MVS/QuickRef - Tailoring QW

Speaker Name: Chuck Davis
Speaker Company: Chicago-Soft, Ltd.

Date of Presentation: February 5, 2013
Session Number: 12489

cdavis@quickref.com
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

- QWIKMRGBJ – 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

GETNEXT

GETPREV
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 SYNTX’
  - R = ‘V3R2’
  - I = ‘.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

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.

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. ----
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The reference information in this product provides you with a description. Type HELP on the command line to access MVS/QuickRef help information.
QWIKREF1 Processing Overview
MVS Address Space / QWIKREF1

QWIKREF1 resides here
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)
- QWCMDSDDD – 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
**Top of Data**

```plaintext
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 ISPPLIB DATASET ID('SYS2.QUICKREF.R770.PANELS')
000018 ISPEXEC LIBDEF +
000019 ISPMLIB DATASET ID('SYS2.QUICKREF.R770.MESSAGES')
```
QW Clist – 3 of 3

EDIT   QWUSER.DEMO.JCL(QW) - 01.02
Command ==> ISPEXEC LIBDEF ISPMLIB
000041  ISPEXEC LIBDEF ISPLLLIB
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) /* OverrideParms

******** *************************************** 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

<table>
<thead>
<tr>
<th>IEC108I – V1R1</th>
<th>Text for IEC108I that is used for V1R1</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEC108I – V1R2</td>
<td></td>
</tr>
<tr>
<td>IEC108I – V1R3</td>
<td></td>
</tr>
<tr>
<td>IEC108I – V1R4</td>
<td></td>
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<tr>
<td>IEC108I – V1R5</td>
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<tr>
<td>IEC108I – V1R6</td>
<td></td>
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<tr>
<td>IEC108I – V1R7</td>
<td></td>
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<tr>
<td>IEC108I – V1R8</td>
<td></td>
</tr>
<tr>
<td>IEC108I – V1R9</td>
<td></td>
</tr>
<tr>
<td>IEC108I – V1R10</td>
<td></td>
</tr>
<tr>
<td>IEC108I – V1R11</td>
<td></td>
</tr>
<tr>
<td>IEC108I – V1R12</td>
<td></td>
</tr>
</tbody>
</table>
Too Many Items!

Select desired item for display or enter desired item at top left

Licensed for benefit of Referential Systems

<table>
<thead>
<tr>
<th>Item</th>
<th>Vendor</th>
<th>Product</th>
<th>Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>S213</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES</td>
<td>V1R1</td>
</tr>
<tr>
<td>S213</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES</td>
<td>V1R2</td>
</tr>
<tr>
<td>S213</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES</td>
<td>V1R3</td>
</tr>
<tr>
<td>S213</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES</td>
<td>V1R4</td>
</tr>
<tr>
<td>S213</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES</td>
<td>V1R5</td>
</tr>
<tr>
<td>S213</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES</td>
<td>V1R6</td>
</tr>
<tr>
<td>S213</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES</td>
<td>V1R7</td>
</tr>
<tr>
<td>S213</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES</td>
<td>V1R8</td>
</tr>
<tr>
<td>S213</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES</td>
<td>V1R9</td>
</tr>
<tr>
<td>S213</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES</td>
<td>V1R10</td>
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<tr>
<td>S213</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES</td>
<td>V1R12</td>
</tr>
<tr>
<td>S213</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES</td>
<td>V1R13</td>
</tr>
</tbody>
</table>

Type HELP on the command line to access MVS/QuickRef help information.
## Virtual Excludes - Example

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Product</th>
<th>Release</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES V1R1</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES V1R2</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES V1R3</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES V1R4</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES V1R5</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES V1R6</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES V1R7</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES V1R8</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES V1R9</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES V1R10</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES V1R11</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES V1R12</td>
<td>*</td>
</tr>
<tr>
<td>E</td>
<td>IBM</td>
<td>Z/OS SYSTEM CODES V1R13</td>
<td>*</td>
</tr>
</tbody>
</table>
Virtual Excludes - Results

