

# Client and Server Examples for z/VSE Batch

This chapter describes the examples provided for the COBOL Wrapper for z/VSE Batch. All examples here can be found in the EntireX directory *examples/RPC* under UNIX and Windows. Alternatively, you can download the full set of z/VSE COBOL examples from Software AG's customer service site Empower. In Empower, choose **Products > Download Components**. The examples are provided as AWS tape `EXAMPLE .AWS`. The tape contains source code and the corresponding objects and phases, ready to run. This chapter covers the following topics:

- Basic RPC Client Examples - CALC, SQUARE
  - Basic RPC Server Examples - CALC, SQUARE
  - Reliable RPC Client Example - SENDMAIL
  - Reliable RPC Server Example - SENDMAIL
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## Basic RPC Client Examples - CALC, SQUARE

This section covers the following examples:

- CALC Client
- SQUARE Client

### CALC Client

The CALC client is built with COBOL Wrapper interface type "Batch with standard linkage calling convention". See *Client Interface Types* for more information.

Name	Type	Sublibrary	Description	Notes
README1.TXT	Text document	EXAMPLE.COBCLTB	Client build instructions and description.	
CALCCLT.C	COBOL source code	EXAMPLE.COBCLTB	A client application calling the remote procedure (RPC service) CALC, with associated example.idl.	2
CALC.C	COBOL source code	EXAMPLE.COBCLTB	Client interface object for IDL program CALC.	1
CALC.C	COBOL copybook	EXAMPLE.COBCPYB	Client interface object copybook for IDL program CALC.	1
ERXCOMM.C	COBOL source code	EXAMPLE.COBCPY	RPC Communication Area copybook.	1
COBSRVIB.C	COBOL source code	EXAMPLE.COBCLTB	Generic RPC Service.	1
CALCCLT.J	JCL	EXAMPLE.COBCLTB	Job control to build the RPC client CALCCLT.	3
CALCRUN.J	JCL	EXAMPLE.COBCLTB	Job control to execute the RPC client CALCCLT.	3

**Notes:**

1. Generate these objects with the EntireX Workbench or use the example library contained in EXAMPLE.AWS.
2. Application built according to the client-side build instructions, see *Using the COBOL Wrapper for Batch (z/OS, BS2000/OSD, z/VSE and IBM i)*.
3. Adapt the JCL to your needs.

For more information refer to the file README1.TXT in EntireX directory *examples/RPC/basic/example/CobolClient/vseBatch* under UNIX or Windows, or the downloaded example sublibrary EXAMPLE.COBCLTB.

**SQUARE Client**

For batch under operating system z/VSE, the SQUARE client is built with COBOL Wrapper interface type "Batch with standard linkage calling convention". See *Client Interface Types* for more information.

Name	Type	Sublibrary	Description	Notes
README1.TXT	Text document	EXAMPLE.COBCLTB	Client build instructions and description	
SQRECLT.C	COBOL source code	EXAMPLE.COBCLTB	A client application calling the remote procedure (RPC service) SQUARE, with associated example.idl.	1
SQUARE.C	COBOL source code	EXAMPLE.COBCLTB	Client interface object for IDL program SQUARE.	3
SQUARE.C	COBOL copybook	EXAMPLE.COBCPYB	Client interface object copybook for IDL program SQUARE.	3
ERXCOMM.C	COBOL source code	EXAMPLE.COBCPY	RPC Communication Area copybook.	
COBSRVIB.C	COBOL source code	EXAMPLE.COBCLTB	Generic RPC Service.	
SQRECLT.J	JCL	EXAMPLE.COBCLTB	Job control to build the RPC client SQRECLT.	2
SQRERUN.J	JCL	EXAMPLE.COBCLTB	Job control to execute the RPC client SQRECLT.	2

**Notes:**

1. Application built according to the client-side build instructions, see *Using the COBOL Wrapper for Batch (z/OS, BS2000/OSD, z/VSE and IBM i)*.
2. Adapt the JCL to your needs.
3. Generate these objects with the EntireX Workbench or use the example library contained in EXAMPLE.AWS.

For more information, refer to the file README1.TXT in EntireX directory *examples/RPC/basic/example/CobolClient/vseBatch* under UNIX or Windows, or the downloaded example sublibrary EXAMPLE.COBCLTB.

## Basic RPC Server Examples - CALC, SQUARE

This section covers the following examples:

- CALC Server
- SQUARE Server

### CALC Server

For batch under operating system z/VSE, the CALC server is built with COBOL Wrapper "Batch with standard linkage calling convention" interface type. See *Server Interface Types* for more information.

