

VSE Hot Topics – WAVV 2007

WAVV 2007
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VSE Hot Topics

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VSE Hot Topics – WAVV 2007

Objectives

- Provide you with useful VSE tips you can take home and use
- Get you to share your tips with the rest of us

Note: The topics covered in this presentation assume no vendor products are being used, just a standard IBM VSE system



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WAVV2007-3

z/VSE 4.1.0 Items

- Single Supervisor
 - ❑ \$\$A\$SUPI, no \$\$A\$SUPX
 - ❑ No generation options
- LE/VSE 1.4.5
 - ❑ Review/update runtime options
 - ❑ CEEDOPT (batch), CEECOPT (CICS)
- TCP/IP 1.5E in PRD1.BASE (PK87041)
 - ❑ Includes 1.5E zaps ZP15E201 and ZP15E202



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z/VSE 4.1.0 Items...

- 8GB Real Storage support
 - Use NOPDS option (no page dataset)
 - Saves DASD space
 - 2.3GB page dataset per 3390-3
 - VSE virtual size based on available real storage
- Larger DITTO phase (also z/VSE 3.1)
 - Dynamic partition Y increased from 2MB to 3MB



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ACF/VTAM 31-bit IOBUF support

- VTAM IO Buffers
 - Current support
 - Allocated in 24-bit system GETVIS storage
 - Virtual storage constraint for large networks
 - New support
 - Allocated in 31-bit system GETVIS storage
 - New VTAM startup option IOBUF31=YES
- Available for z/VSE 3.1 via PTFs
 - ACF/VTAM 4.2 – apar DY46471
 - z/VSE 3.1 – apar DY46396
 - Integrated in z/VSE 4.1 (default in new install)



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Managing VSE Shared Storage

Storage Boundary Rounding

Boundary Alignment MODE=ESA	SVA-31		
1MB —	Private Area		
64KB —	Shared Partition(s) (Plus Unused)	SYS SPSIZE	
4KB —	VPOOL	VPOOL	
1KB —	Label Work Area	System Defined SYS NPARTS	
4KB —	System GETVIS-24	SVA GETVIS-24	
4KB —	VLA (SVA-24 Phases)	SVA PSIZE-24	
4KB —	SDL List	SVA SDL	
4KB —	Trace Area	SYS SDSIZE	
1KB —	Tables/Ctl Blocks	SYS BUFSIZE, CHANQ, NPART, NPGR	
	Base Supervisor	Gen Options	

24-Bit
Shared
Boundary
↓

Objective:
Move Down
as Far as
Possible



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Managing VSE Shared Storage...

- Supervisor size
 - Phase size (bytes)

z/VSE 4.1.0	z/VSE 3.1.1	VSE/ESA 2.7.3
\$\$\$SUPI	\$\$\$SUPI	\$\$\$SUPI
	\$\$\$SUPX	\$\$\$SUPX
493,400	471,464	463,032
	462,248	453,944

Note: will vary depending on maintenance

- Larger size on MAP command
 - Includes tables and control blocks
 - Varies depending on IPL parameters



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Managing VSE Shared Storage...

- 24-Bit shared boundary
 - Rounds to 1 MB boundary
 - Installed system 4MB in 2.4, 5MB in 2.5+
 - Unused space added to SPSIZE
 - Even if SPSIZE=0
 - MAP command to determine how much you need to save

map							
AR	0015	SPACE	AREA	V-SIZE	GETVIS	V-ADDR	UNUSED NAME
AR	0015	S	SUP	696K		0	\$\$\$SUPI
AR	0015	S	SVA-24	1868K	1788K	AE000	768K ←
AR	0015	0	BG V	1280K	4864K	500000	65536K

- Find "Unused" Amount (768K) in SVA-24
- Calculate "Overage": 1024K - 768K = 256K



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Managing VSE Shared Storage...

