

MVS/QuickRef - Tailoring QW

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Planned topics include - 1 of 2

- Database Context Processing
- QWIKREF1 Processing Overview
- Installation: QWLIBREX, QWIAD and CA MSM
- Virtual Excludes
- QINFO Subcommand
- QWIKOPTS Tailoring
- QWIKSLCJ – Cutting up the Database

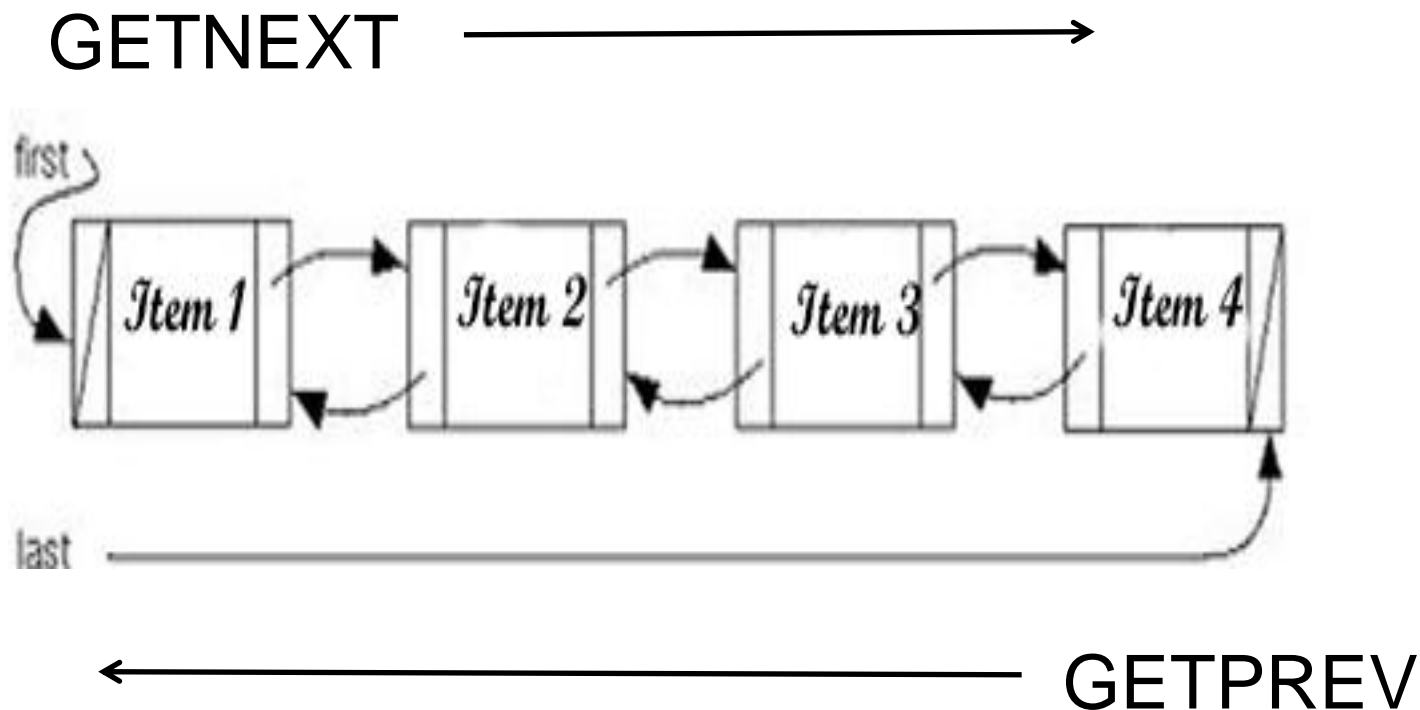
Planned topics include - 2 of 2

- QWIKMRGJ – Reassembling the Database
- QWIEXPYR – Checking the license key
- User Data Bases (UDB's) – using QWIKREF2
- OVERRIDE Facility - A Better User Data Base
- QWIKEXIT
- Batch Processing and Batch Commands

Database Context Processing

Database Context Processing

- View manuals such as Language manuals



Database Context Commands

- GETNEXT or GN – move forward
- GETPREV or GP – move backwards
- .TBL-OF-CONTENTS item is clue that GETNEXT and GETPREV are enabled in the product.
- V='IBM'
P='C/C++ LANGUAGE SYNTAX'
R='V3R2'
I='.INTRODUCTION'

GETNEXT Example

```
Item ==> * MVS/QuickRef 7.7 * Col 1 Line 1 of 28  
Command ==> getnext Scroll ==> CSR  
You may scroll the information below UP, DOWN, LEFT, and/or RIGHT as needed  
----- V=IBM P=C/C++ LANGUAGE SYNTAX R=V3R2 I=.INTRODUCTION -----  
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>><<<<<<<<<<<<<<<<<<<  
***** Text Below Copyright (c) 2013, IBM *****  
  
Introduction
```

This product describes IBM's C/C++ For MVS/ESA programming language.

For a list and a description of each item carried in the MVS/QuickRef data base for this product, see item INDEX. To review the Table of Contents for this product, see item TBL OF CONTENTS.

The IBM C/C++ for MVS/ESA licensed program is the language-centered C and C++ application development environment on the MVS/ESA platform.

IBM C/C++ for MVS/ESA includes a C compiler component (referred to as the C/MVS compiler), a C++ compiler component (referred to as the C++/MVS compiler), a set of C++ class libraries, a mainframe interactive Debug Tool (optional), and a set of C/C++ application development utilities.

The reference information in this product provides you with a description

```
----- Type HELP on the command line to access MVS/QuickRef help information. -----
```

GETPREV Example

```
Item ==> * MVS/QuickRef 7.7 * Col 1 Line 1 of 595  
Command ==> getprev Scroll ==> CSR  
You may scroll the information below UP, DOWN, LEFT, and/or RIGHT as needed  
----- V=IBM P=C/C++ LANGUAGE SYNTAX R=V3R2 I=.TBL_OF_CONTENTS -----  
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>><<<<<<<<<<<<<<<<<<<<<<<<<<  
***** Text Below Copyright (c) 2013, IBM *****
```

Note: Each topic listed in the table of contents below which is covered by an item in the data base is followed by the associated item name enclosed in parentheses. You can use the FIND command to help locate particular topics which may be of interest.

