

Installing ISV Mainframe Products through a Web Browser with CA MSM: Update and User Experiences

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for

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Session 11840

Our environment

- Two Sysplexes, basically Prod and Test. Prod is an 8 way and test is a three way.
- DASD and UCATs shared across all systems (yes, this causes a problem for PDSe's)
- We run a lot of ISV's. Top Secret, FDR, etc.
- I consider myself a novice MSM user. Relatively speaking, I've probably done more than most, but still feel rather new at it. I have no unix background.

Our environment: Software levels

- z/OS is at 1.13, PUT level is 1204.
- We are just finished migrating PUT 1204 through our Ipars.
- We put maintenance on bi-monthly, two PUTs back, plus any applicable hipers or special request PTFs.

Our environment: MSM

- MSM, like SMPE, runs only in our SYSPROG LPAR. That LPAR has two shared GP's and a shared ziiip
- LPAR has 10G storage
- We've not had problems with response time:

```

13.57.30 S0001349 ---- MONDAY,      23 JUL 2012 ----
13.57.30 S0001349 IEF695I START MSMTC      WITH JOBNAME MSMTC
13.57.30 S0001349 $HASP373 MSMTC      STARTED
13.57.30 S0001349 USI001I MSMTC      MSMSRV      REGN=9640K
13.57.30 S0001349 IEF403I MSMTC - STARTED - TIME=13.57.30 -
13.57.47 S0001349 MSM0013I CA MSM STARTUP INITIATED
13.58.29 S0001349 MSM0009I CA MSM STARTUP COMPLETE
. . .
09.58.34 S0999746 MSM0014I CA MSM SHUTDOWN INITIATED
09.59.13 S0999746 MSM0011I CA MSM HAS TERMINATED SUCCESSFULLY
09.59.17 S0999746 -STEPNAME PROCSTEP      RC      EXCP      CONN      TCB      SRB
09.59.17 S0999746 -          MSMSRV        00      260K     20458     .58     .00
09.59.17 S0999746 IEF404I MSMTC - ENDED - TIME=09.59.17

```

Our MSM History

- May 2, 2011 - Downloaded and installed MSM 3.1
 - Had a lot of fun installing, setting it up, mainly SAF issues.
 - SAF wounds were self inflicted
- August 16, 2011 - Upgraded to MSM 4.0
- November 14, 2011 - Upgraded to z/OS 1.13
- November 29, 2011 - Installed 48 PTFs
- December 19, 2011 - Downloaded and installed MSM 4.1
- July 11, 2012 – Downloaded and installed MSM 5.0
- July 23, 2012 – Applied approximately 30 PTFs to MSM 5.0

MSM 3.1

- Initial install took a few days
 - Security Setup
 - Catalog Aliases
 - WLM classifications
 - AO startup/shutdown
- The CCS guy hadn't installed FMID CETN300, since we weren't using MSM at that time.

MSM 4.0

- Downloaded and installed 8/16/2011 at the request of the Datacom guys. (R14 for them)
- One thing I messed up was unpaxing in my /capack directory rather than in /msmserv/v40/msminstall
- This caused my MSMInstaller, MSMPProduct and MSMSSetup to land in the wrong location.
- `cp -r -p /capack/MSMInstaller /msmserv/v40/msminstall`

```
java.io.FileNotFoundException: File  
'/msmserv/v40/msmruntime/tomcat/webapps/MSM/MSMMain.html' does not exist
```

```
INFO: Deploying web application archive MSM.war  
Aug 16, 2011 11:27:21 AM org.apache.catalina.startup.ContextConfig init  
SEVERE: Exception fixing docBase for context [/MSM]  
Throwable occurred: java.io.IOException: EDC5133I No space left on device.
```

MSMRUNT was full. Grew the zfs, unmounted, remounted, bounced MSMTTC

MSM 4.1 Upgrade

- Very smooth! Too smooth, in fact. 😊
- `/msmserv/msminstall/MSMSetup/MSMSetupOptionsFile.properties`
- `PreviousRelease.MSMPATH=/msmserv/v40/msm`
- Specifying the wrong 'PreviousRelease' makes MSM appear to be a few months older than it was before. Maintenance is missing, etc.
 - `/msmserv/msm`
 - `/msmserv/v40/msm`