- Start reducing shared usage
 - Set SYS SPSIZE=0
 - Move VSE/POWER to private partition
 - Reduce SVA 24-Bit PSIZE
 - Librarian LD SDL
 - Reduce 24-Bit System GETVIS
 - Move CICS/VSE to Dynamic Partition(s)
 - Does not apply to CICS TS
 - Watch out for VTAM requirements
 - IOBUF31=YES to move VTAM IO buffers above 16MB



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Managing VSE Shared Storage...

- Start reducing shared usage...

Librarian LD SDL

LD SDL				
STATUS DISPLAY			SDL AND SVA	DATE: 2007-04-16 TIME: 14:48

SDL	TOTAL ENTRIES :	908	(100%)	
	USED ENTRIES :	488	(54%)	
→	FREE ENTRIES :	420	(46%)	
SVA (24)	TOTAL SPACE :	1804K	(100%)	
	USED SPACE :	1475K	(82%)	
	- PFIKED AREA:	164K	(9%)	START AT: 00257C70
→	FREE SPACE :	329K	(18%)	
SVA (31)	TOTAL SPACE :	7540K	(100%)	
	USED SPACE :	6517K	(86%)	
	- PFIKED AREA:	644K	(9%)	START AT: 051BDB0
	FREE SPACE :	1023K	(14%)	



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Managing VSE Shared Storage...

- Start reducing shared usage...

GETVIS SVA Command

getvis sva					
AR 0015	GETVIS USAGE	SVA-24	SVA-ANY	SVA-24	SVA-ANY
AR 0015	AREA SIZE:	1,616K	8,412K		
AR 0015	USED AREA:	804K	3,696K MAX. EVER USED:	928K	3,884K
→	AR 0015	FREE AREA:	812K	4,716K LARGEST FREE:	808K 3,904K
AR 0015 1140I READY					



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Managing VSE Shared Storage...

- Start reducing shared usage...
 - Reduce SYS BUFSIZE
 - CCW translation buffers
 - 1500 (default) may be more than adequate
 - 72 bytes per entry
 - Reduce SYS CHANQ
 - Default based on number of ADD statements
 - 32 bytes per entry
 - SIR command can help validate
 - Set VPOOL=64K



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Managing VSE Shared Storage...

- If not possible to reduce, start adding
 - Add eligible phases to the 24-Bit SVA
 - Increase SYS PSIZE
 - Increase 24-Bit System GETVIS
 - Increase SYS BUFSIZE
 - Increase VTAM IOBUF if IOBUF31 is not being used

Remember: “Unused” = “Wasted”!



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Undocumented Commands

■ List all commands with SIR COMMAND

- "Documented" - in official IBM SRLs
 - System Control Statements, Diagnostic Tools, etc.
- "Undocumented"
 - Some are "semi-documented" in System Hints and Tips document on IBM VSE web site
<http://ibm.com/zseries/zvse/>

"Undocumented additional function" in some "documented" commands



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Undocumented Commands...

Undocumented

ATTN	DOIO	ECHO	EZAAPI	IXFP
LOCATE**	LOCK	MODE	NOAVR	NOASSGN
PFKEY	REIPL	RESUME	SHOW**	SHUT
SIMTAPE	SIM3540	SIR**	SL	STACK**
SUSPEND	TAPE**	TESTMON	TIME	Q...
#CP				

