

Net Express with MQSeries solutions

Normally MQSeries COBOL programs require the LITLINK directive to be set for the COBOL compile and for the programs to be linked with the correct MQSeries .LIB. libraries.

Adding SQL or additional third party interface calls along side the MQSeries calls can cause a problem when the linking of the program.

LINK error LNK2001: unresolved external symbol _callitem; callitem will equal the call entry points within your program.

One method to address this would be to LITLINK only the MQSeries calls by adding a SPECIAL-NAMES entry and a call-convention of 8; LITLINK this call or call convention 12 LITLINK this call and request update of RETURN-CODE. This will still require the correct MQMCB32.LIB or MQICCB32.LIB to be included with the link. To use the call convention, simply place the call convention name that you have assigned to the call-convention between the function CALL and the called module name.

```
IDENTIFICATION DIVISION.
PROGRAM-ID. 'MQODBCPUT'
environment division.
configuration section.
===> special-names.
===>     call-convention 12 is MQCALL.
PROCEDURE DIVISION.
===>     CALL MQCALL 'MQCONN'
        USING QM-NAME, HCONN,
        COMPLETION-CODE, CON-REASON.
```

Another way would be to use the Procedure-Pointer method, which will permit the same program to be run on a machine running MQSeries Client or the MQSeries Server This does not require the addition of the MQMCB32.LIB or MQICCB32.LIB when creating EXE or DLL.

```
IDENTIFICATION DIVISION.
PROGRAM-ID. 'MQODBCPUT'
environment division.
WORKING-STORAGE SECTION.
===> 01 WORK-AREAS.
===>     05 LIBPTR          PROCEDURE-POINTER.
===>     05 BADPTR         PROCEDURE-POINTER.
PROCEDURE DIVISION.
===>     SET LIBPTR TO ENTRY "MQMCB32".
===>     set BadPtr to entry "xyzyzy"
===>     if LIBPTR = BadPtr
===>         SET LIBPTR TO ENTRY "mqiccb32".
CALL     'MQCONN'
        USING QM-NAME, HCONN,
        COMPLETION-CODE, CON-REASON.
```