

CICS TS for VSE/ESA Hot Topics – WAVV 2007

WAVV 2007
Green Bay, WI

CICS TS for VSE/ESA Hot Topics

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Objectives

- Provide you with useful CICS 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 and CICS TS system

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CICS TS for VSE/ESA Hot Topics – WAVV 2007

CICS Startup and Shutdown

- CICS startup recommendations
 - Use START=AUTO in CICS SIT or startup JCL overrides
 - Type of startup based on last CICS shutdown
 - WARM start if normal CICS shutdown
 - Emergency restart if not normal CICS shutdown
 - CEMT PERFORM SHUTDOWN IMMEDIATE is not a normal shutdown
 - Use START=COLD in CICS SIT or startup JCL overrides only if necessary



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CICS Startup and Shutdown

- CICS startup recommendations...
 - COLD start
 - Forced if CICS system catalog datasets (DFHGCD and DFHLCD) are redefined
 - Skeleton SKCICCLD in ICCF library 59
 - May also need to redefine restart dataset (DFHRSD)
 - Cold starts all resources in SIT
 - Loads resource definitions from CSD groups define in lists in SIT GRPLIST parameter



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CICS Startup and Shutdown

- CICS startup recommendations...
 - WARM start
 - After CEMT PERFORM SHUTDOWN (NORMAL) and START=AUTO startup
 - Warm starts all resources in SIT except those with COLD option specified
 - Loads resource definitions defined when CICS was last running from system catalog DFHGCD
 - Startup override NEWSIT=YES
 - Uses all SIT settings except FCT, CSDxxxx and GRPLIST parameters



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CICS Startup and Shutdown

- CICS startup recommendations...
 - ❑ Emergency restart
 - After CEMT PERFORM SHUTDOWN IMMEDIATE or CICS crash and START=AUTO startup
 - Backout and recovery of inflight tasks
 - ❑ Performed using system log and restart dataset (DFHRSD)
 - Loads resource definitions defined when CICS was last running from system catalog DFHGCD

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CICS Startup and Shutdown

- CICS startup recommendations...
 - ❑ Global catalog (DFHGCD)
 - Journal status
 - ❑ Ignored if JSTATUS=RESET in startup overrides
 - ❑ Taken from DFHJACD for automatic archive journals
 - Installed RDO resources
 - Restart control record
 - Warm keypoint information
 - Heavily used during warm start and shutdown
 - ❑ Specify BUFNI=nn and BUFND=nn on DLBL

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CICS Startup and Shutdown

- CICS startup recommendations...
 - ❑ Local catalog (DFHLCD)
 - CICS TS domain parameter records and status information
 - Formatted with DFHCCUTL utility
 - ❑ If one system catalog dataset is redefined, both must be

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CICS Startup and Shutdown

- CICS startup recommendations...
 - ❑ Define parameters for each LSRPOOL
 - KEYLEN – maximum keylength for files in pool
 - STRNO – number of strings for pool
 - Buffers – number and size of index and data buffers
 - ❑ Don't let CICS calculate LSR pool values
 - Delays CICS startup
 - ❑ SHOWCB issued for each file
 - ❑ Extra I/O to VSAM catalog to determine LSR pool parameter values

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CICS Startup and Shutdown

- CICS SVA usage
 - ❑ \$SVACICS IPL loadlist loads mandatory phases
 - Compatible with CICS/VSE 2.3 partitions
 - ❑ Other CICS TS phases in the SVA
 - If you don't run CICS/VSE 2.3 partitions
 - If you run multiple CICS TS partitions
 - ❑ Saves real storage
 - ❑ Saves virtual storage (mostly 31-bit)
 - ❑ Saves startup time
 - Protects phases from corruption
 - ❑ SIT RENTPGM=PROTECT provides read-only protection for SVA-eligible phases loaded in CICS partition

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CICS Startup and Shutdown

- CICS SVA usage...
 - ❑ SIT SVA=YES
 - Tries to load modules from SVA first
 - Information message if module not in SVA
 - ❑ PRVMOD startup override
 - Specifies list of modules to load into partition
 - ❑ Use with SIT SVA=YES and LE/VSE modules in SVA
 - ❑ CICS supplied PRVMOD list DFH\$SVEJ
 - ❑ New PRVMOD list IESVAEXC.Z supplied with VSE/ESA 2.7
 - ❑ SIT SVA=NO
 - All SVA-eligible modules loaded into partition

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CICS Startup and Shutdown...

