



## *FAQS overview*

- Job scheduling
- Message handling
- Notification
- Example REXX imod
  
- Hanes' implementation is BIM-FAQS/PCS and ASO 5.0a

## *Job Scheduling*

- Event definitions
  - Jobs from various library structures
  - IMODs (REXX procedures)
  - AR Commands
  - Manual work tasks
- Master and Current events

## Current Event Directory

- Selection criteria
- Event name
- Organized by time
- Grouping by a name and/or CPUid
- Status

```

JOLEVT .7 ** BIM-FAQS/PCS Online V5.0A ** ID=VSEESA23.SAW
====>
** BIM-FAQS/PCS ONLINE - Event maintenance **
Event Name =====> * Event File =====> CURRENT Cpu =====> *
Time =====> * Group =====> * Job =====> * Stat =====> *

Event Job/Cnd Day/Cal M Early Group CpuId Description Stat
- CIVRLOCN CIVRLOCN MON 08:05 H1D1 VSEHC11 IN STG FDR 2 WKS Comp
- CCAWRPT CCAWRPT MON 08:21 H1D3 VSEHC11 WKLY CAR RPT Comp
- CDPDED15 CDPDED15 MON 08:25 H1D1 VSEHC11 LOAD EDI TRANS Comp
- AAPCHK1 AAPCHECK MON 08:30 H1C1 VSEHC11 EDIT=YES Wait
- CPSRPRT1 CPSRPRT MON 08:30 H1D1 VSEHC11 ORD PREP PRINT Comp
- AAPCHK2 AAPCHECK MON 08:32 H1C1 VSEHC11 EDIT=NO,CHECK=YE Work
- AAPCHK3 AAPCHECK MON 08:34 H1C1 VSEHC11 UPDATE=YES Work
- CIVRSCND CIVRSCND MON 08:45 H1D1 VSEHC11 HFC WOVEN SEC RP Comp
- CIVRLOTS CIVRLOTS MON 09:05 H1D1 VSEHC11 LOTS BY FOB Comp
- CIVRLOT1 CIVRLOTS MON 09:10 H1D1 VSEHC11 LOTS BY PROD DES Comp
- CIVRCODE CIVRCODE MON 09:30 H1D1 VSEHC11 INV BY APPL CODE Comp
- CORDORD CORDORD MON 10:00 H1D1 VSEHC11 ORDERS PRINT Freq
- CIVDTRCK CIVDTRCK MON 10:15 H1D1 VSEHC11 LOAD TKT TRACKNG Freq
- CPSRPRT CPSRPRT MON 10:30 H1D1 VSEHC11 ORD PREP PRINT Freq

Actions: A=Audit C=Data D=Doc F=Dsuc G=Graph H=Hold J=Job L=Del N=Note
P=Post R=Reset T=Tape U=Uhid V=Vars W=Work X=Edit Y=Vsuc Z=Acct
PF1=Help PF2=Switch PF3=Return PF4=Create PF7=Bwd PF8=Fwd PF9=/sn
480 1:51 01.06 00:00.350 09:58 09:11/00
  
```

## Event Definition

- Name, grouping and description
- Specific command
- Times
  - Clock - begin, late, abort
  - Date
- Multiple runs
- 8 When conditions
- 30 Successors
- Variables
- Data Set status
- Resource weighting
- Event/Job exclusion

```
JOLEVT .Z **      BIN-FAQS/PCS OnLine      VS.0A      ** ID=VSEESA23.SAM
===>

      ** Event Maintenance for File=MASTER *** Status=Mast **

Event Name  ===> CHKVPRTD          Group Name  ===> SYSAUTO
Description ===> CHK VPRT IN DEVP  Event Hold  ===> N
Event Cuid  ===> VSEHCI1          ABND RC    ===> 0008
Command    ===> &AO CHKVPRT F6
CSPD       ===> _____      Target Node ===>

Early Time  ===> 0300             Late Time   ===> 2659
Abort Time  ===> 2659             XDATE OR   ~ MTWTFSS  CYCLE H Hol-id W
Event Day   ===> DAILY           000  S  000  -
Occurrences ===> *                Frequency   ===> 0300
Start Date  ===>                End Date    ===>

When Cond.  ===> Y                Successors  ===> N
Variables   ===> N                Data Sets  ===> N
Tape Reels  ===> 00               Cartridges  ===> 00
Resources   ===> N                Excl type  ===>
Exclude     ===> _____

PF1=Hlp PF2=Tra PF3=Ret PF4=Upd PF5=New PF6=Fwd PF9=Del PF10=When PF11=For
480                1:51                02.06 00.00.190 10:04 09/11/00
```