** - partial documentation added to z/VSE 3.1 Guide For Solving Problems

Additional Function

VOLUME



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Sir Command

```
sir
AR 0015 CPUID VM = 150000F770600000      VSE = FF00000170600000
AR 0015 VM-SYSTEM = VM/ESA (LPAR) 3.1.0      0101
AR 0015 PROCESSOR = IBM 7060-H30 02 USERID = MP3ZVSE
AR 0015 PROC-MODE = ESA IPL(D00) 14:51:10      08/05/2005
AR 0015 SYSTEM = z/VSE 3.1.0      01/31/2005
AR 0015 VSE/AF 7.1.0      VSE31 GA 11/25/2004
AR 0015 VSE/POWER 7.1.0      DY-BASE 11/25/2004
AR 0015 IPL-PROC = $IPLESA JCL-PROC = $$JCL
AR 0015 SUPVR = $$A$SUPI TURBO-DISPATCHER (46) ACTIVE
AR 0015 HARDWARE COMPRESSION ENABLED
AR 0015 SEC. MGR. = BASIC SECURITY = ONLINE
AR 0015 VIRTCPU = 0000:12:40.428 CP = 0000:00:36.583
AR 0015 CPU-ADDR. = 0000 (IPL) ACTIVE
AR 0015 ACTIVE = 0000:11:56.051 WAIT = 0218:58:30.990
AR 0015 PARALLEL= 0000:03:36.624 SPIN = 0000:00:00.000
```



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Sir Command...

```
AR 0015 CPU timings MEASUREMENT INTERVAL 0219:11:20.365
AR 0015 TASKS ATT.= 00024 HIGH-MARK = 00025 MAX = 00164
AR 0015 DYN.PARTS = 00001 HIGH-MARK = 00001 MAX = 00048
AR 0015
AR 0015 COPY-BLKS = 00000 HIGH-MARK = 00026 MAX = 00500
AR 0015 CHANQ USED= 00004 HIGH-MARK = 00008 MAX = 00301
AR 0015 LBL.-SEGM.= 00007 HIGH-MARK = 00007 MAX = 00717
AR 0015 PGIN TOT.= 0000000000 EXP.AVRGE.= 0000000000/SEC
AR 0015 PGOUT TOT.= 0000000000
AR 0015 UNC.= 0000000000 EXP.AVRGE.= 0000000000/SEC
AR 0015 PRE = 0000000000 EXP.AVRGE.= 0000000000/SEC
AR 0015 LOCKS EXT.= 0000000682 LOCKS INT.= 0000008748
AR 0015 FAIL = 0000000018 FAIL = 0000000015
AR 0015 LOCK I/O = 0000000000 LOCK WRITE= 0000000000
```

Note: SIR RESET command resets counters – use after IPL



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STACK Command Update

■ Review

- Used to
 - Create customized console commands
 - Disable or replace existing console commands
- "Semi-documented" in VSE/ESA Hints and Tips and now in z/VSE 3.1 Guide to Solving Problems
- Can make your life much easier
 - Or more difficult!



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STACK Command Update...

Command Syntax

```
STACK
STACK CLEAR
→ STACKP CLEAR
STACK CLEAR=name
→ STACKP CLEAR=name
STACK SHOW
STACK SHOW=name
STACK name | command [ | command ] [ | ... ] ...
→ STACKP name | command [ | command ] [ | ... ] ...
```



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STACK Command Update...

- Changes over time
 - Originally STACK with no parameters deleted entire stack
 - With APAR DY45629 acts like STACK SHOW
 - Originally stack buffer was lost at IPL
 - With APAR DY45629 stack preserved across IPLs
 - On CKD/ECKD only
 - New SLEEP command - SL nnn
 - Provides delay between execution of commands
 - APAR DY45452



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STACK Command Update...

- New: STACKP to preserve stack over IPL
 - Introduced with APAR DY45700
 - Documented in Hints and Tips (July 2002) as PSTACK
 - Shown as STACKP by SIR COMMAND
 - Commands entered with STACK now *not* saved across IPL
- Up to 10 variables can be used
 - &0 through &9



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STACK Command Update...

Example

```
stack task|msg f2,data=cent i tas
AR 0015 1I40I  READY
stack prty|* priority command has been disabled
AR 0015 1I40I  READY
task
AR 0015 1I40I  READY
AR 0015 MSG F2,DATA=CENT I TAS
AR 0015 1I40I  READY
F2 0120
      Tas(0000023) Tra(CXPB)          Sus Tas Pri( 001 )
      Sta(S ) Use(DBDCCICS) Rec(X'B8116B39A24FCA80') Hty(OPEN_ANY)
      Tas(0000025) Tra(IESO)          Sus Tas Pri( 020 )
      Sta(S ) Use(CICSUSER) Rec(X'B8116B399B259980') Hty(EKCWAIT )
.
.
.
prty
AR 0015 1I40I  READY
AR 0015 * PRIORITY COMMAND HAS BEEN DISABLED
```



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STACK Command Update...