Table of Contents

Preface

Introduction (INTRODUCTION)
Table of Contents (TBL_OF_CONTENTS)
Index (INDEX)
Standards/Copyright Acknowledgements (STANDARDS)
Who Should Use This Product (WHO_SHOULD_USE)
Unprintable Character Replacement (CHAR_REPLACEMENT)

```
----- Type HELP on the command line to access MVS/QuickRef help information. -----
```


Original Starting Point

```
Item ==> * MVS/QuickRef 7.7 * Col 1 Line 1 of 28  
Command ==> Scroll ==> CSR  
You may scroll the information below UP, DOWN, LEFT, and/or RIGHT as needed  
----- V=IBM P=C/C++ LANGUAGE SYNTAX R=V3R2 I=.INTRODUCTION -----  
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>><<<<<<<<<<<<<<<<<<  
***** Text Below Copyright (c) 2013, IBM *****  
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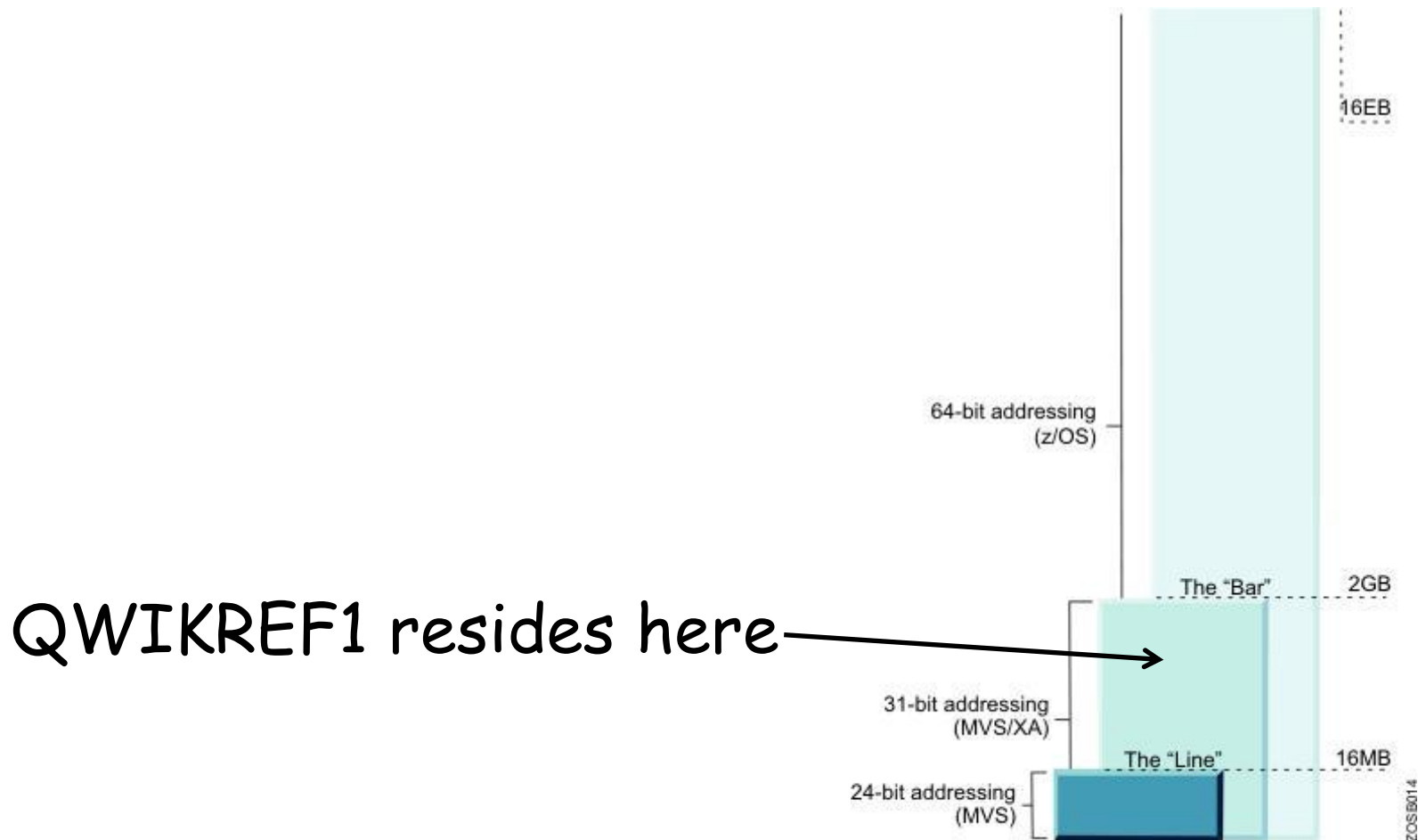
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```

QWIKREF1 Processing Overview

MVS Address Space / QWIKREF1



QWIKREF1 Attributes

- No AC=01 - not APF-Authorized
- Does not use 64-bit addressing but does execute in 64-bit addressing systems
- AMODE 31
- RMODE ANY
- RENT, REUS
- LINKLIST is not recommended

QW DD Names – 1 of 2

- QWREFDD – DD name used for the main database.
- QWLICKEY – DD name used for the license key file.
- QWVIRTEX – DD name used for the virtual excludes.
- QWPARMS – DD name used for the OVERRIDE facility.

QW DD Names – 2 of 2

- SYSHELP –DD name used for TSO/E items found in SYS1.HELP.
- QWREFDDU – DD name used in batch for a single user database.
- QWPRINT – DD name used in batch for the output.

DCB=(RECFM=VBA,LRECL=300,BLKSIZE=blk)

- QWCMDSDU –DD name used in batch for the batch commands.

Where are QW DD Names Used?

Places you may see QW DD Names include

1. QW Clist
2. QWBATCH
3. Dynamic Allocation – Use ISRDDN to view

QW Clist – 1 of 3

```

File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT      QWUSER.DEMO.JCL(QW) - 01.02      Columns 00001 00072
Command ==> _____ Scroll ==> CSR