## When Conditions

- Primary condition trigger can be:
  - POWER, VSE or event name
  - Specific phase along primary qualifier for a name
  - Global variable altered, etc.
- Primary qualifier can be a POWER, VSE or event name.
- Secondary qualifier can be IBM cancel code, return code, CPUid or time range.

```

JOLEXPT .A **      BIN-FAQS/PCS OnLine      VS.0A      **      ID=VSEESA23.SAM
====>
- Or Condition With Next - Condition Has Occured          WHEN1
  Primary Condition          Primary Qualifier
- Event          - Power User          - Dos Job
- Dos Job        - PDS Member Update    - Power Job
- Power Job      - Work Station          - Event
- Phase          - Data Station          - Group
- Group          - Global Variable
- PCS Proc       - User Posted
- CA- Product
X Message

Condition Value ==> EXPC257I          Qualifier Value ==>

Secondary Qualifiers          EQ NE GE LE GT LT
PCS User Id ==>
Partition Id ==> F6          X -
IBM CC ==>
SRC Value ==>
SMRC Value ==>
CPU Id ==>
Time Frame ==>
PF1=Help PF2=Insert PF3=Return PF7=Bwd PF8=Fwd PF9=Delete
180          1:51          02.06 00:00.360 10:00 09/11/00
  
```

## Message Handling via FAQs/ASO

- Console message value trigger
- Time range
- Can be partition specific
- Actions for a trigger:
  - Message manipulation (highlight, suppress, etc.)
  - IMODs (REXX)
  - Reply
  - Issue an AR command

```
FAQMENU.M      ** BIN-FAQS/ASO Online V5.0A **      ID=VSEESA23.SAM
===>
File: HCIMSG
Action Name ==> IST259I      reactivate line down after 15 seconds
Message      ==> IST259I      Scan ( 01 . 00 )      MTWRPSS
Message2     ==> CODE        Scan ( 29 . 05 )
Occurrences  ==> 30          Phase ==>
Frequency    ==> ( 01 : 00 : 00 )      Jobname ==>
Time Range   ==> ( 00 : 00 : 24 : 00 )      CPUID ==> *
Pid          = F3
- ACTION Enabled
Highlight ( )      Disable Generics ( _ )
Hold ( )           Simulate Action ( _ )
Unhold ( )        Stop After Match ( _ )
Suppress ( )      Old Style Args ( _ )
Delete ( )        Command Delay ( 00 : 15 ) MM:SS
- REXX IMOD ( ) ==>
Reply ( ) ==>
- Command ( X ) ==> V NET,ACT,ID=(&(+26.3),SCOPE=ALL
- Mask ( ) Mask= Length= Offset=
- Notify ( ) Type= User= Node= RSCS=

PF1=Field Help PF3=Return PF4=MSG exp PF5=Save PF6=Easy Scan PF9=MSG lookup
400 1:51 05.14 00:00.100 10:13 09/11/08
```

## Notification

- FAQs/Call
  - PC based using an emulated 3270 session with the HLLAPI interface
  - Makes phone calls to notify someone of status
  - Can “speak” to operator via speaker
  - Can be numeric pager or home and leave a message
  - Can require a response or continued notification

```
JQLBEEP .4 **      BIM-FAQS/PCS Online      V5.0A      **      ID=VSEESA23.SAW
===>

      ** BIM-FAQS/CALL DEFINITION PANEL **

Condition ID  ===> 98
PC Call List  ===> @-BEEPER
Description   ===> PASS MESSAGE TO VARIOUS MIS PAGERS
Voice Data
@ @ @ @ @ @ @ @ @ @

      Free Form Description
===> THE 1st PARAMETER IS THE PREFIX FOR THE BEEPER LIST. SHOULD BE ONE
===> OF "SYSPROG", "HOF", "HCI" OR "OPER".
===> THE 2nd PARAMETER IS THE NUMERIC DATA TO PASS IN THE FORMAT
===> $NUM(NNNNNNNN) WHERE N = THE NUMBER TO APPEAR ON THE PAGER DISPLAY.
===> THE 3rd - Nth PARAMETERS ARE ANY VOICE CLIPS AND/OR LITERAL ITEMS
===> OF DATA THAT ARE STORED AS PART OF THE RECORDED MESSAGE THAT IS
===> PLAYED BACK DURING CONFIRM INCIDENT.
===>
===>
===>
PF1=Help PF3=Return PF4=Update
480 1:51 02.06 00:00.351 10:19 09/11/00
```

