EntireX, the following components will support Microsoft Visual Studio version 2015:</p> <ul style="list-style-type: none"> • C Wrapper • DCOM Wrapper • .NET Wrapper Wizard for Microsoft Visual Studio <p>Older versions will no longer be supported.</p>

Deprecated Item	Description
WebSphere MQ RPC Server and Listener Support for dynamic IDL/RPC parameters	

Changed Item	Description
Installation Packages	<p>The EntireX installation packages have been streamlined and restructured:</p> <ul style="list-style-type: none"> EntireX Broker can now stay running while runtime updates outside EntireX Broker are made. Administration and Monitoring functionality has been clearly separated from the runtime parts. Mini Runtime is now a separate installation package. Examples have been reworked and streamlined.
EntireX built with Visual Studio 2015	<p>This version of EntireX was built with Microsoft Visual Studio 2015. When you install EntireX components, the necessary Microsoft Redistributable Files are also installed.</p>
COBOL Wrapper, generic RPC service modules	<p>The generic RPC service modules for the following interface types need to be generated with the EntireX Workbench. See COBOL Wrapper documentation for details.</p> <ul style="list-style-type: none"> COBSRVID for CICS with standard linkage calling convention COBSRVIB for Batch with standard linkage calling convention

Release 9.9

Added Item	Description
Enhanced null value suppression	<p>A new button in the XML Mapping Editor Overview Page enables you to set the current null value suppression settings to all mappings.</p>

Added Item	Description
COBOL MPO support	The IDL Extractor for COBOL - together with the EntireX Adapter or EntireX RPC Servers - supports the concept of multiple possible output (MPO). This means that the output structure returned is decided by the COBOL server at runtime; the COBOL layout on output varies.
COBOL server using data length to process a variable number of array elements	The IDL Extractor for COBOL - together with the CICS RPC Server, the EntireX Adapter with IMS Connect connections, or the IMS Connect RPC Server - supports COBOL server programs that use the data length of their interface to process a variable number of array elements in a fixed-size COBOL table.
Command Central support	<p>With the Software AG's Command Central you can configure, manage, and administer one or more installations of the webMethods product suite in your enterprise. EntireX supports Command Central for EntireX Broker instances running on Linux, UNIX or Windows. They must have been created with version EntireX 9.9 by System Management Hub, Command Central or command line (SMH, CC, or Broker command-line utility etbsrv).</p> <p>You can start, stop and configure EntireX Broker instances from a single location, using the Command Central user interface or from a command line. Basic monitoring KPIs for EntireX Broker instances can be seen from the UI.</p>
EntireX Adapter Listeners	A new information screen provides statistics about the listeners of the EntireX Adapter.
Application Monitoring Data Collector	The Data Collector now provides callback functionality for the processing of incoming events.

Added Item	Description
Logging exit for EntireX scripting commands	Since version 9.7, EntireX has provided a set of command-line scripts with which, for example, you can monitor your environment and check that all components (broker, RPC servers) are up and running. Now an optional logging exit is provided. This is called every time a component in the environment is checked; results can be written to a CSV file. You can use the sample script <code>log_environment.bat</code> as a template.
Set application name with .NET Wrapper	For accounting purposes, a new property <code>ApplicationName</code> has been introduced for the .NET Wrapper. Set this property before calling one of the Logon methods if you want to replace the default application name.
Preview of Date/DateTime Pattern in XML Mapping Editor	The Preferences page of the XML Mapping Editor now shows a preview for date and dateTime patterns entered.

Removed Item	Replacement, if any
EntireX Mini Runtime is no longer delivered with EntireX.	Functionality is provided with EntireX Libraries in the Software AG Installer.
EntireX support for Software AG's Integrated Authentication Framework (IAF) has been dropped from all interfaces.	
EntireX Wrapper for Enterprise JavaBeans. It is no longer possible to enable Java-based components to access an EntireX RPC server using Enterprise JavaBeans.	
Adapter Services Wrapper for Natural.	The functionality is already covered by using the IDL Extractor for Natural and the Integration Server Wrapper.
Partner Broker ID.	
Support for IBM compiler PL/I for MVS & VM.	Support for Enterprise PL/I for z/OS compiler will continue.
Microsoft Visual Studio Wizard for EntireX DCOM Wrapper.	The functionality is provided by the EntireX Workbench.

