

# CA Recommended Service, FIXCAT Exploitation, and Other Enhancements to CA Service Delivery

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Session Number 11846



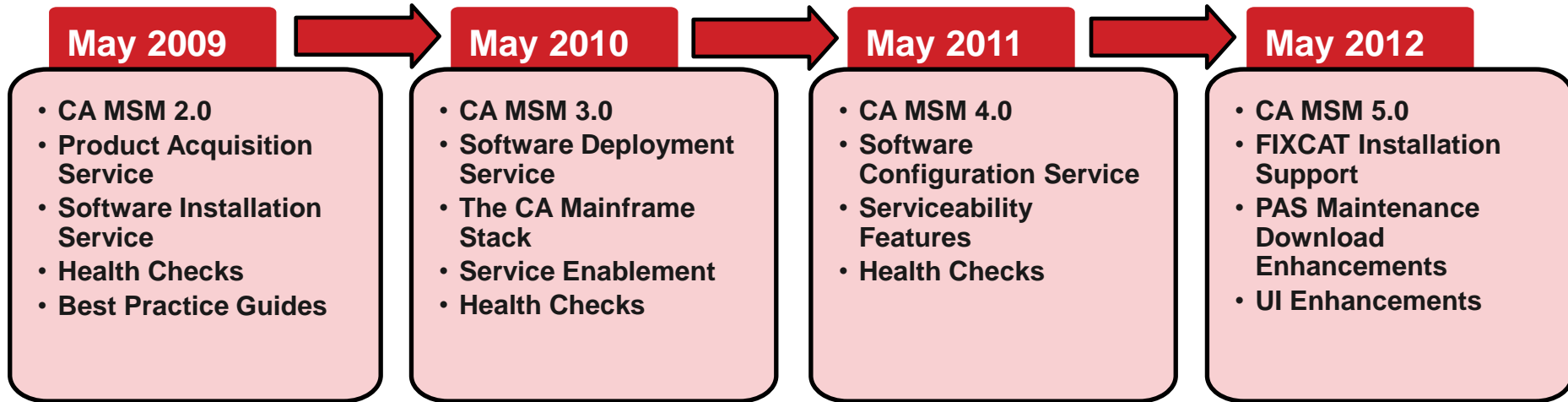
# Session Abstract

CA Technologies recently introduced CA Recommended Service (CA RS) for most of its z/OS products. CA RS provides preventive service in a consistent and more granular way than the product-specific service packs it has replaced. CA RS is built upon results from CA's Integrated System Test (IST) environment where PTFs are tested with other CA products and various releases of z/OS and major subsystems. In addition FIXCAT holds are now provided to automate the installation of product maintenance needed to support new z/OS releases and new hardware. In this session, the speaker will review the new service deliverables and will explain how you can use them to effectively maintain your CA products.

# Agenda

- Next-Generation Mainframe Management and CA Mainframe Software Manager™ (CA MSM)
- The CA Mainframe Stack
- Quality and Service Improvements
  - Goals and Overview
  - Integrated System Test
  - CA Recommended Service (CA RS)
  - FIXCAT Exploitation

# CA's Next-Generation Mainframe Management



## Key Components:

- CA Mainframe Software Manager™ (CA MSM)
- Health Checks for the IBM Health Checker for z/OS
- FIXCAT support for CA products
- Common packaging standards