## *Notification*

- E-mail
  - With TCP/IP
  - Accompanying E-mail function
  - E-mailer can be scheduled by FAQs

## *Example: System Shutdown*

```
/* This REXX IMOD will issue all commands for the shutting down */
/* of our system. */

parse upper arg pend
pid = pidlist('B') /* get busy partitions and jobnames */
j = (length(pid)%2) - 1
n = 0
do i = 0 to j
  p = substr(pid,i*2+1,2)
  jnm = jobname(p)
  if jnm ^= 'NO NAME' then do
    n = n + 1
    x.n = jnm /* jobname & pid into stem vars */
    y.n = p
  end
end

(continued)
```



## Example: Shutdown *(continued)*

```
do i = 1 to n
  if substr(x.i,1,4) == 'CICS' then do
    call shutcics x.i PEND
    if result='1' then do
      say 'ZFAQS: halting termination,' x.i 'still active' TIME()
    end
  end
end
if x.i == "M4VAPRNT" then m4va = x.i
if x.i == "EXPLCICS" then do
  expc = x.i
  expcp = y.i
end
if x.i == "NETTST02" then nettst = x.i
if x.i == "NETFTP01" then netftp = x.i
if x.i == "EVSEIBAT" then evse = x.i
if x.i == "NETTEL00" then nettel = x.i
end
```

(continued)

## Example: Shutdown *(continued)*

```
CALL $EVENT DELETE ABNDVPRNT /* delete event that monitors */

if m4va == "M4VAPRNT" then call shutvprt

if expc == "EXPLCICS" then ADDRESS CONSOLE 'MSG' expcp

if nettst == "NETTST02" then call shuttcp nettst

if netftp == "NETFTP01" then call shuttcp netftp

call TERMINAT NOTIFY /* start FAQS shutdown */

ADDRESS CONSOLE 'Z NET,QUICK' /* terminate vtam */

if evse == "EVSEIBAT" then ADDRESS CONSOLE 'A RDR,EVSEPBAT,DISP=K,CLASS=S'

if nettel == "NETTEL00" then call shuttcp nettel

ADDRESS CONSOLE 'V NET,INACT,ID=H04NCP0,FORCE' /* sometimes NCP */
/* hangs VTAM */
```

## Example: Shutdown *(continued)*

```
ADDRESS CONSOLE 'PEND'           /* terminate POWER */

ADDRESS CONSOLE 'SIR'
ADDRESS CONSOLE 'QUERY TD'
ADDRESS CONSOLE 'SYSDEF TD,RESETCNT'

say 'ZFAQS: done! ... at' TIME()

call TERMINAT SHUT           /* finish FAQS shutdown */

EXIT
```

## Example: SHUTTCP imod

```
/* SHUTTCP REXX IMOD WILL find the partition running 'jobname' */
/* and issue the commands to shut that job down */

Parse upper arg jnm junk
jnm = strip(jnm)

pid = pidlist('B')
j = (length(pid)%2) - 1
do i = 0 to j
  y = substr(pid,i*2+1,2)
  x = jobname(y)
  if rc = 0 then do
    if x = jnm then do /* if jnm then shut it down */
      say 'SHUTTCP: continuing at' TIME()
      x = replid(y) /* is there a message outstanding */
      if rc = 0 then do
        if x = '' then do /* no, then request one */
          ADDRESS CONSOLE 'MSG' y
        end
      end
    end
  end
end
(continued)
```

## *Example: SHUTTCP imod*

```
if rc = 0 then do
  call getptnid      /* try until there is a message */
  z = substr(x,5,3)
  ADDRESS CONSOLE z 'SHUTDOWN'
  if rc = 0 then do
    call getptnid    /* try until there is a message */
    z = substr(x,5,3)
    ADDRESS CONSOLE z 'YES'
    EXIT
  end
end
else do
  say 'REPLID failed rc='||rc
  EXIT
end
end
```

(continued)

## *Example: SHUTTCP imod*

```
else do
  say 'REPLID failed rc='||rc
  EXIT
end
end
end
end
EXIT

getptnid:
do forever until x = '' /* try until there is a msg */
  x = wait('2')
  x = replid(y)        /* is there a msg outstanding now */
end
return
```



*Automated Operations*

FAQS Finis