

Sample JCL

This appendix includes sample JCL. It includes these sections:

- Nonreentrant User Program: C/370 Compiler
Compile and link a nonreentrant user program using the C socket library, the RPC library and the C/370 compiler.
- Reentrant User Program: C/370 Compiler
Compile and link a reentrant user program using the C socket library, the RPC library and the C/370 compiler.
- Nonreentrant User Program: SAS/C Compiler
Compile and link a nonreentrant user program using the C socket library, the RPC library and the SAS/C compiler.
- Reentrant User Program: SAS/C Compiler
Compile and link a reentrant user program using the C socket library, the RPC library and the SAS/C compiler.

Note If you are link-editing with the BINDER (HEWLF096) under SMP/E, you may get the error message IEW2480W. This message can be safely ignored. You can turn this message off by setting option MSGLEVEL=4 in the PARM field of the linkedit (binder).

Nonreentrant User Program: C/370 Compiler

```
//RPCIBMC JOB
//*
//* SAMPLE JCL TO COMPILE, LINK, AND EXECUTE A NONREENTRANT
//* USER PROGRAM USING THE TCP/API C SOCKET LIBRARY, THE
//* TCP/API RPC/XDR LIBRARY, AND THE IBM C/370 C COMPILER.
//*
//* EDIT THE JOB JCL STATEMENT, VERIFY THE DATA SET NAME(S)
//* OF THE USER'S DATA SETS, AND VERIFY THAT THE DATA SET
//* NAMES REFERENCED BELOW MATCH THE NAMES THAT YOU SELECTED
//* FOR THE TCP/IP TARGET DATA SETS (DSN'S TO BE VERIFIED
//* ARE MARKED BELOW WITH "<=== VERIFY ..."). THIS JOB ASSUMES
//* THAT THE STANDARD IBM C/370 EDCCLG JCL PROCEDURE IS
//* AVAILABLE IN YOUR INSTALLATION'S PROCLIB(S).
//*
//CLGNRENT EXEC EDCCLG,
//      INFILE='USER.C(CPROG)',           <=== VERIFY DSNAME
//      PARM='NORENT,DEF(IBM C)',
//      GPARM='PROGRAM PARAMETERS'        <=== VERIFY PARAMETERS
//*
//* INCLUDE THE TCP/API SOCKET INCLUDE (.H) DATA SET IN THE
//* COMPILER SYSLIB CONCATENATION. BOTH THE SOCKET AND RPC/XDR
//* INCLUDE FILES ARE FOUND IN THE SAME SYSLIB DATA SET.
//*
//COMPILE.SYSLIB      DD DISP=SHR,DSN=TRGINDX.H           <=== VERIFY DSNAME
//                  DD DISP=SHR,DSN=&VSCCHD&CVER&EDCHDRS
//* INCLUDE THE TCP/API SOCKET SUBROUTINE LIBRARY DATA SET IN
//* THE LINKAGE EDITOR SYSLIB CONCATENATION. BOTH THE SOCKET
//* AND RPC/XDR LOAD MODULES ARE INCLUDED IN THE SAME SYSLIB
//* DATA SET.
//*
//LKED.SYSLIB        DD
//                  DD
//                  DD DISP=SHR,DSN=TRGINDX.CILIB          <=== VERIFY DSNAME
//
//LKED.SYSIN          DD DUMMY,DCB=(LRECL=80,RECFM=FB,BLKSIZE=3120)
```

Reentrant User Program: C/370 Compiler

This JCL is for the C/370 version of the compiler.