Item ==>    * MVS/QuickRef 7.7 *    Col 1 Line 1 of 683
Command ==>    Scroll ==> CSR

You may scroll the information below UP, DOWN, LEFT, and/or RIGHT as needed
------------------------------- V=IBM P=Z/OS SYSTEM CODES R=V1R10 I=S213 -------------------------------
>>>>>>>>>>>>>>>>>>> Licensed for benefit of Referential Systems <<<<<<<<<<<<<<<<<<<<<<
************************************************************************** Text Below Copyright (c) 2013, IBM**************************************************************************

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Explanation: The error occurred during processing of an OPEN macro instruction for a direct access device. This system completion code is accompanied by message IEC143I. Refer to the explanation of message IEC143I for complete information about the task that was ended and for an explanation of the return code (rc in the message text) in register 15.

Application Programmer Response: Respond as indicated to the applicable message.

System Programmer Response: If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the program listing for the job.

---- Type HELP on the command line to access MVS/QuickRef help information. ----
QINFO Subcommand
QINFO from 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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QINFO – 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

<table>
<thead>
<tr>
<th>DD or Area</th>
<th>Data Set Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISPMLLIB</td>
<td>RSC004.R770.LINKLIB</td>
</tr>
</tbody>
</table>
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
QINFO – License Key Info

<table>
<thead>
<tr>
<th>Type of License Key:</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed CPU(s):</td>
<td>Serial</td>
</tr>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>AD0E</td>
<td>2094</td>
</tr>
<tr>
<td>AC6B</td>
<td>1090</td>
</tr>
<tr>
<td>6B15</td>
<td>2817</td>
</tr>
<tr>
<td>78E0</td>
<td>2097</td>
</tr>
<tr>
<td>78E0</td>
<td>2097</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>CPU</th>
<th>Serial</th>
<th>Version</th>
<th>Type</th>
<th>SU/Sec</th>
<th>MIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU:00</td>
<td>01AC6B</td>
<td>D3</td>
<td>1090</td>
<td>1444.6</td>
<td>29.7</td>
</tr>
<tr>
<td>CPU:01</td>
<td>01AC6B</td>
<td>D3</td>
<td>1090</td>
<td>1444.6</td>
<td>59.5</td>
</tr>
<tr>
<td>CPU:02</td>
<td>01AC6B</td>
<td>D3</td>
<td>1090</td>
<td>1444.6</td>
<td>89.3</td>
</tr>
</tbody>
</table>

Model Capacity Indicator: 305

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 hhmmsssth
[Year] [Day] [hhmmsssth]
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.DMO.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

<table>
<thead>
<tr>
<th>SITE</th>
<th>ComTab</th>
<th>APPLID:SITE</th>
<th>SEARCH ORDER:</th>
<th>ISP</th>
<th>USER</th>
<th>ComTab</th>
<th>APPLID:USER</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITE</td>
<td>CTab 2</td>
<td>APPLID:SIT1</td>
<td></td>
<td></td>
<td>USER</td>
<td>CTab 2</td>
<td>APPLID:USR1</td>
</tr>
<tr>
<td>SITE</td>
<td>CTab 3</td>
<td>APPLID:SIT2</td>
<td></td>
<td></td>
<td>USER</td>
<td>CTab 3</td>
<td>APPLID:USR2</td>
</tr>
</tbody>
</table>
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: ISPCMDS
  Trunc: 0
  Action: SELECT PGM(QWIKREF1) PARM(&ZPARAM) NEWAPPL(QWIK)
  Desc: INVOKE QUICKREF AS POPUP APPLICATION