Example

```
stack gv|time|getvis sva|getvis f2
AR 0015 1I40I  READY
gv
AR 0015 1I40I  READY
AR 0015 TIME
AR 0015 TIME IS: 15:35:54 (DST)          DATE 08/12/2002  MONDAY
AR 0015 GETVIS SVA
AR 0015 GETVIS USAGE  SVA-24          SVA-ANY          SVA-24          SVA-ANY
AR 0015 AREA SIZE:    1,824K          8,976K
AR 0015 USED AREA:    1,180K          3,012K MAX. EVER USED:  1,204K          3,040K
AR 0015 FREE AREA:    644K           5,964K LARGEST FREE:      644K          5,320K
AR 0015 1I40I  READY
AR 0015 GETVIS F2
AR 0015 GETVIS USAGE  F2-24          F2-ANY          F2-24          F2-ANY
AR 0015 AREA SIZE:    11,260K         51,196K
AR 0015 USED AREA:    8,712K          37,140K MAX. EVER USED:  11,260K         39,868K
AR 0015 FREE AREA:    2,548K          14,056K LARGEST FREE:      2,528K         13,964K
AR 0015 1I40I  READY
```



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STACK Command Update...

Example

```
stack gv|time|getvis &0,&1
AR 0015 1I40I  READY
gv £7
AR 0015 1I40I  READY
AR 0015 TIME
AR 0015 TIME IS: 15:44:29 (DST)          DATE 08/12/2002  MONDAY
AR 0015 GETVIS F7
AR 0015 GETVIS USAGE      F7-24          F7-ANY          F7-24          F7-ANY
AR 0015 AREA SIZE:       10,640K        12,688K
AR 0015 USED AREA:       3,348K         5,396K MAX. EVER USED: 10,640K    12,688K
AR 0015 FREE AREA:       7,292K         7,292K LARGEST FREE:   7,104K    7,104K
AR 0015 1I40I  READY
```



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STACK Command Update...

Example

```
stack dp|d t|sl 1|d q|sl 1|d a|sl 1|d status
AR 0015 1I40I  READY
dp
AR 0015 1I40I  READY
AR 0015 D T
AR 0015 1C39I  COMMAND PASSED TO VSE/POWER
AR 0015 SL 1
F1 0001 1R46I  TIME IS 15:52:52, DATE IS 08/12/2002
F1 0001 1R46I  019 PAGES FIXED, 029 CURRENT TASKS
AR 0015 1I40I  READY
AR 0015 D Q
AR 0015 1C39I  COMMAND PASSED TO VSE/POWER
AR 0015 SL 1
F1 0001 1R49I  QUEUE FILE 014% FULL - 740 FREE QUEUE RECORDS
F1 0001 1R49I  QUEUE FILE EXTENT ON CKD-250, SYS001, 945, 7
.
AR 0015 1I40I  READY
AR 0015 D A
AR 0015 1C39I  COMMAND PASSED TO VSE/POWER
AR 0015 SL 1
F1 0001 1R48I  SAS,00007, SAS=SYSTCP00,
F1 0001 1R48I  SAS,00008, SAS=SYSTCQ00,
.
AR 0015 1I40I  READY
AR 0015 D STATUS
AR 0015 1C39I  COMMAND PASSED TO VSE/POWER
F1 0001 1R46I  VSE/POWER 6.6.0 STATUS FOR IPWPOWER ON 08/12/2002 TIME 15/52/55
.
```



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STACK Command Update...

