

## webMethods EntireX

EntireX RPC Servers, Listeners and Bridges

Innovation Release

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**WEBMETHODS** 

This document applies to webMethods EntireX Version 9.9 and all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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# 1 EntireX RPC Servers, Listeners and Bridges

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The EntireX RPC Servers (available under CICS, z/OS Batch, UNIX, Windows and Java) execute servers on RPC client requests. Using EntireX RPC Wrapper technology of the *EntireX Workbench*, you can generate these servers together with integrated wrappers (server interface objects). The Workbench tool you choose to generate these servers depends on your environment, for example Java Wrapper, COBOL Wrapper, C Wrapper, XML/SOAP Wrapper, etc.

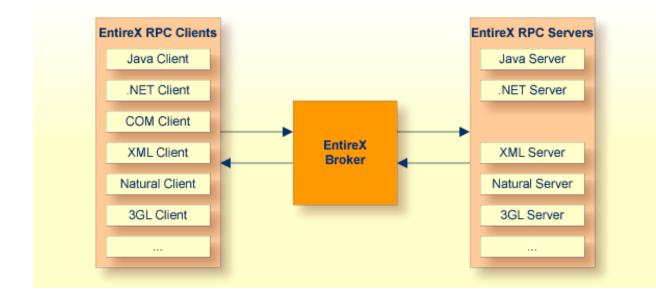
### Introduction

EntireX RPC Servers handle all aspects of Broker communication, which means you do not need to deal with Broker ACI programming. EntireX RPC Servers call the generated servers in a standardized way depending on the platform under which the EntireX RPC Server is running, for example DLL on Windows, shared library on UNIX, CICS program under CICS. This means you can implement your servers in your usual manner.

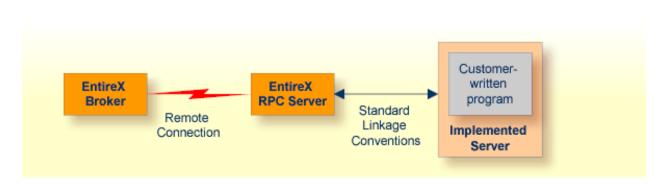
This section lists the EntireX RPC Servers and provides links to installation and administration sections of the documentation.



**Note:** For Natural RPC servers, see *Setting Up a Natural RPC Environment* in your Natural documentation.



### EntireX RPC Servers under z/OS



### **CICS RPC Server**

The EntireX z/OS CICS® RPC Server allows standard RPC clients to communicate with RPC servers on the operating system z/OS under CICS. It supports the programming languages COBOL and PL/I.

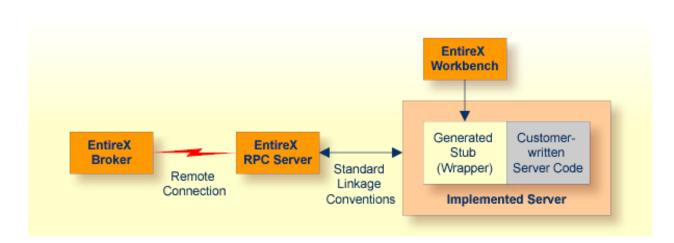
### Batch RPC Server

The EntireX z/OS Batch RPC Server allows standard RPC clients to communicate with RPC servers on the operating system z/OS running in batch mode. It supports the programming languages COBOL, PL/I and C.

### **IMS RPC Server**

The EntireX z/OS IMS RPC Server allows standard RPC clients to communicate with RPC servers on the operating system z/OS running with IMS in BMP mode. It supports the programming languages COBOL, PL/I and C and can provide IMS-specific PCB pointers for access to IMS databases if needed.





#### **UNIX RPC Server**

The UNIX RPC Server enables you to call shared objects/libraries as servers. The preferred language to implement servers under UNIX is C.

#### Windows RPC Server

The Windows RPC Server, together with the C Wrapper, enables you to call DLLs as servers.

#### Java RPC Server

The EntireX Java RPC Server is an RPC server which runs Java server interface objects generated from your IDL files. This server can register an Attach Service to start several services with the same server address on demand. See *Administering the EntireX Java RPC Server* in the UNIX and Windows administration documentation.

#### .NET RPC Server

The EntireX .NET RPC Server, together with the EntireX .NET Wrapper, enables you to call .NET assemblies as servers. See *Server Configuration* under *EntireX* .NET Wrapper Application Configuration.

### XML/SOAP RPC Server

With the XML/SOAP RPC Server you can process XML-based server calls from EntireX RPC clients/Natural RPC clients. The EntireX RPC client communicates with the XML-based server, using the XML/SOAP RPC Server. See *Administering the EntireX XML/SOAP RPC Server* in the UNIX and Windows administration documentation.

### XML/SOAP Listener

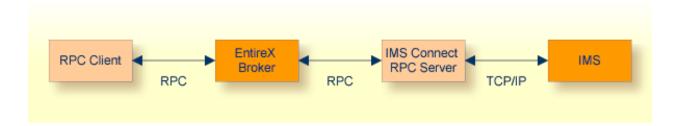
The EntireX XML/SOAP Listener is part of the EntireX XML/SOAP Runtime. It plugs the generated AAR file, including XMM files, into Web servers and so enables the EntireX XML/SOAP Runtime to send and receive XML documents using HTTP/HTTPS to/from a Web server. This component was formerly referred to as "XML Servlet". See *Configuring the XML/SOAP Listener* in the UNIX and Windows administration documentation.