- How can I ensure CICS TS shuts down?
 - Issue CEMT P SHUT IMMEDIATE
 - Generally a very bad idea!
 - Manually try to find and terminate task(s)
 - Can take a long time
 - Operator training?
 - SIT terminal shutdown limit
 - Write program to find and fix hung tasks
 - Time, effort, testing, skills available, etc.
 - Implement sample shutdown program DFH\$SDAP



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CICS Startup and Shutdown...

- SIT terminal shutdown limit
 - Helps ensure completion of normal shutdown
 - VTAM terminals and ISC LU6.1 and LU6.2 sessions
 - TCSWAIT=mm
 - Time CICS waits before taking terminal shutdown actions
 - Facility disabled if TCSWAIT=NO|NONE|0
 - TCSACTN=action
 - Action CICS takes after TCSWAIT time expires
 - NONE - no action, message issued if terminal hung
 - UNBIND - force close all hung terminals
 - FORCE - force close VTAM ACB



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CICS Startup and Shutdown...

- DFH\$SDAP implementation
 - Customize DFH\$SDAP if needed
 - Change delay time - default is 10 seconds
 - Translate and compile DFH\$SDAP
 - Assembler source in DFH\$SDAP.A in PRD1.BASE
 - Define transaction SDAP
 - Define program DFH\$SDAP
 - Add PLT shutdown table entry for DFH\$SDAP
 - In Phase 1 (before DFHDELIM)



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CICS Startup and Shutdown...

- General logic flow of DFH\$SDAP
 - ❑ Phase 0 (called from PLTSD)
 - Check that system shutdown is in progress
 - START transaction SDAP with 10 second delay
 - ❑ Phase 1
 - PURGE all tasks except shutdown and itself
 - START transaction SDAP with 10 second delay
 - ❑ Phase 2
 - FORCEPURGE all tasks except shutdown and itself
 - START transaction SDAP with 10 second delay

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CICS Startup and Shutdown...

- General logic flow of DFH\$SDAP...
 - ❑ Phase 3
 - FORCECLOSE VTAM
 - START transaction SDAP with 10 second delay
 - ❑ Phase 4
 - PERFORM SHUTDOWN IMMEDIATE
 - End SDAP task
- Console messages to keep operator informed of progress

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CICS Startup and Shutdown...

- Other VSE CICS skeleton considerations
 - ❑ VSE CICS startup skeletons
 - Increase MXT=20 override in SKCICS startup
 - Remove PERM from LIBDEF if you run other jobs in the same partition when CICS is down
 - ❑ VSE CICS SIT skeletons
 - SIT TCTUALOC=ANY
 - ❑ Change to TCTUALOC=BELOW if 24-bit addressing mode applications do EXEC CICS ADDRESS TCTUA
 - SIT STATRCD=ON
 - ❑ Only required for interval statistics recording to DMF

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Resource Definition

- Use of CICS CSD is optional but recommended for FCT definitions:
 - CEDA DEFINE FILE
 - CEDA DEFINE LSRPOOL
 - Index and data buffers can be defined separately
- Can still use FCT macro table
 - DFHFCT TYPE=FILE for files
 - DFHFCT TYPE=SHRCTL for LSR pools
 - One set of buffer definitions for index and data buffers
 - Must use macro table for DA files

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Resource Definition...

- Installing files defined in the CSD
 - If the file already exists in the running system
 - CEMT SET FILE(filename) CLOSED DISABLED
 - Install the file definition
 - CEDA INSTALL GROUP(groupname) with the file definition
- Installing LSRPOOLS defined in the CSD
 - LSRPOOL is created when first file using the pool is opened
 - LSRPOOL is not deleted until all files in the pool are closed

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Resource Definition...