***** ***** Top of Data *****
000001      PROC 0 PRM()
000002      /*
000003      /* This clist invokes MVS/QuickRef using the ISPF LIBDEF
000004      /* service.
000005      /*
000006      /* Verify/Correct all data set and member names.
000007      /*
000008      /* If you uncomment one of the optional ALLOCATE statements,
000009      /* make sure you uncomment the associated FREE statement.
000010      /*
000011      IF &SYSISPF ^= ACTIVE THEN DO
000012          WRITE THIS CLIST MUST BE EXECUTED UNDER ISPF - TRY AGAIN
000013          EXIT
000014          END
000015      CONTROL MAIN NOMSG
000016      ISPEXEC LIBDEF +
000017          ISPLIB DATASET ID('SYS2.QUICKREF.R770.PANELS')
000018      ISPEXEC LIBDEF +
000019          ISPLIB DATASET ID('SYS2.QUICKREF.R770.MESSAGES')

```

QW Clist – 2 of 3

```

File Edit Edit_Settings Menu Utilities Compilers Test Help
EDIT      QWUSER.DEMO.JCL(QW) - 01.02      Columns 00001 00072
Command ==>      Scroll ==> CSR
000020      ISPEXEC LIBDEF +
000021          ISPLLIB DATASET ID('SYS2.QUICKREF.R770.LINKLIB')
000022      ISPEXEC LIBDEF +
000023          ISPTLIB DATASET ID('SYS2.QUICKREF.R770.TABLES')
000024      ALLOC F(QWREFDD) +
000025          DA('SYS2.QUICKREF.R770.DATABASE') SHR REUS
000026      ALLOC F(QWLICKEY) +
000027          DA('SYS2.QUICKREF.LICENSE.KEY') SHR REUS
000028      /* ALLOC F(QWVIRTEX)                      /* Virtual Excludes */ +
000029      /*      DA('SYS2.QUICKREF.R770.JCL(QEXCLUDE)') +
000030      /*      SHR REUS
000031      /* ALLOC F(QWREFDDU)                      /* User Data Base */ +
000032      /*      DA('SYS2.QUICKREF.USER.DATABASE') +
000033      /*      SHR REUS
000034      /* ALLOC F(QWPARMS)                      /* Override Parms */ +
000035      /*      DA('SYS2.QUICKREF.OVERRIDE.PARMS') +
000036      /*      SHR REUS
000037      ISPEXEC SELECT PGM(QWIKREF1) PARM(&SYSNSUB(0,&PRM)) +
000038          NEWAPPL(QWIK) PASSLIB
000039      ISPEXEC LIBDEF ISPLLIB

```


QW Clist – 3 of 3

```

File Edit Edit_Settings Menu Utilities Compilers Test Help
EDIT      QWUSER.DEMO.JCL(QW) - 01.02      Columns 00001 00072
Command ==>      Scroll ==> CSR
000040      ISPEXEC LIBDEF ISPMLIB
000041      ISPEXEC LIBDEF ISPLLIB
000042      ISPEXEC LIBDEF ISPTLIB
000043      FREE F(QWREFDD)
000044      FREE F(QWLICKEY)
000045      /* FREE F(QWVIRTEX)      /* Virtual Excludes
000046      /* FREE F(QWREFDDU)      /* User Data Base
000047      /* FREE F(QWPARMS)      /* Override Params
***** ***** Bottom of Data *****

```


QWBATCH

Menu Utilities Compilers Help

BROWSE QWUSER.DEMO.JCL(QWBATCH) - 01.07 Line 00000019 Col 001 080
 Command ==> Scroll ==> CSR