QWS in ISPF command table: ISPCMDS
  Trunc: 0
  Action: SELECT PGM(ISPSTRT) PARM(PGM(QWIKREF1) PARM(&ZPARAM) NEWAPPL(QWIK) SC
  Desc: INVOKE QUICKREF AS NEW SCREEN SPLIT
QINFO - QWParms 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
DASFRE=\(1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18\)
BATPDSRD=N
ONLPDSRD=N
SMSVSTAT=YXXXX
JES2CHR=$
HELPDD=SYSHELP
PF3=END
CHRXLAT=N
VISLOPT=N
CHRXTAB=C0->4C,00->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
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 - QWParms 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,
QDB=QWUSER.QW.DATABASE,
LICDSN=QWUSER.QW.LICENSE.KEY.FILE,
VEXDSN=QWUSER.Demo.JCL,
VEXMBR=VEXCLUDE,
PARMDSN=,  OVERRIDE PARAMETER DSN, NO QUOTES
OUTCLAS=A,  QPRINT OUTPUT SYSOUT CLASS
OUTDEST=LOCAL,  QPRINT OUTPUT DESTINATION
OUTDISP=HOLD,  QPRINT OUTPUT HOLD/NOHOLD SETTING
ROUTCDE=2,  WTO ROUTE CODE
JES2CHR=$,  JES2 COMMAND CHARACTER
HELPDD=SYSHELP,  DDNAME FOR HELP
PF3=END,  TREAT END AS END
CDIXLAT=',=*{(};{}!}',  CURSOR DRIVEN Xlate
MAINMNU=QWIKREFA,  NAME OF Q/R MAIN MENU
USERMNU=QWIKREFU,  NAME OF Q/R USER MAIN MENU
DASDFRE=(1,2,3,4,5,6,7,8,9,10,11,12,13,14,
15,16,17,18),
BATPDSRD=N,  BATPDSRD VALUE
ONLPDSRD=N,  BATPDSRD VALUE

53
<table>
<thead>
<tr>
<th>Command</th>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMSVSTAT=YYYYY,</td>
<td>DISPLAY SMS VSTAT</td>
<td>QP0906B QE0810B 7.1X00190600</td>
</tr>
<tr>
<td>TEXTSTR=940000,</td>
<td>MAIN DB STORAGE AREA</td>
<td>SIZE QE0001E 5.7X00200000</td>
</tr>
<tr>
<td>USERSTR=640000,</td>
<td>USER DATA BASE STORAGE</td>
<td>AREA SIZE X00210000</td>
</tr>
<tr>
<td>CHRXLAT=N,</td>
<td>SPECIAL CHARACTER XLTATION</td>
<td>X00220000</td>
</tr>
<tr>
<td>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)),</td>
<td>QP9906A 5.5X00220100</td>
<td></td>
</tr>
<tr>
<td>UISLOPT=N,</td>
<td>USER ITEM SLCTN LIST</td>
<td>OPT QE9712C 5.2X00220500</td>
</tr>
<tr>
<td>OSLSLO=Y,</td>
<td>05 LEVEL SLCTN LIST</td>
<td>OPTION QE9807B 5.3X00220600</td>
</tr>
<tr>
<td>VPSSLO=N,</td>
<td>VDR/PRD SPCFC SLCT LST</td>
<td>OPT QE9807B 5.3X00220700</td>
</tr>
<tr>
<td>FOLD=N,</td>
<td>FOLD DATA TO UPPER</td>
<td>CASE QP9810A 5.3X00220800</td>
</tr>
<tr>
<td>AUTOLUP=Y,</td>
<td>AUTOMATIC LOOKUP</td>
<td>OPTION QE0001E 5.7X00220900</td>
</tr>
<tr>
<td>AUTOFC=Y,</td>
<td>AUTOMATIC FINDCODE</td>
<td>OPTION QE0001E 5.7X00221000</td>
</tr>
<tr>
<td>PNREL=S,</td>
<td>PANEL DISPLAY RELEASE</td>
<td># QP0901F 7.0X00221100</td>
</tr>
<tr>
<td>USECSID=N,</td>
<td>CCSID VARIANTS XLTATE</td>
<td>OPT. QP1011B 7.4X00221200</td>
</tr>
<tr>
<td>LOCLDB1=,</td>
<td>1ST USER DATA BASE</td>
<td>DSN, NO QUOTES X00230000</td>
</tr>
<tr>
<td>LOCLDB2=,</td>
<td>2ND USER DATA BASE</td>
<td>DATA SET NAME X00240000</td>
</tr>
<tr>
<td>LOCLDB3=,</td>
<td>3RD USER DATA BASE</td>
<td>DATA SET NAME X00250000</td>
</tr>
<tr>
<td>LOCLDB4=,</td>
<td>4TH USER DATA BASE</td>
<td>DATA SET NAME X00260000</td>
</tr>
</tbody>
</table>
QWIKOPTS List – 3 of 3