CEDA DEFINE LSRPOOL

```
DEFINE L(TESTPOOL) G(TEST) L(6) DATA4K(5) DATAB(3) DATA16K(6) INDEX12(10)I
OVERTYPE TO MODIFY
CEDA DEFINE Lsrpool( TESTPOOL
Lsrpool : TESTPOOL
Group : TEST
Description ==> TEST
Lsrpoolid ==> 06          1-15
Length ==> 030            0-255
SHaralimit ==>           1-100
Strings ==> 015           1-255
DATA BUFFERS ==>          3-32767
DATA1K ==>                3-32767
DATA2K ==>                3-32767
DATA4K ==> 00005          3-32767
DATA8K ==> 00003          3-32767
DATA12k ==>               3-32767
DATA16k ==> 00006          3-32767
DATA20k ==>               3-32767
+ DATA24k ==>              3-32767
SYSID=CIC1 APPLID=DBDCCICS
PF 1 HELP 2 COM 3 END      6 CRSP 7 SBH 8 SFH 9 MSG 10 SB 11 SF 12 CNCL
```

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Resource Definition...

CEDA DEFINE LSRPOOL...

```
DEFINE L(TESTPOOL) G(TEST) L(6) DATA4K(5) DATASK(3) DATA16K(6) INDEX512(10)I
OVERTYPE TO MODIFY
CICS RELEASE = 0410
CEDA DEFINE Lsrpool( TESTPOOL )
+ DATA20k ==> 3-32767
DATA32k ==> 3-32767
INDEX16K ==> 00010 3-32767
INDEX32K ==> 00009 3-32767
INDEX2K ==> 00003 3-32767
INDEX4K ==> 3-32767
INDEX8K ==> 3-32767
INDEX16K ==> 3-32767
INDEX32K ==> 3-32767
INDEX20K ==> 3-32767
INDEX24K ==> 3-32767
INDEX28K ==> 3-32767
INDEX32K ==> 3-32767

SYSID=CIC1 APPLID=BBDCIC1
PF 1 HELP 2 COM 3 END      6 CCSR 7 SBH 8 SFH 9 MSG 10 SB 11 SF 12 CNCL
```

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Resource Definition...

Batch Define (DFHCSDUP)

```
// JOB DEFGROUP  DEFINE GROUP DEMOGRP
// EXEC DFHCSDUP
DELETE G(DEMOGRP)
DEFINE TRANS(TEST)          GROUP (DEMOGRP)      PROGRAM (TESTPROG)
TWA(2048)                   TASKDATALOC (ANY)
DEFINE LOGICDM(TESTPROG)    GROUP (DEMOGRP)      LANG (COBOL)
DATA(ANY)
DEFINE FILE(TESTFIL)         GROUP (DEMOGRP)      LSPPOOL(10)
STRINGS(5)                  DA(5)               IN(5)
RECORDF(F)                  BROWSE (YES)        UPDATE (YES)
DEFINE LSRPOOL(TESTPOOL)     GROUP (TEST)        LSPPOOLID(10)
DATA4K(5)                   DATASK(3)          DATA16K(6)
INDEX512(10)                INDEX1K(8)         INDEX2K(3)
MAXKEYLENGTH(30)            STRINGS(15)

/*
*/
```

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Resource Definition...

Extracting Definitions (DFHCSDUP)

```
// JOB EXTRGROUP  EXTRACT GROUP DEMOGRP
// DLBL CDBOUT,'CICS EXTRACT FILE' ,VSAM,CAT=VSESPUC,           x
// RECSIZE=80,DISP=(NEW,KEEP),RECORDS=(500,100)
// EXEC DFHCSDUP
EXTRACT GROUP (DEMOGRP) USERPROGRAM (DFH0CBDC) OBJECTS
/*
*/
NOTE: Sample COBOL user program DFH0CBDC in PRD1.BASE must be
compiled
```

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Resource Definition...

- Define user groups in separate group list
 - Group list: a list of groups that CICS installs on a CICS COLD start
 - Specified in SIT GRPLIST=list parameter
 - Up to 4 lists can be specified during CICS TS startup
 - GRPLIST *not* used on WARM or EMER restart
 - IBM supplied definitions in VSELIST, VSELST2, and DFHLIST
 - Duplicate definition hierarchy
 - RDO definitions override duplicates in macro table
 - Last group in last list processed overrides duplicates in earlier groups