Example

```
stack show
AR 0015 TASK|MSG F2,DATA=CEMT I TAS
AR 0015 GV|TIME|GETVIS &0
AR 0015 DP|D T|SL 1|D Q|SL 1|D A|SL 1|D STATUS
AR 0015 CJM1|TIME|CJM2
AR 0015 CJM2|PDELETE LST,VTAM*
AR 0015 1I40I  READY
stack clear=dp
AR 0015 1I40I  READY
stack show
AR 0015 TASK|MSG F2,DATA=CEMT I TAS
AR 0015 GV|TIME|GETVIS &0
AR 0015 1I40I  READY
stack clear
AR 0015 1I40I  READY
stack show
AR 0015 1I40I  READY
```



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STACK Command Update...

- Additional information
 - Maximum of 32 entries in buffer
 - Maximum command length 126 characters
 - Can put in BG ASI procedure to automate
 - But STACK command itself not accepted during ASI
 - DTRIATTN
 - PARM limited to 72 bytes
 - SVC 30 program
 - Sample in Hints and Tips document



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STACK Command Update...

- Additional information...
 - STACK STACK|* to disable the STACK command
 - Keep the operators from changing your stuff?
 - Better be the last STACK command you enter!
 - STACK buffer written on DOSRES Cyl 0 Head 0 Record 4
 - Record key is STACK.DATA.BUFFER



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REIPL Command

- AR command to re-IPL
 - Uses same IPL/JCL procs
 - Should quiesce the system first!
 - Volser or cuu
 - LOADP also accepted
 - If omitted, existing LOADP used
 - Reset with LOADP=.....
 - If NOPROMPT used, it must be last operand

```
REIPL DOSRES,LOADP=. .P,NOPROMPT
```



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WAVV2007-30

Basic Security Manager

- Basic ESM introduced in VSE/ESA 2.4+
- Basic security support for CICS TS
 - Sign-on security
 - Transaction-attach security
 - Requires SIT SEC=YES, XTRAN=YES
- Support for DTSECTAB system security
 - IPL SYS SEC=YES
 - Not required for CICS TS security



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Basic Security Manager...

- Enhanced in z/VSE 3.1.1
 - Support for CICS resource access security
 - Programs
 - Files
 - Started transactions
 - Journals
 - Temporary storage and transient data
 - Support for application (APPL) and facility resource classes
 - New BSM security dialogs and security repository VSAM file BSTCNTL



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WAVV2007-32

BSM Transaction Security

- Two methods of defining security
 - DTSECTXN table
 - Old method still supported
 - Transaction security only
 - BSM Control file BSTCNTL
 - z/VSE 3.1.1 and later
 - Transaction and other resource security

All transactions must be defined to BSM!!!



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BSM Transaction Security...

- DTSECTXN table
 - BSM CICS transaction security definitions
 - Define using Define Transaction Security dialog or macros
 - Option under Interactive Interface resource definition dialog (fastpath 285 from IUI main menu)
 - Security Maintenance dialogs changed in z/VSE 3.1.1+
 - Option to migrate DTSECTXN security to BSTCNTL or use old method



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BSM Transaction Security...

z/VSE 3.1.1+

IESADMSL.IESEBSEC SECURITY MAINTENANCE APPLID: ADICCFT

Enter the number of your selection and press the ENTER key:

- 1 BSM Resource Profile Maintenance
- 2 BSM Group Maintenance
- 3 BSM Security Rebuild
- 4 Maintain Certificate - User ID List
- 5 Define Transaction Security

PF1=HELP 3=END 4=RETURN 6=ESCAPE (U)

9=Escape (m)



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BSM Transaction Security...

z/VSE 3.1.1+

TAS\$SEC4 MIGRATE SECURITY ENTRIES

Enter the required data and press ENTER.

The security concept of the Basic Security Manager (BSM) has changed. You are recommended to migrate your entries and use the dialog Maintain Security Profiles.

The DTSECTXN table as used by this dialog can still be used in parallel to the new BSM control file.

MIGRATE..... 1 Do you want to migrate the transaction security entries?
Enter 1 for YES.
Enter 2 to proceed with the Define Transaction Security dialog.