MSM 5.0



- Release was requested by the Datacom guys.
- Started at 8:00AM, completed at 10:12AM.
- Smooth sailing.
- A few days later, applied 20-some PTFs.
- Missed the MSMDEPLY job somehow
- After I ran it, bounced MSM, got a browser message that my cache didn't match my MSM version, and to clear cache. Did that and all was well.

MSM 5.0 Upgrade – Overview

- Order and download PAX from CA Support
- `pax -rvf 50000068X01.pax.Z`
- `sh MSMSSetup.sh copyOPT /msmserv/v41/msm/`
- Checked `/capack/MSMSSetup/MSMSSetupOptionsFile.properties`
- `MSMSSetup.sh`
- Startup DBMSMUF (Datacom MUF)
- Run MFNEW03
- Startup DBMSSRVR (Datacom Server)
- Startup MSMTTC (TomCat Server)
- Logon, and 'Migrate an existing CSI' to bring MSM 5 in.

MSMDEPLY Notes

- /msmserv/V50/msm is the TARGET path
- /msmserv/V50/msmruntime is where MSM actually executes
- This is all set up for you properly in SMPE
- You just have to remember to run the 'deploy' job.
- Maybe there should be holddata for that. 😊

A small MSM 5 issue

- The CICS guy is ready to use MSM. I talk him through getting started, and he encounters an error in Settings/Software Acquisition.
- It appears to allow him to define his CA Support ID, but after clicking 'Apply' and giving a 'succeeded' message, the ID is gone.
- I backed off the FO47547 Cumulative maintenance fix. No luck.
- I call Summer in a panic, because I want this fixed before Share. She identifies a database error and asks me to back off RO48169 and RO48171. It worked!

UITool



- Used the UITool with MSM 3.1, 4.1 and 5.0
- Like! Or Plus 1 if you're a Google Plus person

DATE: 07/24/2012

CA MSM (v5.0)

TIME: 12:20:50

M A I N M E N U

OPTION ===> _____

Gather Site values for MSM Option File parms

1 Gather Site values for Pre-Filling Installer Option File

Create and Mount paths for MSM installation

2	zFS Multiple File System JCL	or	cccc	aaaaa	
			cc	cc	a
3	zFS Single File System JCL	or	cc		a
4	HFS Multiple File System JCL	or	cc	aaaaa	
5	HFS Single File System JCL		cc	aa	a
			cc	aa	aa
D	Display Mount File Attributes		cccc	aaaa	a

Edit MSM Installation Options File

REL UI50

6	Using pre-filled site values	or	M	M	SSSS	M	M					
7	Using ISPF Editor		MM	MM	S	MM	MM					
			M	M	M	M	SSSS	M	M	M	M	
I	MSM Installer Invocation Details		M	M	M	M	S	M	M	M	M	
H	Help	L	Log			M	M	M	SSSS	M	M	M

TIPS



CA Mainframe Software Manager™ - Main Window - Software Catalog - CA - Mozilla Firefox

File Edit View History Bookmarks Tools Help

usct:22120/MSM/#Detail/swcatMaster/swcat-vendor-products/2/CA

CA Mainframe Software Manager™

Logged in as: MAM (Log Out)

Software Status Software Catalog SMP/E Environments Deployments Configurations System Registry Tasks Settings

Search

Search For:

Search In: Products Search

Actions

- Update Catalog Tree
- Show LMP Keys
- Insert New Product
- Install External Package
- Insert New CA RS File
- Update HOLDDATA

Filter

Show: All Edit

Available Products

- Products
 - CA
 - CA 1 Tape Management - MVS
 - CA Auditor - MVS
 - CA Bind Analyzer for DB2 for z/OS - MVS
 - CA Cleanup for Top Secret - MVS
 - CA Common Services - MVS
 - CA Compliance Manager for