Removed Item	Replacement, if any
Broker Control Block Definitions NATDEF12 and NATDEF21 of ACI for Natural.	Use NATDEF in your application for Broker control block definition.

Deprecated Item	Replacement, if any
Encryption/decryption provided by EntireX Security will be deprecated in the next version.	For encrypted transport we strongly recommend using the Secure Sockets Layer/Transport Layer Security protocol.
EntireX Broker support for Java Message Service will be dropped in the next version.	
EntireX Broker support for Publish and Subscribe communication model will be dropped in the next version.	
Direct SSL/TLS support (using GSK) inside the broker stubs under z/OS will be dropped in the future.	We recommend using IBM's Application Transparent Transport Layer Security (A T-TLS) instead.
Administration using System Management Hub (including batch interface <code>argbatch</code>) and SNMP support is planned to be dropped in a future version of EntireX.	
The Generic RPC services modules COBSRVIB and COBSRVID delivered on mainframe will be moved to the examples in the next version.	For your integration scenarios, use the modules generated by the EntireX Workbench.

Changed Item	Description
DCOM Wrapper	The wrapper now supports Microsoft Visual Studio 2012 and 2013 in addition to the already supported Visual Studio versions.
Integration Server Wrapper	The wrapper no longer creates the <code><IDL>_IS.properties</code> file. Existing property files are ignored.
Platform support	EntireX and EntireX Adapter 9.9 now run under SUSE Linux Enterprise Server for x86-64 (64-bit) version 12 in addition to version 11.

Changed Item	Description
Java 8 support in Java Wrapper and IDL Extractor for WSDL	<p>When generating Java RPC clients (Bean-compliant) with the Java Wrapper, the name generation rules have changed slightly to ensure greater consistency. This means a name used for more than one IDL group parameter with different content is always changed.</p> <p>With the IDL Extractor for WSDL, prefix name assigning has been enhanced to ensure consistent generation of XML mapping files. If more than one prefix is associated with a URL, the last prefix (in alphabetical order) is used.</p> <p>See EntireX Release Notes for examples.</p>
EntireX Adapter license handling	<p>License handling for EntireX Broker connections now better reflects the EntireX pricing model: a license status line has been introduced for EntireX Broker connections (ACI connections or normal RPC connections), and a warning message is given in the case of a possible license coverage mismatch.</p>
CICS RPC user exit COBUEx02	<p>The user exit now provides the maximum expected length of output data (reply) before calling the target CICS program.</p>
Compatibility with webMethods Suite Naming Conventions	<p>The name of the UNIX start/stop script for the EntireX Broker Administration Service has changed to comply with webMethods suite naming conventions:</p> <p>in <i>directory etc/init.d</i>: from <i>sag<n>etbsrv</i> to <i>sag<n>exx99</i> in directory <i>EntireX/bin</i>: from <i>sag<n>etbsrv</i> to <i>sagexx</i></p>
Running the XML/SOAP RPC server in the Software AG Runtime	<p>After installation, the default XML/SOAP RPC Server using Broker "localhost:1971" and server address "RPC/XMLSERVER/CALLNAT" is no longer started automatically.</p>
OpenSSL Support	<p>The OpenSSL Project has announced it will no longer support version 0.9.8 from December 31, 2015. EntireX now supports OpenSSL version 1.0.1. See CIPHER-SUITE under <i>Broker Attributes</i> in the EntireX documentation.</p>

Release 9.7

Removed Item	Replacement, if any
Broker Services were partially retired with EntireX version 8.0; they are now fully retired.	See Release Notes
Location Transparency support was dropped in EntireX version 9.5. Location Transparency has now been removed from all major interfaces.	

Deprecated Item	Replacement, if any
See <i>Features to be Dropped in Future Versions</i> in the EntireX Release Notes for comprehensive list.	