Migrate own security definitions in macro format?
Migrate Member.....

PF1=HELP 2=REDISPLAY 3=END

TO MIGRATE PRESS PF6 IN MAINTAIN USER PROFILE DIALOG.



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BSM Transaction Security...

DTSECTXN method

TAS\$SEC1 DEFINE TRANSACTION SECURITY

Enter the required data and press ENTER.

OPTIONS: 1 = ADD 2 = ALTER 5 = DELETE

OPT	TRANSACTION NAME	CICS REGION	SECURITY CLASS	GENERIC
-	CEDC		1	
-	CEDF		1	
-	CEDF	PRODCICS	5	
-	CEGN		1	
-	CEHP		1	
-	CEHS		1	
-	CEMS		1	
-	CEMT		7	
-	CEMT	PRODCICS	60	
-	CEOS		1	

LOCATE TRANSACTION NAME == > _____

INCLUDE MEMBER == > IJSYSRS.SYSLIB.DTSECTXM.A

PF1=HELP 2=REDISPLAY 3=END 5=PROCESS

PF7=BACKWARD 8=FORWARD



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BSM Transaction Security...

DTSECTXN method

TAS\$SEC2 DEFINE TRANSACTION SECURITY: ADD ENTRIES

Enter the required data and press ENTER.

TRANSACTION NAME	CICS REGION	SECURITY CLASS	GENERIC
C		1	x
CEDF	PRODCICS	5	-
CEMT		7	-
CEMT	PRODCICS	1	-
0		1	x
1		1	x
		1	-
		1	-
		1	-
		1	-

PF1=HELP 2=REDISPLAY 3=END



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BSM Transaction Security...

DTSECTXN method - User Profile

```
IESADMUPR1          ADD OR CHANGE RESOURCE ACCESS RIGHTS
Base      II      CICS      ResClass ICCF

Place an 'X' next to the transaction security keys for user TEST
01 X  02 X  03 X  04 X  05 X  06 X  07 X  08 X  09 X  10 X  11 X
12 X  13 X  14 X  15 X  16 X  17 X  18 X  19 X  20 X  21 X  22 X
23 X  24 X  25 X  26 X  27 X  28 X  29 X  30 X  31 X  32 X  33 X
34 X  35 X  36 X  37 X  38 X  39 X  40 X  41 X  42 X  43 X  44 X
45 X  46 X  47 X  48 X  49 X  50 X  51 X  52 X  53 X  54 X  55 X
56 X  57 X  58 X  59 X  60 X  61 X  62 X  63 X  64 X

Specify the access rights for 1-32 DTSECTAB access control classes
( _=No access, 1=Connect, 2=Read, 3=Update, 4=Alter )
01 _  02 _  03 _  04 _  05 _  06 _  07 _  08 _  09 _  10 _  11 _
12 _  13 _  14 _  15 _  16 _  17 _  18 _  19 _  20 _  21 _  22 _
23 _  24 _  25 _  26 _  27 _  28 _  29 _  30 _  31 _  32 _

READ DIRECTORY..... 1  User can read directory with Connect (1=yes, 2=no)
B-TRANSIENTS..... 1  User can manipulate B-Transients      (1=yes, 2=no)

PF1=HELP          3=END          5=UPDATE
PF7=BACKWARD      8=FORWARD
```



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BSM Transaction Security...

- Review and update BSM security definitions
 - Transaction security definitions
 - Security class 1 defined for all CICS transactions (CEMT, CEDA, CECI, etc.)
 - DITT(O) transaction defined with security class 61
 - Default security
 - Security profile required for CICS default user
 - SIT DFLTUSER=CICSUSER
 - CICSUSER profile defined with security classes 1, 60-64
 - Default user should have minimum level security
 - Security classes 1 and 61



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BSM Transaction Security...