CA

Products > CA

Products Refresh

Select and: Update Catalog Products 1 - 25 of 57 > >>

Select	Product Name	New HIPERs	New Maintenance	Actions
<input type="checkbox"/>	CA 1 Tape Management - MVS	5	243	Update Catalog Product
<input type="checkbox"/>	CA Auditor - MVS	0	0	Update Catalog Product
<input type="checkbox"/>	CA Bind Analyzer for DB2 for z/OS - MVS	0	0	Update Catalog Product
<input type="checkbox"/>	CA Cleanup for Top Secret - MVS	0	0	Update Catalog Product
<input type="checkbox"/>	CA Common Services - MVS	0	0	Update Catalog Product
<input type="checkbox"/>	CA Compliance Manager for z/OS - MVS	0	0	Update Catalog Product
<input type="checkbox"/>	CA Database Analyzer for DB2 for z/OS - MVS	0	0	Update Catalog Product
<input type="checkbox"/>	CA Datacom CICS Services - MVS	0	0	Update Catalog Product
<input type="checkbox"/>	CA Datacom Datadictionary Option - MVS	0	0	Update Catalog Product
<input type="checkbox"/>	CA Datacom Server - MVS	0	0	Update Catalog Product
<input type="checkbox"/>	CA Datacom SQL Option - MVS	0	0	Update Catalog Product
<input type="checkbox"/>	CA Datacom STAR - MVS	0	0	Update Catalog Product
<input type="checkbox"/>	CA Datacom/AD - MVS	0	0	Update Catalog Product
<input type="checkbox"/>	CA Datacom/DB - MVS	1	1	Update Catalog Product

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About

Tips...All those zFS's...

```
//STEP05A EXEC PGM=DBSQLPR,
//          PARM='PRTWIDTH=1500,INPUTWIDTH=72'
//STEPLIB DD DSN=CAMSM.V50.RUN.CUSLIB,DISP=SHR
//          DD DSN=CAMSM.V50.RUN.CAAXLOAD,DISP=SHR
//CXX      DD DSN=CAMSM.V50.RUN.CXX,DISP=SHR
//SYSUDUMP DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//STDERR   DD SYSOUT=*
//STDOUT   DD SYSOUT=*
//OPTIONS  DD *
AUTHID=CASWMGT
/*
//SYSIN    DD *
SELECT * FROM MOUNTPPOINT;
/*
MOUNTPPOINTID,      <8>,                INT NOT NULL
MP_PATH,            < /msmserv/mpm/scroot/DatabaseM/CA/MAINTENANCE>, VARCH
MP_DATASET,         < OMVS.CAMSM.MSMT5>,  VARCHAR(16/45)
MP_TYPE,            <*> (NULL),          VARCHAR(20)
MP_OPTIONS,         < ZFS>,                VARCHAR(3/2000)

MOUNTPPOINTID,      <9>,                INT NOT NULL
MP_PATH,            < /msmserv/mpm/scroot/DatabaseM/CA/MAINTENANCE/descri
MP_DATASET,         < OMVS.CAMSM.MSMT6>,  VARCHAR(16/45)
MP_TYPE,            <*> (NULL),          VARCHAR(20)
MP_OPTIONS,         < ZFS>,                VARCHAR(3/2000)

MOUNTPPOINTID,      <10>,               INT NOT NULL
MP_PATH,            < /msmserv/mpm/scroot/DatabaseM/CA/MAINTENANCE/CA_1_T
40)
MP_DATASET,         < OMVS.CAMSM.MSMT7>,  VARCHAR(16/45)
MP_TYPE,            <*> (NULL),          VARCHAR(20)
MP_OPTIONS,         < ZFS>,                VARCHAR(3/2000)
```

Complete your sessions evaluation online at SHARE.org/AnaheimEval

Stupid things I did along the way...