Changed Item	Description
IDL Extractor for Integration Server	The handling of content types when mapping Integration Server data types to IDL has changed. See <i>IDL Extraction from Integration Server</i> in the webMethods EntireX Adapter documentation.
WebSphere MQ Listener	The handling of the correlationId and the messageId in synchronous request/reply scenarios has been changed. See <i>Support for Synchronous Request/Reply Scenarios</i> under <i>Advanced WebSphere MQ Listener Functionality</i> in the EntireX documentation.

Release 9.6

Removed Item	Replacement, if any
Removed support for z/OS 1.12, z/VSE 4.3.	The following platforms are no longer supported: z/OS 1.12, z/VSE 4.3.
No new version of IAF is delivered with this release of the webMethods suite.	If you are running IAF, you can continue using the version delivered with an earlier suite version.

Deprecated Item	Replacement, if any
Broker stub BKIMBTSO is no longer provided.	The functionality is covered by stub BROKER. The default transport method for BKIMBTSO was TCP; default for BROKER is NET. However, this can be changed to TCP if required.

Release 9.5

The following functionality has been dropped in this release:

- Location Transparency Location transparency is no longer supported in this version.
- Windows Server 2008 (32-bit) Windows Server 2008 (32-bit) is no longer supported. We suggest you upgrade to the 64-bit or a more recent Windows version. See *List of Components per Platform* in the EntireX Release Notes for full list
- JBoss Application server JBoss is no longer supported.

9.0 Added, Removed, Deprecated, or Changed Built-In Services

A release is listed in this section only if changes occurred in that release.

Release 9.9

All services apply to EntireX Adapter.

Added Service	Description
<code>pub.listener:createDocumentTypes</code>	Creates document type objects, using the metadata stored in the listener, connection or adapter service object.
<code>pub.listener:createFlow</code>	Creates flow objects for the specified EntireX Adapter listener object.
<code>pub.listener:createIDL</code>	Creates an IDL file, using the metadata which is stored in the listener, connection or adapter service object.
<code>pub.wmentirex.directrpc.admin:setTLSProtocols</code>	Change the set of enabled TLS protocols.
<code>pub.wmentirex.directrpc.admin:getTLSProtocols</code>	Return the value of <code>setTLSProtocols</code> .
<code>pub.wmentirex.directrpc.admin:setCipherSuites</code>	Change the set of enabled cipher suites.
<code>pub.wmentirex.directrpc.admin:getCipherSuites</code>	Return the value of <code>setCipherSuites</code> .

Changed Service	Description
<code>com.softwareag.entirex.wmadapter.Deployment</code>	Namespace changed to <code>pub.wmentirex.listener</code> . The service is still available using the old namespace.

Changed Service	Description
pub.wmentirex.listener: generateIDLfromService	The meaning of parameter <code>fileName</code> has changed. This is the name of the IDL file with extension ".idl". You cannot specify a folder name. The file is created in the folder <i><IntegrationServer_instance>/packages/WmEntireX/resources</i> .

10.0 Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.

Release 9.9

Added Parameter	Description
Broker attribute <code>MAX-TRACE-FILES</code>	Maximum number of backup copies of trace file <code>ETB.LOG</code> .
Broker attribute <code>TRACE-FILE-SIZE</code>	Maximum size of one trace file. If this value is exceeded, a new trace file is allocated up to the limit specified in <code>MAX-TRACE-FILES</code> .

Changed Parameter	Description
Broker attribute <code>CIPHER-SUITE</code> .	New default value to support OpenSSL version 1.0.1.

Deprecated Parameter	Replacement, if any
Support for dynamic IDL/RPC parameters will be dropped in a future version.	

Release 9.7

Changed Parameter	Description
Broker attribute <code>POLL</code> .	Default value changed from YES to NO for z/OS and z/VSE.

11.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

Release 9.7

Removed API	Replacement, if any
Location Transparency.	No replacement. Support for Location Transparency was dropped in EntireX version 9.5. It has now been removed from all major interfaces.

12.0 Copyright Information

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13.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

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