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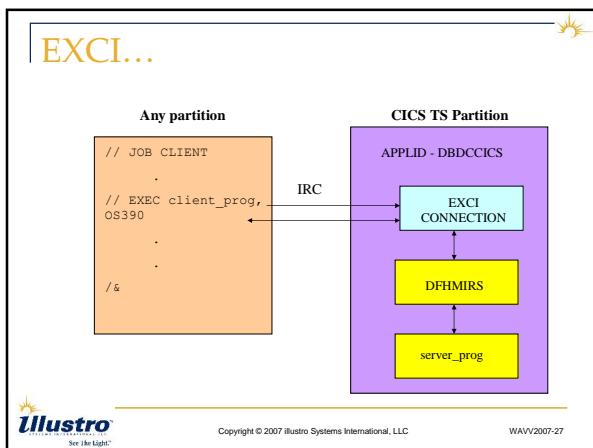
External CICS Interface (EXCI)

- Allows VSE batch program to link to program running in CICS TS
 - Similar to Distributed Program Link
 - Same VSE system
- User-written Client and Server programs
 - Samples supplied
- Two interfaces in Client
 - CALL interface
 - EXEC CICS LINK

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EXCI Implementation

- Requirements
 - Interregion Communications (IRC) *must* be defined *and* active in the target CICS
 - SIT ISC=YES, IRCSTRT=YES
 - CONNECTION and SESSION definition
 - ACCESSMETHOD *must* be IRC
 - PROTOCOL *must* be EXCI
 - CONNTYPE
 - *Must* be GENERIC for EXEC CICS LINK interface
 - Can be GENERIC or SPECIFIC for CALL interface
 - **Only one session supported per EXCI connection on VSE**
 - VTAM APPLID used to identify target CICS

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EXCI Implementation...

CICS TS EXCI Generic CONNECTION Definition

```
OBJECT CHARACTERISTICS          CICS RELEASE = 0410
CEDA View Connection( CON1 )
Connection : CON1
Group      : EXCIGRP
Description : SAMPLE EXCI CONNECTION DEFINITION
CONNECTION IDENTIFIERS
Netname   :
INDsys    :
REMOTE ATTRIBUTES
REMOTESESYtem :
REMOTENName :
REMOTESYSNet :
CONNECTION PROPERTIES
Accessmethod : IRc           Vtam | IRc | INdirect
Protocol   : Exci          Appc | Lu61 | Exci
Conntype   : Generic       Generic | Specific
SInglessess : No            No | Yes
Datastream  : User          User | 3270 | SCs | STRfield | Lms
```

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EXCI Implementation...

CICS TS EXCI Specific CONNECTION Definition

```
OBJECT CHARACTERISTICS          CICS RELEASE = 0410
CEDA View Connection( CON2 )
Connection : CON2
Group      : EXCIGRP
Description : SAMPLE EXCI CONNECTION DEFINITION
CONNECTION IDENTIFIERS
Netname   : BATCH01
INDsys    :
REMOTE ATTRIBUTES
REMOTESESYtem :
REMOTENName :
REMOTESYSNet :
CONNECTION PROPERTIES
Accessmethod : IRc           Vtam | IRc | INdirect
Protocol   : Exci          Appc | Lu61 | Exci
Conntype   : Specific       Generic | Specific
SInglessess : No            No | Yes
Datastream  : User          User | 3270 | SCs | STRfield | Lms
```

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EXCI Implementation...