Name	Type	Sublibrary	Description	Notes
README1.TXT	Text file	EXAMPLE.COBSRVB	CALC server build instructions and description	
CALC.C	COBOL source code	EXAMPLE.COBSRVB	A server application providing the remote procedure CALC (RPC service), with associated example.idl.	1
CALC.J	JCL	EXAMPLE.COBSRVB	Job control to build the remote procedure CALC (RPC service).	2

**Notes:**

1. Application built according to the server-side build instructions, see *Using the COBOL Wrapper for Batch (z/OS, BS2000/OSD, z/VSE and IBM i)*.
2. Adapt the JCL to your needs.

For more information refer to the file README1.TXT in EntireX directory *examples/RPC/basic/example/CobolServer/vseBatch* under UNIX or Windows, or the downloaded example sublibrary EXAMPLE.COBSRVB.

**SQUARE Server**

For batch on operating system z/VSE, the SQUARE server is built with COBOL Wrapper interface type "Batch with standard linkage calling convention". See *Client Interface Types* for more information.

Name	Type	Sublibrary	Description	Notes
README1.TXT	Text file	EXAMPLE.COBSRVB	SQUARE server build instructions and description	
SQUARE.C	COBOL source code	EXAMPLE.COBSRVB	A server application providing the remote procedure SQUARE (RPC service), with associated example.idl	1
SQUARE.J	JCL	EXAMPLE.COBSRVB	Job control to build the remote procedure SQUARE (RPC service)	2

**Notes:**

1. Application built according to the server-side build instructions, see *Using the COBOL Wrapper for Batch (z/OS, BS2000/OSD, z/VSE and IBM i)*.
2. Adapt the JCL to your needs.

For more information refer to the file README1.TXT in EntireX directory *examples/RPC/basic/example/CobolServer/vseBatch* under UNIX or Windows, or the downloaded example sublibrary EXAMPLE.COBSRVB.

## Reliable RPC Client Example - SENDMAIL

For batch on operating system z/VSE, the SENDMAIL client is built with COBOL Wrapper interface type "Batch with standard linkage calling convention". See *Client Interface Types* for more information.

Name	Type	Sublibrary	Description	Notes
README2.TXT	Text file	EXAMPLE.COBCLTB	Client build instructions and description.	.
SENDCLT.C	COBOL source code	EXAMPLE.COBCLTB	A client application calling the reliable remote procedure (RPC service), SENDMAIL, with associated mail.idl.	1.
SENDMAIL.C	COBOL source code	EXAMPLE.COBCLTB	Client interface object for IDL program SENDMAIL.	3.
SENDMAIL.C	COBOL copybook	EXAMPLE.COBCPYB	Client interface object copybook for IDL program SENDMAIL.	3.
ERXCOMM.C	COBOL copybook	EXAMPLE.COBCPY	RPC Communication Area copybook.	3.
COBSRVIB.C	COBOL source code	EXAMPLE.COBCLTB	Generic RPC Service.	3.
SENDCLT.J	JCL	EXAMPLE.COBCLTB	Job control to build the RPC client SENDCLT.	2.
SENDRUN.J	JCL	EXAMPLE.COBCLTB	Job control to execute the RPC client SENDCLT.	2.

### Notes:

1. Application built according to the client-side build instructions, see *Using the COBOL Wrapper for Batch (z/OS, BS2000/OSD, z/VSE and IBM i)*. See also *Reliable RPC for COBOL Wrapper*.
2. Adapt the JCL to your needs.
3. Generate these objects with the EntireX Workbench or use the example library contained in EXAMPLE.AWS.

For more information refer to the file README2.TXT in EntireX directory *examples/RPC/reliable/example/CobolClient/vseBatch* under UNIX or Windows, or the downloaded example sublibrary EXAMPLE.COBCLTB.

## Reliable RPC Server Example - SENDMAIL

For batch on operating system z/VSE, the SENDMAIL server is built with COBOL Wrapper interface type "Batch with standard linkage calling convention". See *Client Interface Types* for more information.

Name	Type	Sublibrary	Description	Notes
README2.TXT	Text file	EXAMPLE.COBSRVB	SENDMAIL server build instructions and description	
SENDMAIL.C	COBOL source code	EXAMPLE.COBSRVB	A server application providing the reliable remote procedure (RPC service) SENDMAIL, with associated mail.idl.	2
SENDMAIL.J	JCL	EXAMPLE.COBSRVB	Job control to build the remote procedure SENDMAIL (RPC service).	1

**Notes:**

1. Adapt the JCL to your needs.
2. Application built according to the server-side build instructions, see *Using the COBOL Wrapper for Batch (z/OS, BS2000/OSD, z/VSE and IBM i)*. See also *Reliable RPC for COBOL Wrapper*.

For more information refer to the file README2.TXT in EntireX directory *examples/RPC/reliable/example/CobolServer/vseBatch* under UNIX or Windows, or the downloaded example sublibrary EXAMPLE.COBSRVB.