- DTSECTXN security maintenance
 - FSU updates all IBM supplied transaction security definitions
 - Updated by DTRISEC.U in IJSYSRS.SYSLIB
 - Adds transaction security for new transactions
 - Replaces existing IBM transaction security definitions
 - User modifications to IBM transaction security definitions will be overwritten by FSU
 - Save IPF format entries in user member xxxxxx.Z and use PF6 in dialog to merge after FSU



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BSM Resource Security (3.1.1+)

- Resources
 - Define resource names to BSM
 - Define universal access rights
 - Define which groups have access and access rights (read, update)
- Groups
 - Define group names
 - Connect userids to groups



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BSM Resource Security (3.1.1+)...

IESADMBSL
BSM RESOURCE CLASS: TCICSTRN
START....
OPTIONS: 1 = ADD 2 = CHANGE 5 = DELETE 6 = ACCESS LIST

OPT	PROFILE NAME	DESCRIPTION	UNIVERSAL ACCESS
-	emai	MIGRATED	
-	ftp	MIGRATED	
-	iccf	MIGRATED	
-	lpr	MIGRATED	
-	newc	MIGRATED	
-	ping	MIGRATED	
-	...	MIGRATED	
-	...	MIGRATED	
-	CEMT	MIGRATED	
-	PRODCICS.CEMT	MIGRATED	
-	*0	GENERIC 0XXX TRANS	
-	*1	GENERIC 1XXX TRANS	

PF1=HELP PF7=BACKWARD 8=FORWARD 3=END 9=PRINT



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BSM Resource Security (3.1.1+)...

IESADMBSLA
BSM CLASS: TCICSTRN
START....
OPTIONS: 1 = ADD 2 = CHANGE 5 = DELETE

OPT	NAME	ACC
-	OPERS	2
-	PROGRS	2
-	MANAGERS	2
-	GROUP07	2

PF1=HELP PF7=BACKWARD 8=FORWARD 3=END



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VSE Hot Topics – WAVV 2007

BSM Resource Security (3.1.1+)...

IESADMBSLG
BSM RESOURCE CLASS: GROUP
START....
OPTIONS: 1 = ADD 2 = CHANGE 5 = DELETE 6 = USER LIST
USERID
CONNECTED?

OPT	GROUP NAME	DESCRIPTION
-	OPERS	Operator group
-	PROGRS	Programmer group
-	MANAGERS	Prog Managers
-	GROUP01	Default security
-	GROUP02	CETR CSFE NETT users
-	GROUP03	CMSG CWTO users
-	GROUP04	CEDA CEDB AISW users
-	GROUP05	CEBR CEDC CEDF users
-	GROUP06	CEDA CEDB CEDF users
-	GROUP07	CEMT CEOT CEST users
-	GROUP08	CICS category 1 usrs
-	GROUP09	CEMS CEOS users

PF1=HELP 3=END
PF7=TOP 8=FORWARD 9=PRINT



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BSM Resource Security (3.1.1+)...

IESADMBSLU
BSM CLASS: GROUP
START....
OPTIONS: 1 = ADD 5 = DELETE

OPT	USERID
-	CABO
-	CAB1
-	FAST
-	OPS0
-	OPS1
-	SLOW
-	ZZZZ
-	
-	
-	

PF1=HELP 3=END
PF7=BACKWARD 8=FORWARD



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BSM Password Controls

- EXEC IESIRCVT (pre z/VSE 4.1.0)
 - In USERBG startup proc
 - LENGTH(n) – minimum password length (3-8)
 - WARNING(n) – number of days before issuing password expiration warning (0-9)
 - REVOKE(n) – number of invalid signons before revoking user
 - Overrides setting in IESELOGO
- BSTADMIN utility program Perform Password command in z/VSE 3.1.1
- User password history now documented
 - Last 12 retained by BSM



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WAVV2007-47

Handling System Dumps

- System Dump Library
 - Needs cleaned out regularly
 - Skeleton SKDMPMGR in ICCF 59
 - Always use for system partitions:
 - CICS, VTAM, POWER, TCPIP, etc.
 - Faster than dumping to VSE/POWER LST queue
 - Formatted dumps for subsystems more useful for analysis
 - Generally don't use for batch partitions
 - Programmers want dumps in VSE/POWER queue
 - Partitions are small, dumps don't take long



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Handling System Dumps...