```
//JS10      EXEC PGM=QWIKREF1,
//           REGION=0K,
//           PARM='ITEMNAME'    > OR ANY "FAST PATH" INVOCATION STRING
// *         PARM='S=VOLSER'    > FOR DASD FREE SPACE INFO
//STEPLIB    DD DSN=QUICKREF.LINKLIB.DSN,DISP=SHR
//QWPRINT    DD SYSOUT=*,DCB=(RECFM=VBA,LRECL=300,BLKSIZE=6000)
//QWREFDD    DD DSN=QUICKREF.DATABASE.DSN,DISP=SHR
//QWLICKEY   DD DSN=LICENSE.KEY.DSN,DISP=SHR
// *QWVIRTEX DD DSN=QUICKREF.JCL(QEXCLUDE), > VIRTUAL EXCLUDES, OPTIONAL
// *         DISP=SHR
// *QWCMSDD  DD *           > BATCH Q/R COMMANDS, OPTIONAL
// *SORT 4 D
// *QWREFDDU DD DSN=QUICKREF.USER.DATABASE.DSN, > USE IF USER DB IN USE
// *         DISP=SHR
// *QWPARMS  DD DSN=QUICKREF.OVERRIDE.PARMDSN, >USE IF OVERRIDES IN USE
// *         DISP=SHR
//SYSHELP    DD DSN=SYS1.HELP,DISP=SHR
```

***** Bottom of Data *****

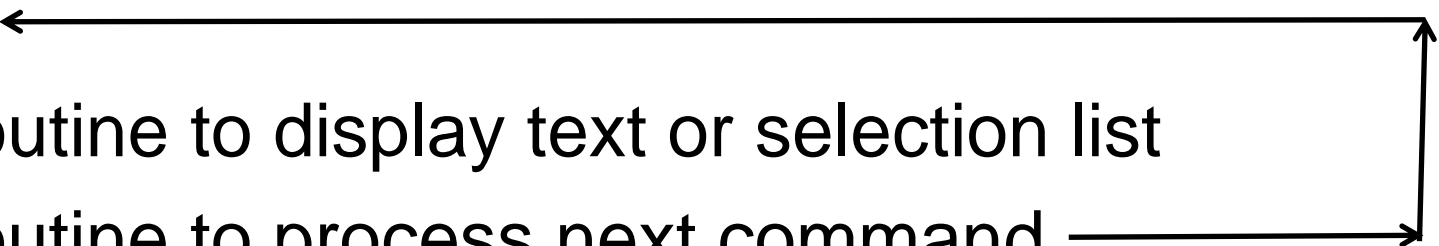
QWIKREF1 – logic flow – 1 of 3

- initializes and establishes ESTAE
- Parses parameters (including fast-path, batch, and direct-program call parameters)
- determine if cursor-driven invocation is required
- determines processing mode (ISPF, batch, direct program call) and handles setup for processing mode
- loads QWIKOPTS

QWIKREF1 – logic flow – 2 of 3

- parse/setup OVERRIDE parameters
- determine if the MVS/QuickRef main and user data base(s) are pre-allocated
- loads QWIKEXIT (if available)
- displays and processes all MVS/QuickRef menus
- determine if DASD Free Space invocation is required

QWIKREF1 – logic flow – 3 of 3

- LOOP ←
 - calls routine to display text or selection list
 - calls routine to process next command →
 - handles termination processing
 - sets the appropriate return code
- 

Installation: QWLIBREX, QWIAD and CA-MSM

Installation Assistance

- **QWLIBREX** – contains compressed QW files and code to decompress them.
- **QWIAD** – QW Installation Assistance Dialog – Supports all possible QW installation paths (non-SMP/E, SMP/E, Full-DB, Partial-DB, DB-only)
QWIAD is highly recommended
- **CA MSM** – CA Mainframe Software Manager - simplifies and unifies the installation of mainframe products on z/OS systems

Virtual Excludes

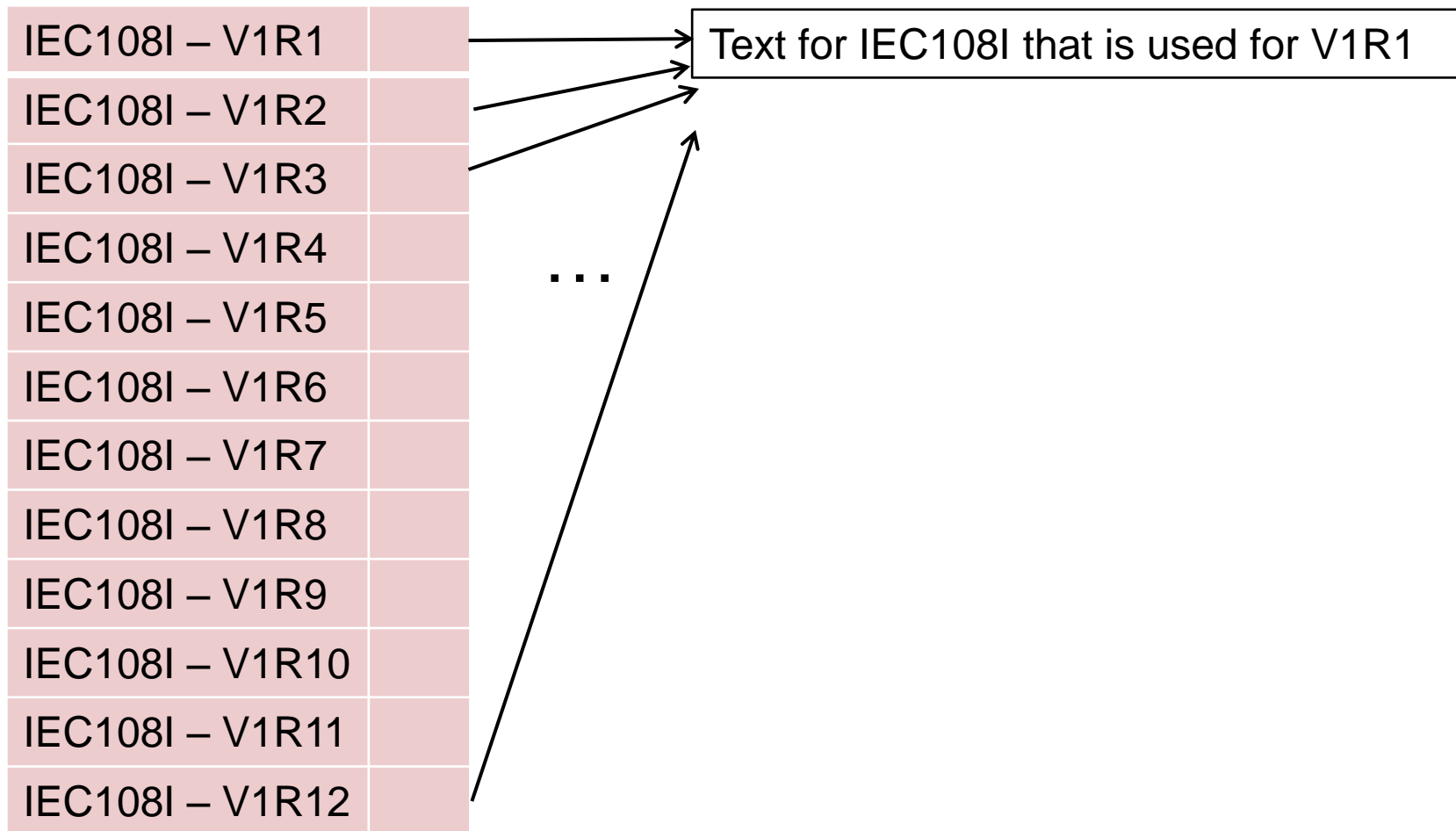
Database Size by Vendor

- For the 71 vendors in release 7.7, the database size by vendor:
 - Allen System Group 2%
 - IBM Tivoli 4.3%
 - CA Technologies 7%
 - BMC 16%
 - IBM 62%
 - **All Other Not Listed** 8%

Why Removing Releases May Not Help

- Why doesn't eliminating releases of product always save space in database?
- Consider the following
V=IBM
P='Z/OS SYSTEM MSGS'
R=V1R1 through V1R12
I=IEC108I
- Logic says removing unneeded releases would save space
- Degassing says "maybe not"

What Degassing Does



Too Many Items!

[illegible]

```
----- Type HELP on the command line to access MVS/QuickRef help information. -----
```

Virtual Excludes - Example