- I lost my notice and consent banner. ☹ It lives in:
/msmserv/v50/msmruntime/tomcat/webapps/MSMBanner.html
 - Make a copy (I did have a copy, just had to find it)
- Got an error in MSM when I had the CSI in use in SMPE in TSO.
- S047 in MSMTTC because it used a steplib and SIOELNKE wasn't explicitly apf'ed. This created a bunch of MSMTnn zfs's that didn't get IOEAGFMT'ed.
- Missed the MSMDEPLY (Deploy) job after applying maintenance.
- Accidentally got CAMSM SAF security turned on, without actually putting the definitions in.

Current status

- I use it for my products (acquisition and maintenance)
- I've imported SMPE zones in, and used it for new products
- Another sysprog, who does most of the CA products, is reluctant, but willing to try.
- The Datacom guys love it:
 - It masks the SMPE from them...at least the commands
 - It uses Datacom databases!
- We're not using Deployment or Configuration yet. We have a fairly robust and well-loved deployment process. I'm picking my battles.
- DB2 is using it (They heard the datacom guys talking about it)
- CICS will be using it for their next Intertest update.

Overall Pro's and Con's

- PRO'S:
 - Everything is in one place. Someone else can come in and pick it right up.
 - Love the ability to manipulate the holddata, smpe output, etc.
 - I CAN put PTFS on and take them off in 45 seconds. No looking for JCL, changing the APPLY statement...etc.
- CON'S:
 - Adoption by the other sysprogs is slow.
 - Adjusting to the terminology

Room for improvement:

- I use different TSO ID's. I'd like to have two TSO ID's use the same CA support ID.
- I'd like to be able to adjust the navbar and columns a bit.
- Cancelling (rather than hiding) a task

Room for Improvement

- Strange field lengths in User Settings:
 - GIMUNZIP Temporary Prefix; we wanted DATACOM.R14BETA, we could only get R14BET.
 - However, volser field is plenty long, but gives 1-6 error msg.

Settings

- System Settings
 - Software Acquisition
 - Software Catalog
 - Software Installation
 - Software Deployment
 - Mount Point Management
- User Settings
 - Software Installation ▸
 - User Preferences
 - Software Acquisition
 - Remote Credentials

Information: Changes made are applied immediately.

MVS Program Executor - Output

Temporary Data Set Prefix: 123456789ABCDEFGH

Use SMS Use VOLSER & Unit

Storage Class: VOLSER: 123456789ABCDEFGHI

Unit:

Package Management

GIMUNZIP Temporary Prefix: 123456789ABCDE

GIMUNZIP Temporary VOLSER: 123456789ABCDEFGH

User Unpax Temporary Directory:

Apply

Conclusions:

- Well worth the effort to get it going.
- You could have colored me skeptical initially.
- I'm now a fan.
- And I haven't even tried deploy and config yet!
- From a 25 year systems programmer who still prefers MVSCP to HCD...give it a try!

Some of my MSM Emails...

- The r14 'mass PTF install' went very well, Mary Anne. Pointed the 'external dataset' at a member with 21 PTFs of which 4 were installed, and one other was on as an APAR. You remember that I was concerned that MSM might try to re-apply those 4, and cause an error. Well, when it displayed the contents of the member, it listed all 21 PTFs as separate line items, correctly annotating those 4 that were already installed. When I hit 'SELECT', it automatically selected just the 17 new ones (including the one replacing the APAR), so there was no question of trying to reinstall a fix. After that it was a regular MSM install.
- Summer, just wanted to let you know that I brought z/OS 1.13 up today and checked MSM...it came up, no intervention, no configs, nothing. Just comes right up beautifully. Great job!

20586681-1: ENHANCEMENT REQUEST

10/17/11

We'd like an enhancement to MSM that allows us to specify NORWSHARE on the zfs mounts for the MSMTnn files. Since MSM takes care of the mounting/unmounting of these files, we are unable to specify this attribute. We only run MSM in one LPAR. Defaulting to RWSHARE can cause unnecessary overhead.

12/27/11

'accepted and is currently targeted for implementation in a future release;

Questions?

