



CA Chorus Software Manager UPS Experience

August 15, 2013

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WE ♥ LOGISTICS™

Agenda

- **Installation History at UPS**
- **Environment**
 - **Mainframe Configuration**
 - **CSM Installation & Configuration**
 - **CSM SMP/E Environment**
 - **CSM Runtime Environment**
- **Customer Enhancement Requests (DAR)**
- **CSM-Enabled Products**
- **Deployment Management**
- **Recommendations**
- **Conclusion**

Installation History at UPS

- 10/2009 2.0 Review/Installation
- 02/2010 2.0 Product Install
- 08/2010 3.0 Product Install (New Install)
 - *Deployment Manager Exploitation*
 - *Single File System Allocation*
 - *SMP/E options added (Receive, Apply Check, Apply, Groupextend)*
- 02/2011 3.1 Product Install (New Install)
 - *CA RS Processing*
- 03/2012 4.1 Upgrade (Data Migration)
 - *CA MSM Resource Center*
 - *Maintenance Usability Enhancements*
- 02/2013 5.1 Upgrade (Data Migration)
 - *Deployment Cloning*
 - *Download Maintenance Only!*

Mainframe Environments at UPS

- 4 Sysplexes
 - 2 Production
 - Consisting of 18 LPARs
 - 1 Development
 - Consisting of 3 LPARs
 - 1 Stress
 - Consisting of 2 LPARs
- 3 MonoPlexes
 - 2 Production
 - 1 Development

CSM Installation & Configuration

- JESINTERFACELEVEL=2 using OMVS to install.
- We let SMS do all the “heavy lifting” during the build process.
- CSM address spaces primarily reside on DVLP LPAR and can be moved to any of the 3 development LPARs by modifying the “context.xml” file in /msmruntime/tomcat/conf/
- Starting with MSM 3.0 & again with 4.0, we had to apply maintenance to Common Services 12.x (CETN300, CETN400). By the time we upgraded to 5.1, Common Services was at release 14.1 and required no additional maintenance.

CSM Installation & Configuration

- Starting with MSM 4.1, we noticed our OMVS “high water marks” increasing from the MSM requests. As a result: We Modified the following OMVS parameters:
 - MSM 4.1 increased MAXMMAPAREA from 4096 to 40960
 - MSM 5.1 increased SHRLIBRGNSIZE from 67108864 to 157386400
 - MSM 5.1 increased IPCMSGNIDS from 500 to 1000

CSM Installation & Configuration

```
INFO1
D OMVS,L
BPXO051I 15.24.23 DISPLAY OMVS 112
OMVS      0010 ACTIVE          OMVS=(00,01)
SYSTEM WIDE LIMITS:          LIMMSG=NONE
                                CURRENT   HIGHWATER   SYSTEM
                                USAGE     USAGE      LIMIT
MAXPROCSYS      1215          1400        1500
MAXUIDS         75           80           100
MAXPTYS         0            3            8000
MAXMMAPAREA     7168          7189        40960
MAXSHAREPAGES   41154        99342       10000000
IPCMSGNIDS      29           32           1000
IPCSEMNIDS      43           48           500
IPCSTMNIDS      32           35           500
IPCSTMSPAGES    40           53           262144
IPCMSGQBYTES    ---         456          262144
IPCMSGQMNUM     ---         7            10000
IPCSTMMPAGES    ---         12800        25600
SHRLIBRGNSIZE  157286400     157286400   157386400
SHRLIBMAXPAGES  0            0            4096
MAXUSERMOUNTSYS 0            0            0
MAXUSERMOUNTUSER 0            0            0
```

CSM Installation & Configuration

- Starting with MSM 4.1 and with CSM 5.1, the Data Migration Utility was used to upgrade the existing product inventory.
- Initial Upgrade to CSM 5.1, we changed from JAVA 6.01 31bit to JAVA 7.0 31Bit and experienced “Out of Memory” during initial load of the logon screen. Worked with support and down leveled to JAVA 6.01 64Bit. Problem resolved.

Runtime Environment

Unique file system for each release of CSM:

Type	Perm	Changed-EST5EDT	Owner	-----Size	Filename
_ Dir	775	2013-07-05 10:39	OMVS	8192	.
_ Dir	775	2011-10-07 12:12	SYS1CJD	608	..
_ Dir	775	2013-03-08 13:28	SYS1CJD	8192	deploy
_ Dir	775	2013-04-04 10:19	OMVS	384	mpm
_ Dir	775	2013-04-10 10:20	OMVS	8192	msmtmp
_ Dir	775	2011-03-03 14:52	OMVS	256	v3r0
_ Dir	775	2011-03-07 12:11	OMVS	256	v3r1
_ Dir	775	2012-02-21 07:37	SYS1CJD	672	v4r1
_ Dir	775	2013-04-10 09:37	SYS1CJD	8192	v5r1

SMP/E Environment

We build a new SMP/E environment for each release of CSM:

```
EUID=1008 /smpe/ca/msm/
```

Type	Perm	Changed-EST5EDT	Owner	-----Size	Filename
_ Dir	775	2013-03-07 14:43	SYS1CJD	8192	.
_ Dir	775	2012-02-15 14:26	SYS1CJD	672	..
_ Dir	775	2011-03-02 14:30	SYS1CJD	256	v3r0
_ Dir	775	2011-03-02 14:30	SYS1CJD	256	v3r1
_ Dir	775	2012-01-10 10:59	SYS1CJD	256	v4r1
_ Dir	775	2013-03-07 14:46	SYS1CJD	8192	v5r1

Customer Enhancement Requests (DAR)

- **SMP/E Receive, Apply Check and Apply**

In MSM 2.0, SMP/E was limited to an install function. Receive, Apply Check, and Apply all in one action.