```

Menu  Utilities  Compilers  Help
-----
BROWSE      QWUSER.DEMO.JCL(VEXCLUDE) - 01.01      Line 00000000 Col 001 080
Command ==> _____ Scroll ==> CSR
***** Top of Data *****
*   Vendor      Product      Release      Item
E   IBM         Z/OS SYSTEM CODES  V1R1        *
E   IBM         Z/OS SYSTEM CODES  V1R2        *
E   IBM         Z/OS SYSTEM CODES  V1R3        *
E   IBM         Z/OS SYSTEM CODES  V1R4        *
E   IBM         Z/OS SYSTEM CODES  V1R5        *
E   IBM         Z/OS SYSTEM CODES  V1R6        *
E   IBM         Z/OS SYSTEM CODES  V1R7        *
E   IBM         Z/OS SYSTEM CODES  V1R8        *
E   IBM         Z/OS SYSTEM CODES  V1R9        *
E   IBM         Z/OS SYSTEM CODES  V1R10       *
E   IBM         Z/OS SYSTEM CODES  V1R11       *
E   IBM         Z/OS SYSTEM CODES  V1R12       *
E   IBM         Z/OS SYSTEM CODES  V1R13       *
***** Bottom of Data *****

```


QINFO Subcommand

QINFO from Main Menu

Vista TN3270 Session A

File Edit Font Transfer Macro Options Window Help

* MVS/QuickRef 7.7 - Main Menu *

Command ==> QINFO

Please enter one of the options listed below:

- C - Request Reference Information by Category
- R - Request Reference Information by Name
- L - List Vendors, Products, and Releases
- S - Request DASD Free Space Information
- ? - What's New with MVS/QuickRef?
- X - Exit MVS/QuickRef

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Type HELP on the command line to access MVS/QuickRef help information.

"Solutions...Not Just Software"

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Ma 0.1 01/17/13.017 06:19PM 71.191.86.90 A 2,19

QINFO – Site Information

```
----- Site Information -----  
Site Id: 125100
```

QINFO – Release Information

```
----- Release Information -----  
Product Release: 7.7  
QWIKOPTS Release: 7.7  
Main Data Base Release: 7.7  
Program information: QWIKREF1 7.70 MVS/QUICKREF 10/31/12 22.24
```

QINFO – QWIKREF1 Module Locations

```
----- QWIKREF1 Module Location(s) -----  
The QWIKREF1 module was found in the following location  
DD or Area      Data Set Name  
ISPLLIB         RSC004.R770.LINKLIB
```

QINFO – QWIKOPTS Module Locations

```
----- QWIKOPTS Module Location(s) -----  
The QWIKOPTS module was found in the following location  
DD or Area      Data Set Name  
ISPLLIB         RSC004.R770.LINKLIB
```

QINFO – Expiration Date Info

```
----- Expiration Date Information -----  
Current system date:2013.017   January 17, 2013  
Product expires on: 2014.015   January 15, 2014
```


QINFO – License Key Info

```
----- License Key Information -----  
Type of License Key: 1  
Licensed CPU(s): Serial Machine  
                   Number  Type  
                   AD0E    2094  
                   AC6B    1090  
                   6B15    2817  
                   78E0    2097  
                   78E0    2097
```

QINFO – License Key Profile

```
----- License Key File Profile -----  
DSN of license key file: QWUSER.LICENSE.KEY.FILE  
License key file was preallocated
```

QINFO – CPU Specifics

```
----- Central Processing Unit Specifics -----  
CPU:00  Serial:01AC6B  Version:D3  Type:1090  SU/Sec: 1444.6  MIPS: 29.7  
CPU:01  Serial:01AC6B  Version:D3  Type:1090  SU/Sec: 1444.6  MIPS: 59.5  
CPU:02  Serial:01AC6B  Version:D3  Type:1090  SU/Sec: 1444.6  MIPS: 89.3  
Model Capacity Indicator: 306  
LPAR Name: IBMSYS1
```

QINFO – Main Database Profile

```
----- Main Data Base Profile -----  
DSN of main data base in use: SYS2.R770.DATABASE.NODUPS  
Time Stamp of main data base: Year Day hhmmssst  
                               2012 272 18060151  
  
Main data base was preallocated  
QWIKSLCT has not been run against main data base  
QWIKMRGE has not been run against main data base
```

QINFO – Virtual Exclude Profile

```
----- Virtual Exclude File Profile -----  
DSN of virtual exclude file: QWUSER.DEMO.JCL  
Member name for virtual excludes: VEXCLUDE  
Virtual exclude file was preallocated
```

QINFO – Z/OS & DFSMSdfp Specifics



```
----- z/OS and DFSMSdfp Specifics -----  
DFAREL: 3321      CVTOSLVx: FFFF,FFFF,EF7F,0000,C000,0000
```


QINFO – ISPF Configuration Table

```
----- ISPF Configuration Table Specifics -----  
The ISPCFIGU module was found in the following location  
  DD or Area      Data Set Name  
  LINKLIST       USER.LINKLIB
```

QINFO – Site/User Command Table

```
----- ISPF Site/User Command Table Information -----  
SITE ComTab APPLID:SITE      SEARCH ORDER:B ISP      USER ComTab APPLID:USER  
SITE CTab 2 APPLID:SIT1      USER CTab 2 APPLID:USR1  
SITE CTab 3 APPLID:SIT2      USER CTab 3 APPLID:USR2
```

QINFO – Site/User Profile

```
----- QW & QWS Command Profile -----  
No site command table named SITECMDS was found in ISPTLIB.  
No site command table named SIT1CMDS was found in ISPTLIB.  
No site command table named SIT2CMDS was found in ISPTLIB.  
No user command table named USERCMDS was found in ISPTLIB.  
No user command table named USR1CMDS was found in ISPTLIB.  
No user command table named USR2CMDS was found in ISPTLIB.  
QW in ISPF command table:ISPCMD5  
  Trunc: 0  
  Action: SELECT PGM(QWIKREF1) PARM(&ZPARM) NEWAPPL(QWIK)  
  Desc:   INVOKE QUICKREF AS POPUP APPLICATION  
QWS in ISPF command table:ISPCMD5  
  Trunc: 0  
  Action: SELECT PGM(ISPSTRT) PARM(PGM(QWIKREF1) PARM(&ZPARM) NEWAPPL(QWIK) SC  
  Desc:   INVOKE QUICKREF AS NEW SCREEN SPLIT
```

QINFO - QW Parms 1 of 3

