



QPAC for Batch and CICS Online

Version 8 Release Information Guide

Version 8 Release 5

First Edition (December 2009)

This edition applies to version 8 release 5 of the Osys Software AG licensed program QPAC for Batch and CICS Online, program number 8050-QP-85-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.

Order publications or address your comments to one of the following addresses

Osys Software AG

Hofwiesenstrasse 350, CH-8050 Zurich/Switzerland

Telephone +41 44 317 18 19

Telefax +41 44 317 18 20

E-Mail office@osys.ch

Osys AG

Hofwiesenstrasse 350, CH-8050 Zurich/Switzerland

Telephone +41 44 317 18 19

Telefax +41 44 317 18 20

E-Mail office@osys.ch

© Copyright Osys Software AG 2009. All rights reserved.

Special Notices

The terms listed below are used in this publication and are trademarks or service marks of the following companies:

Osys Software AG Zurich, Switzerland:

Osys-QPAC

International Business Machines:

z/OS

CICS

VSAM

DL/I

DB2

RACF

MQSeries

ISPF/PDF-TSO

New or enhanced in Version 8 Release 5

This release 8.5 of QPAC contains corrections and additions to release 8.4. QPAC version 7 continues to support the z/VSE operating system. Version 8 continues to support only z/OS and the new z/Architecture on the IBM System z10, z9 and zSeries Systems.

The new version is fully upward compatible.

The expression **z/OS within this release guide will also include the z/Architecture.**

Restrictions

(B) = This letter marks enhancements related to **QPAC for Batch**.

(O) = This letter marks enhancements related to the **QPAC for CICS** feature.

Modifications and Enhancements

1. Warning Messages (B/O)

Important: The following warning messages will be promoted to errors **in the next** QPAC releases. If one of these messages appear you have to modify your QPAC programs!

QPAC184W Warning: FIRST at this point is obsolete, remove it.

FIRST at this point is ignored.

QPAC181W Warning: Change duplicate ** to *. Due to migration reasons

A double asterisk must be converted to e.g. *. to allow future enhancements

QPAC183W Warning: Rename this symbol from ..PCNT to ..PGCNT due to migration reason

Different names for PUT counter and Page counter..

2. Changed Messages (B)

QPAC004I DDN=filename DSNM=data set name

If the data set name is a member of a PDS the member name will additionally be presented beside the data set name.

3. Installation Process

Since QPAC version 8.2 QPAC is distributed in electronic format by e-mail.

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

If needed you can download the utility from the following IBM web site <http://techsupport.services.ibm.com/390/trsmmain.html>.

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

Please contact us for any questions.

Your QPAC team

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 TRSMMAIN 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 command "**quit**" to terminate the FTP connection.

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

Following a sample step:

```
//STEP      EXEC  PGM=TRSMMAIN, PARM=UNPACK
//STEPLIB   DD   DISP=SHR, DSN=<where.TRSMMAIN.lives>
//SYSPRINT  DD   SYSOUT=*
//INFILE    DD   DISP=SHR, DSN=<yourHostFilename>
//OUTFILE   DD   DISP=(,CATLG,DELETE), UNIT=SYSDA,
//           SPACE=(CYL,(5,1,30)),
//           DSN=<Name.of.unpacked.file>
```

TRSMMAIN

The resulting PDS contains the following members:

- QPACINFO Sample program for Type 3 SVC 235
- QPACPROG QPAC objects for the linkage step
- DBV7BDB2 only with DB2 support; DB2 V7 version of QPACBDB2
- DBV7DBRM only with DB2 support; DB2 V7 DBRM for the bind
- DBV8BDB2 only with DB2 support; DB2 V8 version of QPACBDB2
- DBV8DBRM only with DB2 support; DB2 V8 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
//SYSPRINT  DD SYSOUT=*
```

Linkage Editor

For DB2 support the following additional actions must be taken:
DB2 version 7:

> For DB2 version 7 support the corresponding DB2 version 7 QPAC modules must be installed.

Therefore process member DBV7BDB2 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>(DBV7BDB2)
//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
//SYSPRINT  DD SYSOUT=*
```

Linkage Editor DB2 Version 7

> Copy or rename member DBV7DBRM to member QPACBDB2.

> Bind QPACBDB2, e.g.

```
//BIND      EXEC PGM=IKJEFT01,REGION=2048K,COND=(4,LT),
//          PARM='DYNAMNBR=25'
//STEPLIB   DD DISP=SHR,DSN=DSN710.SDSNLOAD
//SYSTSPRT  DD SYSOUT=*
//SYSTEM    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)
/*
```

BIND DB2 Version 7

DB2 version 8:

- > For DB2 version 8 support the corresponding DB2 version 8 QPAC modules must be installed.
Therefore process member DBV8BDB2 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>(DBV8BDB2)
//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
//SYSPRINT  DD SYSOUT=*
```

Linkage Editor DB2 Version 8

- > Copy or rename member DBV8DBRM as member QPACBDB2.
- > If needed delete or re-rename QPACBDB2 (DBRM V7).
- > Bind QPACBDB2 e.g.

```
//BIND      EXEC PGM=IKJEFT01,REGION=2048K,COND=(4,LT),
//          PARM='DYNMNR=25'
//STEPLIB   DD DISP=SHR,DSN=DSN810.SDSNLOAD
//SYSTSPRT  DD SYSOUT=*
//SYSTEM    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(<plannam>)                PKLIST(*.<collection-id>.*) -
    OWNER(QPAC)                     ACTION(REPLACE)
```

BIND DB2 Version 8

4. Support for z/OS 1.11 (B/O)

QPAC does support the new z/OS 1.11 release.

5. EAV Support (B)

Using the VTOC file definition also EAV (Extended Address Volume) volumes are supported. In addition to the format 1 DSCB all format 8 and format 9 DSCBs are made available.

A format 8 DSCB is always completely returned in the I/O buffer, followed by a format 9 DSCB and a maximum of 10 format 3 DSCBs. Each DSCB will be returned unchanged in a length of 140 Bytes. The record layout of the DSCBs is documented in the IBM manual „DFSMSdfp Advanced Services“.

The layout of the format 1 DSCB returned does not change. The first 135 bytes of the format 1 DSCB followed by all extent information of the format 3 DSCBs are returned.

6. ALPHABETIC (B/O)

QPAC fields can now be tested to be ALPHABETIC, ALPHABETIC-LOWER or ALPHABETIC-UPPER.

The following areas are tested:

ALPHABETIC	A-Z, a-z and Space
ALPHABETIC-LOWER	a-z and Space
ALPHABETIC-UPPER	A-Z and Space

The following tests are possible:

```
OS=FIELD1,CL10'ABCDEF`
OS=FIELD2,CL10'AB99CD`
OS=FIELD3,CL10'abcdef`
```

```
IF FIELD1 ALPHABETIC THEN → True
IF FIELD2 ALPHABETIC THEN → False
IF FIELD3 ALPHABETIC-LOWER THEN → True
IF FIELD3 ALPHABETIC-UPPER THEN → False
```