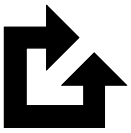
SQT1-21912-00



QPAC for Batch

Installation Guide

Version 9 Release 12

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This edition applies to version 9 release 12 of the Osys Software AG licensed program QPAC for Batch, program number 8050-QP-912-T10 and to all subsequent versions, releases and modifications until otherwise indicated in new editions.
Consult Osys Software AG for current information on this product.

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Chapter 1. Product Installation

Installation Process for Electronic E-Mail Distribution

To install QPAC you have to do a binary upload of the attachment to your host. You then have to unpack it with the utility AMATERSE.

In the following section a possible sequence is described how to install QPAC on your system.

1. Copy the attachment to your PC, e.g. using the right mouse button and then "save as".

2. Transfer the saved file as binary to the host.
   Pay attention that the file will receive the attributes RECFM=FB and LRECL=1024 on the host, otherwise the utility AMATERSE will not be able to read it.

   With FTP take the following steps:
   - Open a command prompt window.
   - Change to the directory where the file has been stored.
   - Enter the command "ftp <YourHostName>".
   - Answer the questions for userid and password.
   - You should now get an ftp> prompt.
   - Enter the command "**binary**".
   - Enter the command "**quote site recfm=fb lrecl=1024**".
   - Enter the command "**put <YourPCFileName> <YourHostFileName>**"
     <YourPCFileName> must correspond to the name of the attachment.
     <YourHostFileName> is the name of the file on the host.
     Attention: If you specify the host file name without quotes, your userid
     will be taken as HLQ.
   - Enter the qommand "**quit**" to terminate the FTP connection.

3. Now unpack the transferred file with the AMATERSE program.

   Following a sample step:

```
//STEP     EXEC PGM=AMATERSE,PARM=UNPACK
//SYSPRINT DD SYSOUT=*
//SYSUT1   DD DISP=SHR,DSN=<yourHostFilename>
//SYSUT2   DD DISP=(,CATLG,DELETE),UNIT=SYSDA,
//            SPACE=(CYL,(5,1,30)),
//            DSN=<Name.of.unpacked.file>
```

Fig. 1: AMATERSE

The resulting PDS contains the following members:
- QPACINFO Sample program for Type 3 SVC 235
- QPACPROG QPAC objects for the linkage step
- QPACBDB2 only with DB2 support; DB2 DBRM for the bind

4. The installation of QPAC can now begin.
   Therefore process the member QPACPROG by the linkage editor:

```
   //LKED     EXEC
PGM=HEWLH096,PARM=(XREF,LET,LIST,MAP),REGION=6144K
   //SYSUT1   DD  UNIT=SYSALLDA,SPACE=(1024,(200,20))

   //SYSLMOD  DD  DISP=SHR,DSN=<QPAC.linklib>

   //SYSLIN   DD  DISP=SHR,DSN=<Name.of.unpacked.File
>(QPACPROG)
   //SYSLIB   DD  DSN=DSNxxx.SDSNLOAD,DISP=SHR
   DB2 Support
   //         DD  DSN=IMSxxx.SDFSRESL,DISP=SHR
   IMS Support
   //         DD  DSN=CSQxxx.SCSQLOAD,DISP=SHR
   MQS Support
   //         DD  DSN=CICSTSxx.CICS.SDFHEXCI,DISP=SHR
  CICS Support
   //         DD  DSN=CICSTSxx.CICS.SDFHLOAD,DISP=SHR
  CICS Support
   //SYSPRINT
DD  SYSOUT=*
```

Fig. 2: Linkage Editor

Note: If only DB2 support but no IMS support is available, then message `IEW2303E` may appear, which can be ignored.

> Bind QPACBDB2 e.g.

```
 //BIND     EXEC
PGM=IKJEFT01,REGION=2048K,COND=(4,LT),
 //              PARM='DYNMNBR=25'
 //STEPLIB  DD DISP=SHR,DSN=DSNxxx.SDSNLOAD
 //SYSTSPRT DD SYSOUT=*
 //SYSTERM  DD SYSOUT=*
 //DBRMLIB  DD DISP=SHR,DSN=<Name.of.unpacked.File>
 //SYSTSIN  DD *
 DSN SYSTEM(<db2id>)
BIND  PACKAGE(<collection-id>)    MEMBER(QPACBDB2)
-
       ISOLATION(CS)       VALIDATE(BIND)         -
       DEGREE(ANY)         DBPROTOCOL(DRDA)       -
       CURRENTDATA(NO)     OWNER(QPAC)            -
       EXPLAIN(NO)         FLAG(I)                -
       DYNAMICRULES(RUN)                          -
       ACTION(REPLACE)
 BIND  PLAN(<planname>)    PKLIST(*.<collection-
id>.*)    -
       OWNER(QPAC)         ACTION(REPLACE)
```

Fig. 3: BIND DB2

Chapter 2. DB2 Support Feature

Installation and Prerequisites under z/OS

1. Before the DB2 support feature can be used, the user must ensure that DB2 is installed as a product, and that the DB2 routines for batch processing are in the pre-determined libraries.