```
----- MVS/QuickRef Options in Effect -----  
QDB= (Not set in QWIKOPTS)  
LICDSN= (Not set in QWIKOPTS)  
VEXDSN= (Not set in QWIKOPTS)  
VEXMBR=QEXCLUDE  
PARMDSN= (Not set in QWIKOPTS)  
OUTCLAS=A  
OUTDEST=LOCAL  
OUTDISP=HOLD  
ROUTCDE=002  
MAINMNU=QWIKREFA  
USERMNU=QWIKREFU  
TEXTSTR=940000  
USERSTR=640000  
DASDFRE=(1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18)  
BATPDSRD=N  
ONLPDSRD=N  
SMSVSTAT=YXXXX
```

QINFO - QW Parms 2 of 3

```
JES2CHR=$
HELPDD=SYSHELP
PF3=END
CHRXLAT=N
UISLOPT=N
CHRXTAB=C0->4C,D0->6E,E0->5F,5A->4F,6A->4F,00->00,00->00,00->00,00->00
          00->00,00->00,00->00,00->00,00->00,00->00,00->00
CDIXLAT=',=*/()?;{}!'
OSLSLO=Y
VPSSLO=N
FOLD=N
AUTOLUP=Y
AUTOFC=Y
PNLREL=S
USECSID=N
LOCLDB1= (Not set in QWIKOPTS)
LOCLDB2= (Not set in QWIKOPTS)
LOCLDB3= (Not set in QWIKOPTS)
LOCLDB4= (Not set in QWIKOPTS)
```


QINFO - QW Parms 3 of 3

```
LOCLDB5= (Not set in QWIKOPTS)
LOCLDB6= (Not set in QWIKOPTS)
LOCLDB7= (Not set in QWIKOPTS)
LOCLDB8= (Not set in QWIKOPTS)
LOCLDB9= (Not set in QWIKOPTS)
```


QINFO – Character Set Usage

```
----- Character Set Usage Information Section -----  
USECSID=N is in effect  
ZTERMCID VARIABLE IS '00037'
```

QWIKOPTS Tailoring

QWIKOPTS List – 1 of 3

```

Menu  Utilities  Compilers  Help

BROWSE      QWUSER.DEMO.JCL(QWIKOPTS) - 01.01      Line 00000010 Col 001 080
Command ==>                                     Scroll ==> CSR
QWIKOPTS QWIKOPT TYPE=CSECT,                        X00100000
          QDB=QWUSER.QW.DATABASE,                  X00110000
          LICDSN=QWUSER.QW.LICENSE.KEY.FILE,        X00110100
          VEXDSN=QWUSER.DEMO.JCL,                   QE0905B 7.2X00110200
          VEXMBR=VEXCLUDE,                          QE0905B 7.2X00110300
          PARMSN=,      OVERRIDE PARAMETER DSN, NO QUOTES  X00120000
          OUTCLAS=A,    QPRINT OUTPUT SYSOUT CLASS        X00130000
          OUTDEST=LOCAL, QPRINT OUTPUT DESTINATION        X00140000
          OUTDISP=HOLD,  QPRINT OUTPUT HOLD/NOHOLD SETTING X00150000
          ROUTCDE=2,    WTO ROUTE CODE                   X00160000
          JES2CHR=$,    JES2 COMMAND CHARACTER           X00170000
          HELPDD=SYSHELP, DDNAME FOR HELP               QE9802E 5.2X00170100
          PF3=END,      TREAT END AS END                 QE9802F 5.2X00170200
          CDIXLAT=' ,=*/( )? ; { } ! ' , CURSOR DRIVEN XLATE QE98010 5.2X00176000
          MAINMNU=QWIKREFA, NAME OF Q/R MAIN MENU        X00180000
          USERMNU=QWIKREFU, NAME OF Q/R USER MAIN MENU  X00190000
          DASDFRE=(1,2,3,4,5,6,7,8,9,10,11,12,13,14,    X00190300
          15,16,17,18),                                QE0710C 6.9X00190310
          BATPDSRD=N,      BATPDSRD VALUE                QE0001D 5.7X00190400
          ONLPDSRD=N,      BATPDSRD VALUE                QE0001D 5.7X00190500

```


QWIKOPTS List – 2 of 3

Menu Utilities Compilers Help

```

BROWSE      QWUSER.DEMO.JCL(QWIKOPTS) - 01.01      Line 00000030 Col 001 080
Command ==>                                     Scroll ==> CSR
SMSVSTAT=YXXXX,   DISPLAY SMS VSTAT   QP0906B QE0810B 7.1X00190600
TEXTSTR=940000,   MAIN DB STORAGE AREA SIZE   QE0001E 5.7X00200000
USERSTR=640000,   USER DATA BASE STORAGE AREA SIZE   X00210000
CHRXLAT=N,        SPECIAL CHARACTER XLATION   X00220000
CHRXTAB=((C0,4C),(D0,6E),(E0,5F),(5A,4F),      QP9906A 5.5X00220100
(6A,4F),(00,00),(00,00),(00,00),              QP9906A 5.5X00220200
(00,00),(00,00),(00,00),(00,00),              QP9906A 5.5X00220300
(00,00),(00,00),(00,00),(00,00)),            QP9906A 5.5X00220400
UISLOPT=N,        USER ITEM SLCTN LIST OPT   QE9712C 5.2X00220500
OSLSLO=Y,         OS LEVEL SLCTN LIST OPTION  QE9807B 5.3X00220600
VPSSLO=N,         VDR/PRD SPCFC SLCT LST OPT  QE9807B 5.3X00220700
FOLD=N,          FOLD DATA TO UPPER CASE    QP9810A 5.3X00220800
AUTOLUP=Y,       AUTOMATIC LOOKUP OPTION     QE0001E 5.7X00220900
AUTOFC=Y,        AUTOMATIC FINDCODE OPTION   QE0001E 5.7X00221000
PNLREL=S,        PANEL DISPLAY RELEASE #     QP0901F 7.0X00221100
USECSID=N,       CCSID VARIANTS XLATE OPT.    QP1011B 7.4X00221200
LOCLDB1=,        1ST USER DATA BASE DSN, NO QUOTES   X00230000
LOCLDB2=,        2ND USER DATA BASE DATA SET NAME   X00240000
LOCLDB3=,        3RD USER DATA BASE DATA SET NAME   X00250000
LOCLDB4=,        4TH USER DATA BASE DATA SET NAME   X00260000

```

QWIKOPTS List – 3 of 3