- **CA RS Maintenance Package & Receive (available with 6.x)**

Currently, CA RS is limited to reporting recommended service. A request was submitted to enhance CA RS with download and receive options.

- **Data Set Allocation – Deployment (considered)**

The current deployment feature transmits and allocates data sets in bytes ONLY! No option available to customize the allocation.

CSM Enabled Products Installed at UPS:

- Currently, 26 CA products are installed on UPS Mainframes.
- 21 are Installed and Managed in CSM.
- With the opportunity to migrate/manage 5 DB2 Utilities.
- CSM is managed by z/OS and third party software support team.
- CSM accessible to all mainframe software support groups.

Deployment & Configuration

- Leveraging TCPIP.
- Deploy to 4 SYSPLEXES & 3 Mono Plexes.
- Deployments are scheduled to staging libraries with Legacy Procedures for “RUNTIME” population.
- We “DO NOT” utilize Software Configuration Services.

Deployment – System Registry

We are CCI-registered to 1 LPAR on each Plex.

The screenshot shows the CA Chorus Software Manager interface. The top navigation bar includes tabs for Software Status, Products, SMP/E Environments, Deployments, Configurations, System Registry (selected), Tasks, and Settings. The left sidebar contains a search bar and a tree view under 'System Registry' with sub-items for Non-Sysplex Systems and Sysplexes (DVLP, GRMY, MENT, MVS1, RAMAPO, STRESS, WINDWARD). The main content area is titled 'Sysplexes' and displays a table of system objects.

Select	Name	Description	Actions
<input type="checkbox"/>	DVLP		Actions ▾
<input type="checkbox"/>	GRMY		Actions ▾
<input type="checkbox"/>	MENT		Actions ▾
<input type="checkbox"/>	MVS1		Actions ▾
<input type="checkbox"/>	RAMAPO		Actions ▾
<input type="checkbox"/>	STRESS		Actions ▾
<input type="checkbox"/>	WINDWARD		Actions ▾

Selected 0 of 7.

Deployment - Methodologies

- Maintain a separate “Methodology” for each product. We use a “standard” SMS-Managed HLQ.
- Choice of:
 - *Create*
 - *Create or Update*
 - *Replace*

Since our deployment data sets are for “staging purposes”, they should never be “in use” by another user, so we use the “REPLACE” option.

Deployment – Methodologies

Information

Information: You can create, edit or delete methodologies.

Methodologies Create

Select and: [Delete](#) 1 - 10 of 16 > >>

<input type="checkbox"/> Select	Name	Description	DSN Mask	Actions
<input type="checkbox"/>	CA Deliver 11.6		N802.CA.DELV11R6	Actions ▼
<input type="checkbox"/>	CA Faver 4.5		N802.CA.FAVER45	Actions ▼
<input type="checkbox"/>	CA TLMS 12.6		N802.CA.TLMSR126.PTFS	Actions ▼
<input type="checkbox"/>	CA View		N802.CA.VIEWR116	Actions ▼
<input type="checkbox"/>	CA1 12.6		N802.CA.CA1V12R6.PTFS	Actions ▼
<input type="checkbox"/>	cadisk		N802.CA.DISK	Actions ▼
<input type="checkbox"/>	CASpool		N802.CA.SPOOL116	Actions ▼
<input type="checkbox"/>	cjd view test		N802.CA.VIEW	Actions ▼
<input checked="" type="checkbox"/>	del 117		N802.CA.DEL117	Actions ▼
<input checked="" type="checkbox"/>	Easytreive		N802.CA.EASYT116	Actions ▼

1 - 10 of 16 > >>

Selected 0 of 16.

Close
Help

Recommendations

- Stay as current as possible with JAVA JRE.
- Always stay current with CA Common Services.
- Use “Prerequisite Validation”.
- Monitor your OMVS “System Wide Settings”. CSM 5.1 had a substantial impact on these settings.

Conclusion

- Substantially cuts down on the amount of time to bring a product to production.
- Little training required. Whether new to SMP/E product delivery and maintenance or experienced, CSM offers the flexibility to bring a product to production in a fraction of the time. CSM offers the experienced programmer flexibility to manage the outcome.
- CSM has grown immensely since 2.0 and offers a complete service from ordering a product through production implementation.
- “Browser Friendly”

Questions ?

Thank You

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