If you are using the Ad/Cycle compiler, replace the following line (shown in bold in the JCL):

```
// DD DISP=SHR,DSN=&VSCCHD&CVER&EDCHDRS
with this line:
// DD DISP=SHR,DSN=&LNGPRFX..SEDCDHDR

//RPCIBMCR JOB
/*
/* SAMPLE JCL TO COMPILE, LINK, AND EXECUTE A REENTRANT USER
/* PROGRAM USING THE TCP/API C SOCKET LIBRARY, THE TCP/API
/* RPC/XDR LIBRARY, AND THE IBM C/370 C COMPILER.
/*
/* EDIT THE JOB JCL STATEMENT, VERIFY THE DATA SET NAME(S)
/* OF THE USER'S DATA SETS, AND VERIFY THAT THE DATA SET
/* NAMES REFERENCED BELOW MATCH THE NAMES THAT YOU SELECTED
/* FOR THE TCP/IP TARGET DATA SETS (DSN'S TO BE VERIFIED ARE
/* MARKED BELOW WITH "<=== VERIFY ..."). THIS JOB ASSUMES THAT
/* THE STANDARD IBM C/370 EDCCPLG JCL PROCEDURE IS AVAILABLE
/* IN AVAILABLE IN YOUR INSTALLATION'S PROCLIB(S).
/*
//CLGRENT EXEC EDCCPLG,
// INFILE='USER.C(CPROG)', <=== VERIFY DSNAME
// CPARAM='RENT,DEF(IBM)' ,
// GPARAM='PROGRAM PARAMETERS' <=== VERIFY PARAMETERS
/*
/* INCLUDE THE TCP/API SOCKET INCLUDE (.H) DATA SET IN THE
/* COMPILER SYSLIB CONCATENATION. BOTH THE SOCKET AND RPC/XDR
/* INCLUDE FILES ARE FOUND IN THE SAME SYSLIB DATA SET.
/*
//COMPILE.SYSLIB DD DISP=SHR,DSN=TRGINDX.H <=== VERIFY DSNAME
// DD DISP=SHR,DSN=&VSCCHD&CVER&EDCHDRS <=== VERIFY Ad/Cycle name
/*
/* INCLUDE THE TCP/API SOCKET SUBROUTINE OBJECT LIBRARY
/* DATA SET IN THE PREPROCESSOR SYSLIB CONCATENATION.
/* BOTH THE SOCKET AND RPC/XDR OBJECT MODULES ARE INCLUDED
/* IN THE SAME SYSLIB DATA SET.
/*
//PLKED.SYSLIB DD DISP=SHR,
// DSN=TRGINDX.CIROBJ <=== VERIFY DSNAME
//PLKED.SYSIN DD DSN=*.COMPILE.SYSLIN,DISP=(OLD,DELETE)
// DD *
INCLUDE SYSLIB(S0SKCF)
INCLUDE SYSLIB(S0INTR)
INCLUDE SYSLIB(RPCFDS)
ENTRY CEESTART
/*
//
```

Nonreentrant User Program: SAS/C Compiler

```
//RPCSASC JOB
//*
//* SAMPLE JCL TO COMPILE, LINK, AND EXECUTE A NONREENTRANT
//* USER PROGRAM USING THE TCP/API C SOCKET LIBRARY, THE
//* TCP/API C RPC/XDR LIBRARY, AND THE SAS/C COMPILER. THIS
//* SAMPLE WORKS WITH SAS/C 4.50, 5.00, AND 5.01.
//*
//* EDIT THE JOB JCL STATEMENT, VERIFY THE DATA SET NAME(S)
//* OF THE USER'S DATA SETS, AND VERIFY THAT THE DATA SET
//* NAMES REFERENCED BELOW MATCH THE NAMES THAT YOU SELECTED
//* FOR THE TCP/IP TARGET DATA SETS (DSN'S TO BE VERIFIED
//* ARE MARKED BELOW WITH "<=== VERIFY ..."). THIS JOB ASSUMES
//* THAT THE STANDARD SAS SAS/C LC370CLG JCL PROCEDURE IS
//* AVAILABLE IN YOUR INSTALLATION'S PROCLIB(S).
//*
//CLNORENT EXEC LC370CLG,
//  PARM.C='NORENT,DEF(SASC)',
//  PARM.GO='PROGRAM PARAMETERS' <=== VERIFY PARAMETERS
//*
//* TCP/IP INCLUDE FILE DATA SET MUST PRECEDE SAS/C
//* DATA SET. BOTH THE SOCKET AND RPC/XDR INCLUDE FILES
//* ARE IN THE SAME DATA SET.
//*
//C.SYSLIB DD DISP=SHR,DSN=TRGINDX.H <=== VERIFY DSNAME
//          DD DISP=SHR,DSN=&MACLIB
//C.SYSIN DD DISP=SHR,
//          DSN=USER.C(CPROG) <=== VERIFY DSNAME
//*
//* TCP/IP OBJECT SYSLIB DATA SET MUST PRECEDE SAS/C
//* DATA SETS. BOTH THE SOCKET AND RPC/XDR LOAD
//* MODULES ARE IN THE SAME SYSLIB DATA SET.
//*
//LKED.SYSLIB DD DISP=SHR,
//              DSN=TRGINDX.CSLIB <=== VERIFY DSNAME
//              DD DISP=SHR,DSN=SASC.&ENV.LIB <=== VERIFY DSNAME
//              DD DISP=SHR,DSN=&SYSLIB
//              DD DISP=SHR,DSN=&CALLLIB
//LKED.SYSIN DD DUMMY,DCB=(LRECL=80,RECFM=FB,BLKSIZE=3120)
```