```

Menu Utilities Compilers Help
BROWSE      QWUSER.DEMO.JCL(QWIKOPTS) - 01.01      Line 00000050 Col 001 080
Command ==>                                     Scroll ==> CSR
      LOCLDB5=,          5TH USER DATA BASE DATA SET NAME      X00270000
      LOCLDB6=,          6TH USER DATA BASE DATA SET NAME      X00280000
      LOCLDB7=,          7TH USER DATA BASE DATA SET NAME      X00290000
      LOCLDB8=,          8TH USER DATA BASE DATA SET NAME      X00300000
      LOCLDB9=          9TH USER DATA BASE DATA SET NAME      00310000
      END                                                         00320000
***** Bottom of Data *****

```


QINFO – QWOPTASM to Reassemble

```
Menu Utilities Compilers Help

BROWSE      QWUSER.DEMO.JCL(QWOPTASM) - 01.02      Line 00000000 Col 001 080
Command ==> _____ Scroll ==> CSR

***** Top of Data *****
//QWUSERQA JOB (A01),'CHUCK DAVIS',MSGCLASS=H,CLASS=A,NOTIFY=&SYSUID
/*JOBPARM L=2
//JS10      EXEC HLASMCL,
//              PARM.C='NODECK,OBJECT,XREF(SHORT)',
//              PARM.L='LIST,MAP,XREF,RENT,REUS'
//C.SYSLIB   DD DSN=QWUSER.R770.MACLIB,DISP=SHR      <-- Macro lib
//              DD DSN=SYS1.MACLIB,DISP=SHR
//              DD DSN=SYS1.MODGEN,DISP=SHR
//C.SYSPRINT DD SYSOUT=*
//C.SYSIN    DD DSN=QWUSER.DEMO.JCL(QWIKOPTS),      <-- Source lib
//              DISP=SHR
//L.SYSLMOD  DD DSN=QWUSER.DEMO.LINKLIB,            <-- Link lib
//              DISP=SHR
//L.SYSPRINT DD SYSOUT=*
//L.SYSIN    DD *
//              NAME QWIKOPTS(R)
***** Bottom of Data *****
```


QWIKOPTS – QWINUOPT

```

Menu  Utilities  Compilers  Help

BROWSE      QWUSER.DEMO.JCL(QWINUOPT) - 01.00      Line 00000001 Col 001 080
Command ==> _____ Scroll ==> CSR

++USERMOD(QWI0002)      /* QWIKOPTS Source Update */.
++VER(Z038)             /* MVS SREL

                                >>> Note <<<
                                Place changes to source
                                library member QWIKOPTS
                                in IEBUPDTE format after
                                ./ CHANGE NAME=QWIKOPTS
                                statement below.  Make
                                sure sequence numbers
                                are correct.

                                */.
                                FMID(QWI0770)      /* MVS/QuickRef SYSMOD */.
++SRCUPD(QWIKOPTS)      /* Module Name */.
                                DISTLIB(AQWISRC)     /* DLIB */.
./ CHANGE NAME=QWIKOPTS
                                QDB=QWUSER.R770.DATABASE,      X00110000
                                LICDSN=QWUSER.LICENSE.KEY.FILE,   X00110100
                                VEXDSN=QWUSER.DEMO.JCL,           X00110200
                                VEXMBR=VEXCLUDE,                  X00110300

```

MVS/QuickRef Utilities

- QWIKSLCT
- QWIKMRGE
- QWIEXPYR / QWIEXPY2

QWIKSLCT / QWIKSLCJ

- Usage:
 - To copy the entire database to new database
 - To selectively copy items from the database to new database
- Action driven by control statements
- Not supported for User Databases (UDB's)
- For JCL, see member QWIKSLCJ in JCL library

QWIKMRGE / QWIKMRGJ

- Usage:
 - To combine (or merge) 1 to 5 update databases into a single database
- Action driven by control statements
- Not supported for User Databases (UDB's)
- For JCL, see member QWIKMRGJ in JCL library

QWIEXPYR

- Usage:
 - To analyze an MVS/QuickRef license key file to return the number of remaining days
- REXX driven
- Checks the currently allocated license key file
- For JCL, see member QWIEXPYR in JCL library

QWIEXPYR REXX Exec

```
Menu Utilities Compilers Help

BROWSE      QWUSER.DEMO.JCL(QWIEXPYR) - 01.00      Line 00000000 Col 001 080
Command ==> _____ Scroll ==> CSR

***** Top of Data *****
/* REXX */
ADDRESS LINKMVS 'QWIEXPYR'
IF RC = '-1' THEN
    SAY 'QWIEXPYR WAS UNABLE TO FIND A VALID LICENSE KEY FILE'
ELSE IF RC = '0' THEN
    SAY 'QWIEXPYR - MVS/QUICKREF LICENSE HAS EXPIRED'
    ELSE SAY 'QWIEXPYR - 'RC' DAYS LEFT UNTIL MVS/QUICKREF EXPIRES'
***** Bottom of Data *****
```


QWIEXPYR/QWIEXPY2 Return Codes



- 0 : license key expired
- -1 : license key file invalid
- 'nnnn' : positive integer is the number of days until the MVS/QuickRef license key expires.

Note: 3653 is reported even when the number of days until expiration may be more than 3653 days.

QWIEXPY2

- Updated version of QWIEXPYR
- Usage:
 - To analyze an MVS/QuickRef license key file to return the number of remaining days
- REXX driven
- Allows you to allocate the license key file
- Useful for dealing with lots of license keys
- For JCL, see member QWIEXPY2 in JCL library

QWIEXPY2 REXX Exec

Menu Utilities Compilers Help

BROWSE QWUSER.DEMO.JCL(QWIEXPY2) - 01.00 Line 00000000 Col 001 080
 Command ==> _____ Scroll ==> CSR

***** Top of Data *****