Menu Utilities Compilers Help

Browse QWUSER.DEMO.JCL(QWIKOPTS) - 01.01 Line 00000050 Col 001 080
Command ===>

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
<th>Data Set Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCLDB5=</td>
<td>5TH USER DATABASE DATA SET NAME</td>
<td>X00270000</td>
</tr>
<tr>
<td>LOCLDB6=</td>
<td>6TH USER DATABASE DATA SET NAME</td>
<td>X00280000</td>
</tr>
<tr>
<td>LOCLDB7=</td>
<td>7TH USER DATABASE DATA SET NAME</td>
<td>X00290000</td>
</tr>
<tr>
<td>LOCLDB8=</td>
<td>8TH USER DATABASE DATA SET NAME</td>
<td>X00300000</td>
</tr>
<tr>
<td>LOCLDB9=</td>
<td>9TH USER DATABASE DATA SET NAME</td>
<td>00310000</td>
</tr>
</tbody>
</table>

END

****************************************************************************** Bottom of Data **************************************************
QINFO – QWOPTASM to Reassemble

```
//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
//  DD DSN=SYS1.MACLIB, DISP=SHR
//  DD DSN=SYS1.MODGEN, DISP=SHR
//C.SYSPRINT DD SYSOUT=*
//C.SYSIN DD DSN=QWUSER.DEemo.JCL(QWIKOPTS),
  // DISP=SHR
//L.SYSLMOD DD DSN=QWUSER.DEemo.LINKLIB,
  // DISP=SHR
//L.SYSPRINT DD SYSOUT=*
//L.SYSIN DD *
  NAME QWIKOPTS(R)
```
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

Ma 0.0 01/21/13.021 04:20PM 71.191.86.90 4,15
MVS/QuickRef Utilities

- QWIKLCT
- QWIKMRGE
- QWIEXPYR / QWIEXPY2
QWI KSLCT / QWI KSLCJ

• 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 QWI KSLCJ 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
QWIEXPRYR REXX Exec

Menu  Utilities  Compilers  Help

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

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

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

---

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

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

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

ADDRESS TSO  "ALLOC DD(QWPLICKEY) 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 OVERRIDE 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.
QWIKEEXIT
QWIKEEXIT

- QWIKEEXIT 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.
- QWIKEEXIT is invoked each time an item is selected to be included in the on-screen item selection list or selected to be displayed.
QWIKEEXIT

• For each invocation of QWIKEEXIT, 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.
QWIKEIXIT Return Codes

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

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
EDIT   QWUSER.DEMO.JCL(QWBATCH) - 01.08
Command ===>

****** ************ 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=OK, 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 /*QWCMDSDD DD *
000010 /* SORT 9 A
000011 //

****** ************ Bottom of Data ************
## Batch Commands

The following commands are valid in batch

<table>
<thead>
<tr>
<th>Command</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>QINFO</td>
<td>QINFO</td>
</tr>
<tr>
<td>SORT</td>
<td>SO</td>
</tr>
<tr>
<td>GETNEXT</td>
<td>GN</td>
</tr>
<tr>
<td>GETPREV</td>
<td>GP</td>
</tr>
<tr>
<td>SEARCH</td>
<td>SE</td>
</tr>
<tr>
<td>QPRINT</td>
<td>QP</td>
</tr>
</tbody>
</table>
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
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MVS/QuickRef - Tailoring QW

Speaker Name: Chuck Davis
Speaker Company: Chicago-Soft, Ltd.

Date of Presentation: February 5, 2013
Session Number: 12489

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