CICS/TS User Experiences

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First a Review

CICS/TS User Experiences

Volusia County Schools DeLand, FL

WAVV 2000

Review of Last Presentation

Status in March

- VSE 2.4
 - Installed and tested in November
 - migrated to all VSE guests in late January
- Security
 - CA Top Secret 3.0 conversion in Fall, 1999

Status in March

- CICS 2.3
 - 1 Production TOR
 - 4 Production AORs
 - − 1 Programmers TOR
 - 4 Programmers AORs
 - − 1 Systems Testing CICS

Current Status

- VSE 2.4.1
- CICS 2.3
 - 1 Production TOR
 - 4 Production AORs
 - 1 Programmer TOR
 - 3 Programmer AORs
- CICS/TS
 - 1 Programmer AOR
 - 1 Systems Testing CICS

Why not Done?

- IBM problems
 - DFHIRP
 - 4 Month delay
 - CICS Command Level programs with ASRA would crash CICS region
 - Restarted CICS (after a crash) could not communicate to
 TOR without an IPL being performed
 - We had to have a stable CICS 2.3 before we could do any CICS/TS testing

Why not Done?

- Vendor problems
 - CA Datacom/DB
 - 6 Month wait/delays for CICS/TS support code
 - Other CA
 - 2 Months of delays
 - Other Vendors
 - 2 Months wait for CICS/TS support code

Why not Done?

- VTAM
 - 2 Month Delay
 - VTAM requires MDLTAB B BOOK
 - VTAM PU/LU requires MDLTAB=
 - Must use the DFH Autoinstall program instead of the IES version in a mixed CICS environment

Vendors and CICS/TS

- In January, 2000 all the vendors were contacted about CICS/TS support
- One vendor had us change products
 - Macro 4 CICS/Print to VTAM/Print
 - Conversion painless
- One vendor "Not till 1st Quarter 2001"
 - Landmark TMON/CICS
 - We converted to CA Explore/CICS

Vendors and CICS/TS

- CA
 - Group 1 (Dynam, Top Secret, Explore, Faver/2)
 - Good response to problems
 - Were ready with code (although not all code was client tested yet)

Vendors and CICS/TS

- Group 2 (Datacom)
 - Were not ready
 - New version with CICS/TS support was not even ready for beta
 - After a delay, back ported CICS/TS code to current version

In-house Programs

- Only 7% (7) Online programs are COBOL
 - Cobol was converted manually
 - Due to some of our standard copybooks, we have to translate using XOPT SP
 - EXEC CICS SET TERMINAL() UCTRAN

In-house Programs

- 93% are CPG-2 (looks like RPG)
 - CPG-2 was suppose to be Command Level
 - Was NOT due to compile JCL "INCLUDE"
 - Command Level acted a little different
 - Resolved with option settings once the problem was identified.
 - In-house Assembler subroutine was using CICS areas (netname, terminal id, etc.)
 - Changed to use "legal" areas
 - In-house Assembler subroutine modifying itself

In-house Programs

- In-house SESN program requires two versions
 - CICS 2.3 calls Macro Assembler IBM interface
 - Command Level Interface is not available
 - CICS/TS uses EXEC CICS SIGNON interface
 - Macro Level Interface is not available

$\frac{1}{2}$

- New methodology for statistics
- Requires it's own partition
- Requires correct PLT Shutdown entry to capture CICS statistics
- Also used by the IBM optional JOBEXIT

Terminal Entries

• REXX and Third Party software require unique "console" terminals

Security OOO

- New entries for a lot of new stuff
- CEMT Security
 - INQ only lists things you have access to

MAN Pitfalls

- Assembler table macros
 - Watch Library Search Order
 - EXIT(LIBEXIT(EDECKXIT(ORDER=AE)))
 - DFHFCT.A
 - PRD1.BASE
 - PRD2.CICSOLDG (generation feature library)
 - DFHFCT.E
 - PRD2.CICSOLDP

WAW Pitfalls 000

- Assembler table macros
 - DFHPCT.A
 - PRD1.BASE
 - PRD2.CICSOLDG
 - PRD2.CICSOLDP
 - DFHPCT macro in the base library?????

