

# Client and Server Examples for UNIX and Windows

This chapter describes the examples provided for the C Wrapper. All examples here can be found in the EntireX *examples/RPC* directory under UNIX and Windows. It covers the following topics:

- Basic RPC Client Examples - CALC, SQUARE
- Basic RPC Server Examples - CALC, SQUARE
- Basic Callable RPC Server Examples - CALC, SQUARE
- Reliable RPC Client Example - SENDMAIL
- Reliable RPC Server Example - SENDMAIL
- Advanced CICS Channel Container Server RPC Example - DFHCON
- Advanced CICS Large Buffer RPC Server Example - DFHLBUF

## Basic RPC Client Examples - CALC, SQUARE

For C environments, the CALC and SQUARE clients are built with the C Wrapper.

Name	Type	Description	Notes
client.c	C source file	A client application calling two remote procedures (RPC services), CALC and SQUARE, with associated example.idl.	1
client.mak	makefile	A build script for generating, compiling and linking.	2
makefile	makefile	A build script for generating, compiling and linking.	3

### Notes:

1. Application built according to the client-side build instructions under *Writing a Single-threaded C RPC Client Application*.
2. Under Windows only.
3. Under UNIX only.

For more information see the readme file in EntireX directory *examples/RPC/basic/example/CClient* under UNIX or Windows.

## Basic RPC Server Examples - CALC, SQUARE

For C environments, the CALC and SQUARE servers are built with the C Wrapper.

Name	Type	Description	Notes
EXAMPLE.C	C source file	A server application providing two remote procedures (RPC services), CALC and SQUARE, with associated example.idl.	1
makefile	makefile	A build script for generating, compiling and linking.	2
server.mak	makefile	A build script for generating, compiling and linking.	3

**Notes:**

1. Application built according to the server-side build instructions. See *Using the C Wrapper for the Server Side (z/OS, UNIX, Windows, BS2000/OSD, IBM i)*.
2. Under UNIX only.
3. Under Windows only.

For more information see the readme file in EntireX directory *examples/RPC/basic/example/CServer* under UNIX or Windows.

## Basic Callable RPC Server Examples - CALC, SQUARE

For C environments, the CALC and SQUARE servers are built with the C Wrapper.

Name	Type	Description	Notes
callableserver.bat	start script	A start script for the Callable C Server.	1
callableserver.bsh	start script	A start script for the Callable C Server.	2
callableserver.c	C source file	A server application providing two remote procedures (RPC services), CALC and SQUARE, with associated example.idl.	3, 4
callableserver.mak	makefile	A build script for generating, compiling and linking.	1
makefile	makefile	A build script for generating, compiling and linking.	2

**Notes:**

1. Under Windows only.
2. Under UNIX only.
3. Application built according to
  - the server-side build instructions, see *Using the C Wrapper for the Server Side (z/OS, UNIX, Windows, BS2000/OSD, IBM i)*
  - Writing Callable RPC Servers, see *Writing Callable RPC Servers with the C Wrapper*
4. This example requires that the *Basic RPC Server Examples - CALC, SQUARE* are built first.

For more information see the readme file in EntireX directory *examples/RPC/basic/example/CServerCallable* under UNIX or Windows.

## Reliable RPC Client Example - SENDMAIL

For C environments, the SENDMAIL client is built with the C Wrapper.

Name	Type	Description	Notes
mailclient.c	C source file	A client application calling the reliable remote procedure (RPC service), SENDMAIL, with associated mail.idl.	1
mailclient.mak	makefile	A build script for generating, compiling and linking.	2
makefile	makefile	A build script for generating, compiling and linking.	3

### Notes:

- Application built according to
  - the client-side build instructions under *Writing a Single-threaded C RPC Client Application*
  - Reliable RPC for C Wrapper*
- Under Windows only.
- Under UNIX only.

For more information see the readme file in EntireX directory *examples/RPC/reliable/CClient* under UNIX or Windows.

## Reliable RPC Server Example - SENDMAIL

For C environments, the SENDMAIL server is built with the C Wrapper.

Name	Type	Description	Notes
MAIL.C	C source file	A server application providing the reliable remote procedure (RPC service) SENDMAIL, with associated mail.idl.	1
makefile	makefile	A build script for generating, compiling and linking.	2
mailserver.mak	makefile	A build script for generating, compiling and linking.	3

### Notes:

- Application built according to
  - the server-side build instructions under *Using the C Wrapper for the Server Side (z/OS, UNIX, Windows, BS2000/OSD, IBM i)*

- *Reliable RPC for C Wrapper*

2. Under UNIX only.
3. Under Windows only.

For more information see the readme file in EntireX directory *examples/RPC/reliable/CServer* under UNIX or Windows.

## Advanced CICS Channel Container Server RPC Example - DFHCON

This example is provided as a client counterpart for easy testing of the CICS Channel Container interface supported by EntireX RPC technology, see *Using the COBOL Wrapper for CICS with Channel Container Calling Convention (z/OS)*. The client is built in the same way as the *Basic RPC Client Examples - CALC, SQUARE* above. From a C Wrapper point of view, no new features are introduced.

Name	Type	Description	Notes
containerclient.c	C source file	A client application calling the remote procedure (RPC service) TWOC, with associated CICSChannelContainer.idl.	1
containerclient.mak	makefile	A build script for generating, compiling and linking.	2
makefile	makefile	A build script for generating, compiling and linking.	3

### Notes:

1. Application built according to the client-side build instructions under *Writing a Single-threaded C RPC Client Application*.
2. Under Windows only.
3. Under UNIX only.

For more information see the readme file in EntireX directory *examples/RPC/advanced/CICSgreater32K/ChannelContainer/CClient* under UNIX or Windows.

## Advanced CICS Large Buffer RPC Server Example - DFHLBUF

This example is provided as a client counterpart for easy testing of the CICS Large Buffer interface supported by EntireX RPC technology, see *Using the COBOL Wrapper for CICS with DFHCOMMAREA Large Buffer Interface (z/OS and z/VSE)*. The client is built in the same way as the *Basic RPC Client Examples - CALC, SQUARE* above. From a C Wrapper point of view, no new features are introduced.

Name	Type	Description	Notes
largebufferclient.c	C source file	A client application calling the remote procedure (RPC service) LBUF, with associated CICSLargeBuffer.idl.	1
largebufferclient.mak	makefile	A build script for generating, compiling and linking.	2
makefile	makefile	A build script for generating, compiling and linking.	3

**Notes:**

1. Application built according to the client-side build instructions under *Writing a Single-threaded C RPC Client Application*.
2. Under Windows only.
3. Under UNIX only.

For more information see the readme file in EntireX directory *examples/RPC/advanced/CICSgreater32K/LargeBuffer/CClient* under UNIX or Windows.