■ System Dump Library...

□ Implementation

- In \$0JCL.PROC
 - STDOPT SYSDUMP=NO,DUMP=PART
- In key partitions (CICS, VTAM, VSE/POWER, etc.)
 - OPTION SYSDUMP,SYSDUMPC,DUMP
 - SYSDUMPC prevents dumping to SYSLST if dump library is full
 - LIBDEF DUMP,CATALOG=SYSDUMP.sublib
- Remove LIBDEF DUMP commands in other partitions
 - Static partition ASI procs and dynamic class profiles



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WAVV2007-49

Automating VSE shutdown

■ Use DTRIATTN and MSG commands

- Undocumented utility to send messages to other partitions

```
// EXEC DTRIATTN,PARM='command'
```

- MSG command supports jobname and DATA parameter

```
MSG CICSICCF,DATA='CEMT P SHUT I'
```

- Not all subsystems support MSG command with DATA parameter
 - CICS/VSE 2.3
 - TCP/IP for VSE/ESA prior to 1.5B



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Automating VSE shutdown...

DTRIATTN Shutdown Job

```
* $$ JOB JNM=SHUTDOWN,DISP=L,CLASS=0
// JOB SHUTDOWN      SYSTEM SHUTDOWN
// PAUSE SYSTEM WILL BE SHUTDOWN, PRESS ENTER TO CONTINUE OR CANCEL
// EXEC DTRIATTN,PARM='MSG CICSICCF,DATA=CEMT P SHUT'
// EXEC IESWAIT,PARM='05'
// EXEC DTRIATTN,PARM='MSG CICS23'
// EXEC IESWAIT,PARM='05'
// EXEC DTRIATTN,PARM='45 CEMT P SHUT'
// EXEC IESWAIT,PARM='30'
// EXEC DTRIATTN,PARM='MSG TCPIP,DATA=SHUTDOWN'
// EXEC IESWAIT,PARM='30'
// EXEC DTRIATTN,PARM='Z NET,QUICK'
// EXEC IESWAIT,PARM='30'
// EXEC DTRIATTN,PARM='PEND'
/&
* $$ EOJ
```



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WAVV2007-51

Daylight Savings Time Change

- VSE provides for automatic Daylight Savings Time adjustments at IPL
 - SET ZONEDEF
 - SET ZONEBDY (max. 20)
- Add to IPL Proc
 - After ADD statements and before SVA
- At IPL time VSE determines date and adjusts time accordingly



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Daylight Savings Time Change...



Setting Daylight Savings Time

```
SET ZONEDEF,ZONE=WEST/05/00,CDT
SET ZONEDEF,ZONE=WEST/06/00,CST
SET ZONEBDY,DATE=03/11/2007,CLOCK=02/00/00,CDT
SET ZONEBDY,DATE=11/04/2007,CLOCK=02/00/00,CST
SET ZONEBDY,DATE=03/09/2008,CLOCK=02/00/00,CDT
SET ZONEBDY,DATE=11/02/2008,CLOCK=02/00/00,CST
SET ZONEBDY,DATE=03/08/2009,CLOCK=02/00/00,CDT
SET ZONEBDY,DATE=11/01/2009,CLOCK=02/00/00,CST
SET ZONEBDY,DATE=03/14/2010,CLOCK=02/00/00,CDT
SET ZONEBDY,DATE=11/07/2010,CLOCK=02/00/00,CST
SET ZONEBDY,DATE=03/13/2011,CLOCK=02/00/00,CDT
SET ZONEBDY,DATE=11/06/2011,CLOCK=02/00/00,CST
```



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Now Its Your Turn



**Anybody got anything
they want to contribute?**



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