CICS TS SESSIONS Definition

```
OBJECT CHARACTERISTICS          CICS RELEASE = 0410
CEDA View Sessions( CON1SESS )
Sessions      : CON1SESS
Group         : EXCIGRP
Description   : SAMPLE SESSIONS DEFINITION FOR EXCI
SESSION IDENTIFIERS
Connection    : CON1
SESSName     :
NETNameq     :
ModNameq     :
SESSION PROPERTIES
Protocol      : Exci          Appc | Lu61 | Exci
MAXimum       : 000 , 000        0-999
RECEIVEPfx    : <             1-999
RECEIVEPCount : 001           MUST BE 1
SENDPfx       :
SENDCount    : 1-999
SENDSize     : 1-30720
RECEIVESize   : 04096          1-30720
...
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```

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EXCI Programming Interface

- Client CALL interface
 - 6 different calls
 - Fairly complex
 - Best for multi-request applications
 - Issue multiple DPL_requests
 - Get/Put multiple file records, etc.
 - Supports generic or specific EXCI connections

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EXCI Programming Interface...

- Client CALL interface...
 - Initialize_User
 - Provides application name for specific connection
 - Allocate_Pipe
 - Specifies target CICS APPLID and type of connection requested
 - Open_Pipe
 - DPL_Request
 - Links to server program with optional COMMAREA
 - Close_Pipe
 - Deallocate_Pipe

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EXCI Programming Interface ...

- Client EXEC CICS LINK interface
 - ❑ One simple command
 - All 6 calls in 1 command
 - ❑ Best for one-time requests
 - Single command to CICS
 - Single record transfer
 - ❑ Requires translator option XOPTS(EXCI)
 - ❑ Supports generic EXCI connections only

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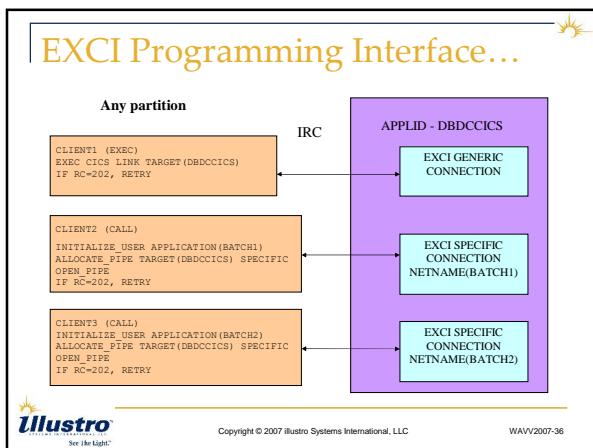
EXCI Programming Interface ...

- Multiple batch EXCI program execution
 - ❑ Only one program can use an EXCI connection at a time
 - ❑ Code retry routine if no pipe available
 - Return code 202 on EXEC CICS LINK or OPEN PIPE call
 - ❑ Only option for EXEC CICS LINK
 - ❑ Only one EXCI generic connection can be defined per CICS
 - ❑ Define multiple EXCI specific connections with different NETNAMEs
 - Code call interface programs to use different application name (netname) on call

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Monitoring CICS GETVIS usage

■ IUI storage dialog (363)

The screenshot shows a window titled 'IESADMDSPL' with the sub-titles 'STATIC PARTITION LAYOUT' and 'PARTITION: F2'. It displays memory usage statistics for the 'GETVIS ANY' area. Key data points include:

Address	Area Type	Used	Free	High Water Mark	Largest Free Block
'036FFFFF'X	GETVIS ANY	36M	14M	39M	13M
- (1GM) A GETVIS BELOW	USED: 8668K FREE: 2592K HIGH WATER MARK: 11M LARGEST FREE BLOCK: 2572K	8668K	2592K	11M	2572K
'00501000'X	PROGRAM AREA (EXEC SIZE)	582B	3514B	4096B	

PF1=HELP PF2=REFRESH PF3=END PF4=RETURN PF5=SVA

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Monitoring CICS GETVIS usage...

■ GETVIS partid