2. Following the catalog run of the QPAC product tape containing the DB2 support feature, under the official LINKAGE EDITOR conventions, it must be verified that the load module **QPACBDB2** is correctly linked, i.e. the DB2 interface **DSNELI** (for batch) must also be linked (a source of confusion could occur with CICS/IMS).

   If DL/I and DB2 data bases are concurrently defined in a **QPAC-Batch** program an additional linkage editor step is necessary.
   The module QPACBDB2 that has been link edited in advance has to be additionally link edited under the name QPACBDBI whereby the interface DSNELI has to be replaced by **DFSLI000**.
   The following replacement is included in the linkage editor input stream file 1.

```
//LKED.SYSIN  DD *
 REPLACE DSNAA
 REPLACE DSNELI
 INCLUDE SYSLMOD(QPACBDB2)
 INCLUDE SYSLIB(DFSLI000)
 NAME QPACBDBI(R)
/*
```

Fig. 4: DB2 installation with DL/I under z/OS

3. If DB2 data bases are used without the **TSO batch program IKJEFT01** (Parm definition `PARM=PLAN=...,DB2ID=...`) an additional linkage editor step is necessary.
   The module QPACBDB2 that has been link edited in advance has to be additionally link edited under the name QPACBDBT whereby the interface DSNELI has to be replaced by **DSNALI**.
   The following replacement is included in the linkage editor input stream file 1.

```
//LKED.SYSLIN DD *
 REPLACE DSNAA
 REPLACE DSNELI
 INCLUDE SYSLMOD(QPACBDB2)
 INCLUDE SYSLIB(DSNALI)
 NAME QPACBDBT(R)
/*
```

Fig. 5: DB2 installation without IKJEFT01 under z/OS

4. The DBRM member with a logical record length of 80 (LRECL=80), is the **3rd file** on the QPAC product tape. This member must be stored in the DB2 PDS for DBRM members under the name **QPACBDB2**.
The DBRM module contains the name QPAC as CREATOR.

```
// EXEC PGM=QPAC
//STEPLIB DD DISP=SHR,DSN=QPAC.LOADLIB
//QPACLIST DD SYSOUT=*
//IPF DD DSN=QPAC.BATCH.DBRM,DISP=OLD,LABEL=(3,SL),
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=3120),
// VOL=SER=QPBvrm,UNIT=TAPE
//OPF DD DSN=DBRMLIB(QPACBDB2),DISP=OLD (Batch)
//QPACIN DD *
IPF=SQ,WP=WPOS7001
OPF=SQ,WP=WPOS7001
END
/*
```

Fig. 6: Storing the DBRM member QPACBDB2

5. A BIND must be carried out for the plans that are to be used, in which at least the QPACBDB2 program is specified.

```
//         EXEC PGM=IKJEFT01
//STEPLIB  DD   DSN=DB2.RESLIB, ...
//DBRMLIB  DD   DSN=DBRMLIB,DISP=SHR
//SYSTSPRT DD   SYSOUT=*
//SYSTSIN  DD   *
   DSN   SYSTEM(DB2)
   BIND  PLAN(qpacplan)      -
         MEMBER(QPACBDB2)    -
         ACT(ADD)            -
         VALIDATE(BIND)      -
         ISOLATION(CS)       -
         ACQUIRE(USE)        -
         RELEASE(COMMIT)
/*
```

Fig. 7: BIND execution with QPACBDB2

Chapter 3. DL/I Support Feature

Installation Procedure

1. To use the DL/I support feature, the following conditions must be met:

   - DL/I FULL must be installed
   - the DL/I batch processing routines must be stored in the prescribed libraries.

2. The catalog run of the QPAC tape, (which must include the DL/I support feature), must be carried out according to the official LINKAGE EDITOR conventions, following which, the DL/I support feature is available for use.

3. Attention:
   During the **batch** linkage editor run the interface DFSLI000 must be linked for the connection to ASMTDLI.
   Please have the correct SYSLIB concatenation in mind.