### Micro Focus RPC Server

The EntireX Micro Focus COBOL RPC Server allows standard RPC clients to communicate with COBOL servers written with Micro Focus COBOL. It works together with the COBOL Wrapper and the IDL Extractor for COBOL.

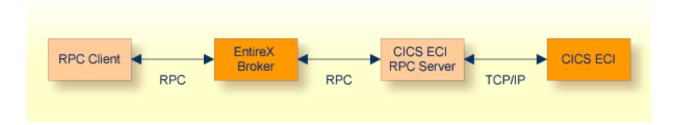
#### **IMS Connect RPC Server**

The EntireX IMS Connect RPC Server allows standard RPC clients to communicate with IMS MPP programs running on IMS version 9 and higher. The IMS Connect RPC Server transforms the RPCs from the clients into messages to IMS Connect v2.2. The IMS Connect RPC Server acts on one side as an RPC server and on the other side as a client for IMS Connect. The IMS Connect RPC Server is a Java-based component that can run on a different host to the one where IMS is running. This allows it to operate with a zero footprint of EntireX on the IMS host.



### **CICS ECI RPC Server**

The EntireX CICS® ECI RPC Server allows standard RPC clients to communicate with CICS programs running on IBM CICS® version 3.2 and higher. The CICS ECI RPC Server transforms the RPCs from the clients into messages to CICS ECI. The CICS ECI RPC Server acts on one side as an RPC server and on the other side as a client for CICS ECI. The CICS ECI RPC Server is a Javabased component that can run on a different host to the one where CICS is running. This allows it to operate with a zero footprint of EntireX on the CICS host.



#### WebSphere MQ RPC Server

EntireX WebSphere MQ RPC Server runs as an RPC server and processes RPC client calls. It is used to send messages to and receive messages from a WebSphere MQ Queue. This means that existing EntireX wrappers can be used for communication with WebSphere MQ.

#### WebSphere MQ Listener

EntireX WebSphere MQ Listener runs as a listener on a WebSphere MQ queue and passes messages to an RPC server. It is used to send messages received from a WebSphere MQ queue to an RPC server applications. This means that existing RPC servers can be used for communication with WebSphere MQ.

### **RPC-ACI Bridge**

The RPC-ACI Bridge enables RPC-based client applications to be used with ACI servers. .

### BS2000/OSD Batch RPC Server

The EntireX BS2000/OSD Batch RPC Server allows standard RPC clients to communicate with RPC servers on the operating system BS2000/OSD. It supports the programming languages COBOL and C. .

### EntireX RPC Servers under z/VSE



### **CICS RPC Server**

The EntireX z/VSE CICS® RPC Server allows standard RPC clients to communicate with RPC servers on the operating system z/VSE under CICS. It supports the programming language COBOL.

#### **Batch RPC Server**

The EntireX z/VSE Batch RPC Server allows standard RPC clients to communicate with RPC servers on the operating system z/VSE under Batch. It supports the programming language COBOL and works together with the COBOL Wrapper and IDL Extractor for COBOL.

### IBM i RPC Server

The EntireX IBM i RPC Server enables you to call server programs written in all ILE-based languages, for example C, COBOL, RPG.



### Installation Information

### z/OS

Data sets for the EntireX RPC Servers are prefixed with EXP on the installation medium. See *Contents of Mainframe Installation Medium* in the z/OS installation documentation.

- Installing EntireX RPC Servers under CICS in the z/OS installation documentation
- Installing EntireX RPC Servers under Batch in the z/OS installation documentation
- Verifying the z/OS Installation in the z/OS installation documentation

#### **UNIX and Windows**

There are no special installation instructions for EntireX RPC Server components on these platforms.

### BS2000/OSD

Installing the BS2000/OSD Batch RPC Server in the BS2000/OSD installation documentation

### IBM i

Installing the EntireX RPC Server under IBM i

### **Administration Information**

### z/OS

- CICS RPC Server
- Administering the Batch RPC Server
- Administering the EntireX RPC Server under z/OS IMS

### UNIX

- Administering the EntireX RPC Server in the UNIX administration documentation
- Administering the EntireX RPC Servers using System Management Hub
- Administering the EntireX Java RPC Server in the UNIX administration documentation
- Administering the EntireX XML/SOAP RPC Server in the UNIX administration documentation
- Administering the EntireX XML/SOAP Listener in the UNIX administration documentation
- Administering the Micro Focus RPC Server

See EntireX Administration under UNIX.

### Windows

- Administering the EntireX RPC Server in the Windows administration documentation
- Administering the EntireX RPC Servers using System Management Hub
- Running an EntireX RPC Server as a Windows Service in the Windows administration documentation
- Administering the EntireX Java RPC Server in the Windows administration documentation
- Administering the EntireX XML/SOAP RPC Server in the Windows administration documentation
- Administering the EntireX XML/SOAP Listener in the Windows administration documentation
- Administering the Micro Focus RPC Server

See EntireX Administration under Windows.

### BS2000/OSD

Administering the BS2000/OSD Batch RPC Server in the BS2000/OSD administration documentation

### IBM i

Administering the EntireX RPC Server in the IBM i administration documentation