Reentrant User Program: SAS/C Compiler

```
//RPCSASCR JOB
//*
//*  SAMPLE JCL TO COMPILE, LINK, AND EXECUTE A REENTRANT C
//*  PROGRAM USING THE TCP/API C SOCKET LIBRARY, THE TCP/IP
//*  C RPC/XDR LIBRARY, AND THE SAS/C C COMPILER. THIS SAMPLE
//*  WORKS WITH SAS/C 4.50, 5.00, AND 5.01.
//*
//*  EDIT THE JOB JCL STATEMENT, VERIFY THE DATA SET NAME(S)
//*  OF THE USER'S DATA SETS, AND VERIFY THAT THE DATA SET
//*  NAMES REFERENCED BELOW MATCH THE NAMES THAT YOU SELECTED
//*  FOR THE TCP/IP TARGET DATA SETS (DSN'S TO BE VERIFIED
//*  ARE MARKED BELOW WITH "<=== VERIFY ..."). THIS JOB ASSUMES
//*  THAT THE STANDARD SAS SAS/C LC370C AND LC370LRG JCL
//*  PROCEDURES ARE AVAILABLE IN YOUR INSTALLATION'S PROCLIB(S).
//*  STEP 1: COMPILE USER PROGRAM REENTRANTLY.
//*
//CCRENT  EXEC LC370C,
//  PARM.C='RENT,DEF(SASC)'
//*
//*  TCP/IP INCLUDE FILE DATA SET MUST PRECEDE SAS/C
//*  DATA SET. BOTH THE SOCKET AND RPC/XDR INCLUDE FILES
//*  ARE IN THE SAME DATA SET.
//*
//C.SYSLIB  DD  DISP=SHR,DSN=TRGINDX.H                <=== VERIFY DSNAME
//          DD  DISP=SHR,DSN=&MACLIB
//C.SYSIN   DD  DISP=SHR,
//          DSN=USER.C(CPROG)                        <=== VERIFY DSNAME
//*
//*  STEP 2: LINK USER PROGRAM USING SAS/C CLINK
//*  PREPROCESSOR AND THEN EXECUTE.
//*
//LKRENT  EXEC LC370LRG,PARM.LKED='LIST,MAP,RENT',
//  PARM.GO='PROGRAM PARAMETERS'                    <=== VERIFY PARAMETERS
//*
//*  TCP/IP OBJECT SYSLIB DATA SET MUST PRECEDE SAS/C
//*  DATA SETS. BOTH THE SOCKET AND RPC/XDR LOAD MODULES
//*  ARE IN THE SAME SYSLIB DATA SET.
//*
//*  TCP/IP OBJECT SYSLIB DATA SET MUST PRECEDE SAS/C
//*  DATA SETS. BOTH THE SOCKET AND RPC/XDR LOAD MODULES
//*  ARE IN THE SAME SYSLIB DATA SET.
//*
//LKED.SYSLIB DD  DISP=SHR,DSN=TRGINDX.CSROBJ        <=== VERIFY DSNAME
//          DD  DDNAME=AR#&ALLRES
//          DD  DISP=SHR,DSN=SASC.&ENV.OBJ           <=== VERIFY DSNAME
//          DD  DISP=SHR,DSN=&SYSLIB
//          DD  DISP=SHR,DSN=&CALLLIB
//LKED.SYSIN  DD  DISP=(OLD,DELETE),DSN=*.CCRENT.C.SYSLIN
//          DD  *
//          INCLUDE SYSLIB(S0SKCF)
//          INCLUDE SYSLIB(S0INTR)
//          INCLUDE SYSLIB(RPCFDS)
//          ENTRY MAIN
//
```