```
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:  8,668K  37,280K MAX. EVER USED: 11,260K  40,072K
AR 0015  FREE AREA:  2,592K  13,916K LARGEST FREE:   2,572K  13,696K
AR 0015 1140I  READY
```

■ GETVIS ANY = 24-bit + 31-bit areas
■ "MAX Ever Used" misleading
■ CICS TS checks available GETVIS during startup
■ GETVIS xx,RESET
■ Resets partition GETVIS stats to current usage
■ VSE supplied CICS AR command program can be used in startup PLT (skeleton SKCICMD in ICCF 59)

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Monitoring CICS DSA usage

■ CEMT INQ DSA

The screenshot shows the output of the 'INQ DSA' command. It lists various DSA areas with their sizes and addresses. At the bottom, it provides system information and response details.

Area	Size	Address
Dsalimit	002424880	052424880
Cdsasize	00524288	05242488
Rdsasize	00524288	05242488
Sdsasize	01048576	01048576
Udsasize	00262144	0262144

EDsalimit(0026214400)
ECdsasize(0001048576)
ERdsasize(0001048576)
ESdsasize(0001048576)
EUdsasize(0001048576)

SYSID=CIC1 APPLID=DBDCCICS
TIME: 11.49.53 DATE: 04.28.00
7 SBR 8 SFH 9 MSG 10 SB 11 SF

RESPONSE: NORMAL
PF 1 HELP 3 END

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Monitoring CICS DSA usage...

- VSE transaction IEDC

CICS TS Storage Reporter				Time: 09:02:27
Applid: DBDCICS	Sysaid: CICL	Jobname: CICSLCF	CICS TS Level: 111	
Storage Protection INACTIVE				Reentrant Programs PROTECT
				CICS Trace Table size.. 80
Extended DSA:				
(All sizes in kbytes) LIMIT 256000				
Current DSA Size	3072	1024	1024	6144 11264
Current DSA used	2584	64	132	5948 8728
*Peak DSA used	2608	64	132	5948
Peak DSA Size	3072	1024	1024	6144 11264
Largest free area/free Storage	1.00	1.00	1.00	0.55
Times short-on-storage (SOS) ..	0	0	0	0
DSA:				
CDSA UDSA SDSA RDSS Totals				
Current DSA Size	512	256	512	512 1792
Current DSA used	408	8	404	416 1236
*Peak DSA used	428	32	424	416
Peak DSA Size	512	256	512	512 1792
Largest free area/free Storage.	0.69	1.00	0.93	0.83
Times short-on-storage (SOS) ..	0	0	0	0
PF1=HELP 2=REFRESH 3=END 4=RETURN				

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Monitoring CICS DSA usage...

- VSE transaction IEDC...
- VSE IUI Display CICS TS Storage Dialog
 - Fastpath option 364
- Can be implemented in CICS without IUI
 - Copy transaction and program definitions from groups VSESPG and DFH\$STAT
 - Transaction IEDC
 - Programs IESXCTS, IESSLV, IESCVA, IESSCRI, IESEDSC, IESSCRH, DFH\$STAS
 - Mapset IESEDSC

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Problem Determination

- Debugging non-terminal tasks
 - EXEC CICS START TRANSID
 - Transient data DCT entries with DEST=FILE,TRANSID=
- CEDX
 - Same as CEDF for terminal related tasks
 - CEDX TRNX,ON|OFF
 - EDFs first occurrence of TRNX

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Problem Determination...

- Displaying task information
 - CEMT INQ TAS
 - Enter ? by task for more detail on 3270 terminal
 - Detailed output on CICS console terminal
 - CECI INQ TASK
 - EXEC CICS INQ TASK

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Problem Determination...

```
IN TAS
STATUS: RESULTS - OVERTYPE TO MODIFY
Tas(0000023) Trs (CXWB)           Sus Tas Pri( 001 )
Tas(0000025) Trs (IESO)           Sus Tas Pri( 020 )
Tas(0014443) Trs (FTPC)          Sus Tas Pri( 001 )
Tas(0025805) Trs (TELC)          Sus Tas Pri( 001 )
? Tas(0025814) Trs (TELW) Fac(NB02) Sus Ter Pri( 001 )
Tas(0030063) Trs (ASRA) Fac(NA05) Sus Ter Pri( 001 )
Tas(0030106) Trs (CEMT) Fac(NA04) Run Ter Pri( 255 )

RESPONSE: NORMAL
PF 1 HELP   3 END
```

SYSID=CIC1 APPLID=DBDCCICS
TIME: 17.20.02 DATE: 08.15.00
7 SBH 8 SFH 9 MSG 10 SB 11 SF

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Problem Determination...