WAVV 2002

CICS/TS User Experiences

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Current Status

- VSE 2.5
 - (VSE 2.6 semi-tested, waiting on new fixes from CA)
- CICS 2.3
 - 1 Production AOR (old frozen system used for archive retrieval)
- CICS/TS
 - 1 Production TOR
 - 3 Production AORs
 - 1 Programmer TOR
 - 4 Programmer AORs
 - 1 Systems Testing CICS

After WAVV 2000

- We were so close at WAVV 2000
- We expected production during the winter break

Winter Break Winter Break

- Programmer CICS's were converted just after WAVV 2000
- Everything looked good for a production cutover
- Rolled production during the winter break
- Programmers came in and tested
- Everything looked good

WRONG!

After Winter Break

- Everything looked good Day 1
- We felt great!
- Mid morning, Day 2, VSE went to 100% of CPU
- CICS was in a loop
- Maybe just a one time thing
- Re-IPL
- CICS in loop within 5 minutes
- Take a Stand-alone dump
- Back-out CICS/TS

Blame game

- CA-Faqs?
- CA-Datacom?
- CICS?
- VTAM/Print (CICS side)?
- Other Vendor product?
- In-house code seeing a new condition?

Blame game

- January to March
 - Send dump to IBM
 - They say send to CA
 - Send dump to CA
 - Not our problem
 - Back to IBM

MANIBM: CICS 0 0 2

(March to May)

- 1. IBM "We see something strange"
- 2. Task chain is chained to itself
- IBM "Not Good"
- 4. Need more info
- 5. Changes to trap program to narrow possibilities
- 6. Turn on internal trap dumps
- 7. Put into production and get new dumps
- 8. Roll back to CICS 2.3
- 9. Send Dump
- 10. Go back to step 4 (MANY, MANY times)

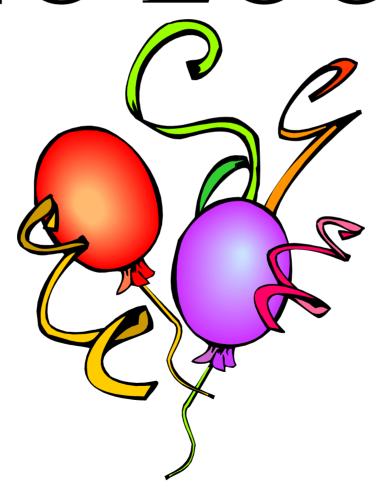
IBM: VSE (May to June)

- IBM:CICS "We know who is doing it, and it's not CICS, it's in the VSE MVS support code" aka "the family API SVC's"
- Problem transferred to VSE support
- Late June, received PTF from IBM (\$ijbfmdb)
- Rolled CICS/TS into production
- NO LOOP
- BUT, by now school is out for summer
- Fixed? Or just not enough load on CICS?
- Leave CICS/TS in production till school starts in mid-August and hope for the best

Will it loop?

- Load increases in mid-August as faculty return
 - Looks ok so far
- Largest load is Day 2 of school
 - Will it loop?
- Day 1 looks good but it's a light load day
 - Pins and needles as Day 2 approaches
 - Back out jobs ready

WAVV 2002 NO LOOP



Follow through

- Contact IBM to tell them fix resolved problem
- We found they had already put it on the newest 2.5.x update even without our feedback

WAV_{VSE 2.5}002

- VSE 2.5 was available
- We had postponed it as we did not want to change the conditions while working out the loop problem
- VSE 2.5 was installed on our systems test machine while waiting on IBM.
- After fix installed (but not verified) 2.5 was put into our development VSE
- Once loop verified, VSE 2.5 was moved into production within a few months.

WAV_{VSE 2.5}002

- New minor security issues with CICS/TS
 - Easily resolved (CA-Top Secret)
- By WAVV 2001, we are current and agreed to participate in this follow-up session
- But it did not happen
- November, 2001: Tony parted ways with Volusia Schools

WAV Review 002

- Started getting ready in Fall, 1999
 - CA-Top Secret
 - VSE 2.4 in wings if needed for Y2K
- VSE 2.4 installed early 2000
- Many Vendor and in-house issues
- Thought it was ready Fall, 2000 (by WAVV)
- Heavy debugging till Summer, 2001
- Finally settled Fall, 2001 (by WAVV)
- 1.5 years (2.0 if you count getting ready with 2.4)
- Delayed 2.5, but so what ☺

Information

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