```
/* REXX */
/*****/
/* THIS REXX CAN BE INVOKED TO SHOW HOW MANY DAYS ARE LEFT */
/* UNTIL THE LICENSE IN THE FILE ALLOCATED TO QWLICKEY */
/* EXPIRES. */
/*****/
```

```
KEYS = 'RSC001.R720.LICENSE.KEY.FILE' /* LICENSE KEY FILE */
```

```
ADDRESS ISPEXEC
"CONTROL ERRORS RETURN" /* RETURN CONTROL TO THIS DIALOGUE */
```

```
ADDRESS TSO "ALLOC DD(QWLICKEY) DS('KEYS') SH REU "
```

```
ADDRESS LINKMVS 'QWIEXPYR'
IF RC = '-1' THEN
  SAY 'QWIEXPYR WAS UNABLE TO FIND A VALID LICENSE KEY FILE'
ELSE IF RC = '0' THEN
  SAY 'QWIEXPYR - MVS/QUICKREF LICENSE HAS EXPIRED'
```

User Data Bases (UDB's)

User Data Bases (UDB's)

Examples:

- Local job class or SYSOUT class standards
- Local JCL standards
- Tape handling procedures and instructions
- Employee phone number list
- "Hot" news items, such as down time schedules
- Hardware/software configuration information
- User ABEND code descriptions for local applications

MVS/QuickRef Database Layout

Indices in QW have the following layout:

- Vendor – 15 characters
- Product – 20 characters
- Release – 15 characters
- Item – 16 characters

Your UDB Database Layout

Manipulate the indices in the database to fit your needs:

- Vendor – “My Company Name”
- Product – “Local ABEND codes”
- Release – “*”, ANY, “My Release” or “ ”
- Item – U0999

Steps to Building User Data Base

Steps for Building UDB:

1. Allocate and load the user data base(s)
2. Define the user data base(s) to MVS/QuickRef
3. If needed, create a user menu panel.
4. If you created a user menu panel, then add user menu option to the MVS/QuickRef main menu
5. Backup your source files because you probably **will** need to rebuild.

See MVS/QuickRef User Guide for details.

The Override Facility

The **VERRIDE** Facility

- You cannot directly modify the Q/R database.
- Sometimes, you need to.
- Override facility allows you to add, append, or replace item with member of PDS.
- Commands are
 - **REPLACE** – add or replace item
 - **AUGMENT** – supply supplemental text
 - **PREVENT** – deny access to item or volser
 - **ALLOW** – allow access to item or volser

The OVERRIDE Facility

- **Useful:**

Suppose the text of an item in the database is missing, incorrect or misleading. You can use the override facility to correct the item.

- **Necessary:**

Suppose you need to prevent the DASD Free Space facility from accessing a specific VOLSER.

The OVERRIDE Facility

Override Facility can provide functionality of a User Database. Although User Database allows you to pack more data into a smaller footprint, it is **static** – you can't change a UDB without rebuilding it.

The override facility is a hot facility – when you edit and save text using ISPF EDIT, the change takes place instantly. For items such as work schedules or things that can change frequently, the override facility is much more flexible.

QWIKEXIT

QWIKEXIT

- QWIKEXIT is an optional, user security exit.
- Not linked into the QWIKREF1 load module.
- It can be used instead of Override Facility PREVENT and ALLOW statements.
- QWIKEXIT is invoked each time an item is selected to be included in the on-screen item selection list or selected to be displayed.

QWIKEXIT

- For each invocation of QWIKEXIT, the item in question may be accepted for display or rejected by this exit.
- How you determine whether it should be accepted or rejected is completely up to you. You can use a SAF call or other means.
- At anytime, MVS/QUICKREF may be terminated via a RC=08 from this exit.

QWIKEXIT Return Codes

MVS/QUICKREF expects one of the following return codes from QWIKEXIT:

- 0 - allow the user to view the item
- 4 - deny the user access to the item and, issue message QWIKM036 (You can change the text of this message using PDF EDIT if desired)
- 8 - deny the user access to the item and, terminate MVS/QUICKREF immediately.

Batch Processing and Batch Commands

QWBATCH JCL

```

File Edit Edit_Settings Menu Utilities Compilers Test Help

EDIT      QWUSER.DEMO.JCL(QWBATCH) - 01.08      Columns 00001 00072
Command ==> _____ Scroll ==> CSR
***** Top of Data *****
000001 //RSC004B7 JOB (A01),'CHUCK DAVIS',MSGCLASS=H,CLASS=A,NOTIFY=&SYSUID
000002 /*JOBPARM L=2
000003 //JS10      EXEC PGM=QWIKREF1,REGION=0K,PARM='S=*'
000004 //STEPLIB    DD DSN=QWUSER.DEMO.LINKLIB,DISP=SHR
000005 //QWPRINT    DD SYSOUT=*,DCB=(RECFM=VB,LRECL=300,BLKSIZE=6000)
000006 //QWREFDD    DD DSN=QWUSER.R770.DATABASE,DISP=SHR
000007 //QWLICKEY   DD DSN=QWUSER.LICENSE.KEY.FILE,DISP=SHR
000008 //SYSHELP    DD DSN=SYS1.HELP,DISP=SHR
000009 //*QWCMSDD   DD *
000010 //*      SORT 9 A
000011 //
***** Bottom of Data *****

```


Batch Commands

The following commands are valid in batch

Command	Abbreviation
QINFO	QINFO
SORT	SO
GETNEXT	GN
GETPREV	GP
SEARCH	SE
QPRINT	QP

Batch Commands File

The batch commands file:

- may be specified as a physical sequential data set or a specific member of a PDS
- may be fixed or variable length
- must have an LRECL no greater than 80 bytes (84 if the file is variable length)
- must not contain any blank records

That's All Folks

QWACADEMY.COM

- The new QuickRef Academy is designed to introduce new users to the full range of QuickRef's features and demonstrate its many problem-solving capabilities. Even Power QW Users may find new uses for QuickRef in the videos.
- Learn more at QWACADEMY.COM

MVS/QuickRef - Tailoring QW

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