

# Server Examples for BS2000/OSD

This chapter describes the examples provided for the C Wrapper for BS2000/OSD. It covers the following topics:

- Overview
- Creating the C RPC Sample Server

## Overview

The following C RPC Server example is delivered for BS2000/OSD:

The `EXAMPLE` server module contains the server-side implementation of the procedure `SQUARE` and the function `CALC`.

Element	Type	LMS Library	Comment	Notes
<code>CREATE-EXAMPLE-SERVER</code>	J	EXP811.CSRV	S-procedure to generate the C RPC sample server. It uses <code>RUN-CPLUS-COMPILER</code> .	
<code>RUN-CPLUS-COMPILER</code>	J	EXP811.CSRV	S-procedure to run the <code>CPLUS</code> compiler.	
<code>EXAMPLE.C</code>	S	EXP811.CSRV	C RPC sample server program source.	1
<code>DEXAMPLE.C</code>	S	EXP811.CSRV	C RPC sample server stub source.	1
<code>ERX.H</code> <code>ERXVDATA.H</code> <code>ERXARRAY.H</code>	S	EXP811.CSRV	RPC runtime header files.	
<code>ETBCDEF.H</code>	S	EXP811.CSRV	C language ACI control block definitions.	

### Notes:

1. When compiling the C server example sources, the compiler may issue warnings. These warnings can be ignored.

## Creating the C RPC Sample Server

➤ To create the server `EXAMPLE`

1. Parametrize S-procedure `CREATE-EXAMPLE-SERVER`, if needed.

Procedure Parameter	Description	Default
<code>EXP-SRV-LIB</code>	C RPC Server examples library	EXP811.CSRV

For more details, see also the procedure headers in the delivered job control.

Enter the following command:

```
/CALL-PROCEDURE *LIB(LIB=EXP811.CSRV,ELE=CREATE-EXAMPLE-SERVER)
```

2. Enter the following command:

This procedure calls the CPLUS Compiler to generate the corresponding object modules stored as L-elements in EXP-SRV-LIB (the default is EXP811.CSRV).

There is no need to link the object modules with the BS2000/OSD Common Runtime Environment (CRTE) library. The CRTE is loaded once dynamically in the corresponding worker task of the RPC server where the server program is executed. The C RPC example server corresponds with the delivered CALC and SQUARE COBOL clients.