```
SYNTAX OF SET COMMAND
SYNTAX OF SET COMMAND
Tas(0025814) Trs (TELW) Fac(NB02) Sus Ter Pri( 001 )
Hty(ZCICOWAIT) Rva(DFHARQL) Hti(590068) Sta(SD)
Use(YSA) Rec(847665E905237800')
CEMC Set(Shdw() | < All >
< Priority() >
< Purge | Forcepurge >
```

SYSID=CIC1 APPLID=DBDCCICS
7 SBH 8 SFH 9 MSG 10 SB 11 SF

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WAVV2007-45

CICS TS for VSE/ESA Hot Topics – WAVV 2007

Problem Determination...

- CEMT INQ TAS
 - Status of task
 - RUN (running)
 - DIS (dispatchable)
 - SUS (suspended)
 - Principal facility
 - TER (terminal), TAS(non-terminal task)

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WAVV2007-46

Problem Determination...

- CEMT INQ TAS
 - Suspended task information
 - Name of resource transaction is waiting on - Hva
 - Resource type suspend is waiting on - Hty
 - How long suspended - Hti
 - Types of suspends described in CICS TS Problem Determination Guide
 - How the transaction was started
 - STA(TO|TP|QD|S|SD|U|D|DS)

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WAVV2007-47

Problem Determination...

- CEMT INQ TAS
 - How the transaction was started (STA)
 - TO terminal operator input
 - TP permanent transaction terminal attach
 - QD transient data trigger level attach
 - S START command without any data
 - SD START command with data
 - U User attached task
 - D Distributed program link
 - DS Distributed program link with syncpoint

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WAVV2007-48

CICS TS for VSE/ESA Hot Topics – WAVV 2007

Problem Determination...

- Review SIT dump options
 - ❑ DUMP=YES|NO
 - Controls taking of system dumps
 - ❑ SYDUMAX=999, TRDUMAX=999
 - Maximum number of system and transaction dumps per dump code
 - VSE supplied SIT skeletons specify 1 for each
 - ❑ OK for system dumps, larger for transaction dumps



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WAVV2007-49

Problem Determination...

- Review SIT trace options
 - ❑ TRTRANSZ=40
 - Size of transaction trace table in KB
 - 128 in VSE SIT skeletons
 - ❑ TRTABSZ=16
 - Size of system trace table in KB
 - 256 in VSE SIT skeletons
 - ❑ Recommend larger values for active systems
 - 1000KB ~ 10,000 trace entries
 - Trace tables allocated in 31-bit partition storage



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WAVV2007-50

Problem Determination...

- Suppress system dumps for ASRA and ASRB abend
 - ❑ SIT ABDUMP and PCDUMP options obsolete
 - ❑ Specify in system dump table
 - ❑ Sample in VSE skeleton SKSUPDMP

```
CEMT SET SYDUMPCODE(AP0001) ADD NOSYSDUMP  
CEMT SET SYDUMPCODE(SR0001) ADD NOSYSDUMP  
  
or from a PLT initialization program  
  
EXEC CICS SET SYDUMPCODE(AP0001) ADD NOSYSDUMP  
EXEC CICS SET SYDUMPCODE(SR0001) ADD NOSYSDUMP
```



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WAVV2007-51

CICS TS for VSE/ESA Hot Topics – WAVV 2007

Problem Determination...

- Analyzing short on storage problems
 - Create entries in system dump table for short on storage conditions

```
CEMT SET SYDUMPCODE(SM0131) ADD SYSDUMP MAX(1)
CEMT SET SYDUMPCODE(SM0133) ADD SYSDUMP MAX(1)

or from a PLT initialization program

EXEC CICS SET SYDUMPCODE(SM0131) ADD SYSDUMP MAX(1)
EXEC CICS SET SYDUMPCODE(SM0133) ADD SYSDUMP MAX(1)
```

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Problem Determination...

- Analyzing short on storage problems...
 - Format transaction and storage manager domains in system dump

```
INFOCNA CICS system dump format options
CALL DFHP0410 DATA XM=1,SM=1

==SM: Task subpool summary
  SMX Addr Name  Id Loc Acc  Gets  Frees  Elms  Elemsdg  Pagesgt
  03418620 M0000004 01 B   C    0     0     0      0       OK
  Last 7 digits → C0000004 02 A   C    1     0     1     1472     4K
  are          B0000004 02 B   C    0     0     0      0       OK
  Task number  U0000004 04 A   C    0     0     0      0       OK
  ...
  ==SM: Domain subpool summary (CDSA)
  Name  Id Chn  Initf  Bindry  Pflen  Q-c  Gets  Frees  Elms  Elemsdg  Pagesgt
  AP_TCA24 47    16K   128  1536 Y    83    75    6    12288    20K
  BSSP1   5C    32      0     0     0      0       0       0       OK
  BSSP2   5D   4096   0     0     0      0       0       0       OK
  ...
```

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Now it is your turn

Anybody got anything they want to contribute?

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