# CA Mainframe Software Manager (CA MSM)



```
TPX
QW53270  EGR  View Options Tools Help

COMMAND GENERATION SELECTION MENU

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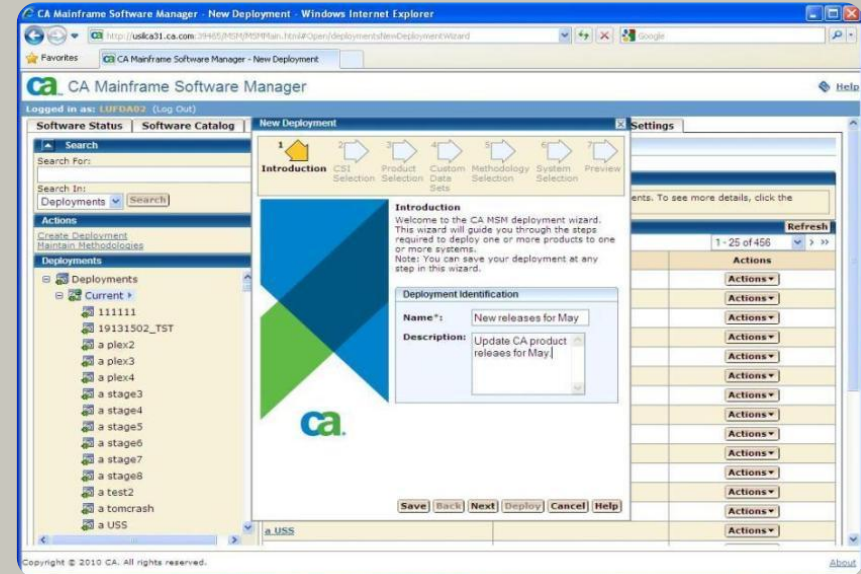
Select one of the following:
10 RECEIVE      20 RESETRC      30 LIST BACKUP   40 ZONECOPY
11 APPLY        21 JCLIN        31 LIST LOG      41 ZONEEDIT
12 ACCEPT       22 UCLIN        32 LIST          42 ZONEDELETE
13 REJECT       23 CLEANUP      33 UNLOAD       43 ZONEEXPORT
14 RESTORE      24 GENERATE     34 REPORT       44 ZONEIMPORT
15 LINK         25 LOG          35 BUILD MCS    45 ZONEMERGE
                26 UPGRADE                46 ZONERENAME
                47 GZONEMERGE

Enter or verify the following:
ZONE NAME      ==>>          (required)
OPTIONS NAME    ==>>          OPTIONS name or
                        blank
SMP/E PROCESS PARAMETER ==>> WAIT WAIT or END

To return to the SMP/E primary option menu enter the END command

5694-A01 5655-G44 COPYRIGHT IBM CORP 1982, 2008

Connected to TPX port 23                DOOW 27      NJM      08:39:35 IBM-3078-2 - AS577396
```



- Download, install, deploy, and configure products from a Web-based UI
- Dramatically simplifies software management activities
- Significantly reduces installation times



# What does CA MSM do?

- Downloads software products and service from CA Support Online
  - Includes other artifacts (e.g. PDFs, letters, etc.)
- Installs products into new or existing CSIs
- Evaluates and installs maintenance into CSIs
- Installs “External Maintenance” and “External Packages”
  - e.g. ++APARs, ++USERMODS
  - e.g. Beta products, other vendor products
- Migrates preexisting CSIs into CA MSM
- Deploys product target libraries to local or external systems
- Configures deployed products for production use



# Where to get more MSM information?

- Wednesday 8:00am Platinum 5 – Installing ISV Mainframe Products through a Web Browser with CA MSM: Update and User Experiences
- <http://support.ca.com>

# the CA Mainframe Stack

- The CA Mainframe Stack is the set of CA products that have adopted key Next-Generation Mainframe Management initiatives
  - Are packaged in SMP/E using common standards
  - Are installable, deployable, and configurable using CA MSM
  - Have provided health checks (where appropriate)
  - Have undergone additional interoperability testing with other CA products and supported z/OS releases and major IBM subsystems
  - Deliver maintenance via CA Recommended Service

*Currently includes 57 product families and 360 FMIDs*



# CA Mainframe Stack product families



CA 1® Tape Management  
CA ACF2™ Option for DB2  
CA ACF2™  
CA Aion® Business Rules Expert  
CA Allocate™ DASD Space and Placement  
CA Auditor for z/OS  
CA Cleanup for CA ACF2  
CA Cleanup for RACF  
CA Cleanup for CA Top Secret  
CA CMDDB Connector for z/OS  
CA Common Services  
CA Compliance Manager for z/OS  
CA Copycat Utility  
CA Datacom®/DB  
CA DB2 for z/OS Tools  
CA Deliver™  
CA Disk™ Backup and Restore  
CA Dispatch™  
CA Easytrieve®  
CA Endeavor® Software Change Manager  
CA File Master™ Plus  
CA File Master™ Plus for IMS

CA Gen Encyclopedia Server / Implementation Toolset  
CA IMS for z/OS Tools  
CA InterTest™ Batch  
CA InterTest™ for CICS  
CA JARS® Resource Accounting  
CA JCLCheck™ Workload Automation  
CA Librarian®  
CA MIM™ Resource Sharing  
CA NetMaster® Network Management for TCP/IP  
CA NetMaster® Network Management for SNA  
CA NetMaster® File Transfer Management  
CA NetMaster® Network Automation  
CA NetSpy™ Network Performance  
CA OPS/MVS® Event Management and Automation  
CA Optimizer®/II  
CA PanAPT®  
CA Panvalet®  
CA PDSMAN® PDS Library Management  
CA SMF Director  
CA SOLVE:Access™ Session Management

CA Spool™  
CA SymDump® Batch  
CA SymDump® for CICS  
CA SymDump® System  
CA SYSVIEW® Performance Management  
CA Tape Encryption  
CA Telon® Application Generator  
CA TLMS® Tape Management  
CA Top Secret®  
CA Top Secret® Option for DB2  
CA TPX™ Session Management  
CA Vantage™ Storage Resource Manager  
CA Verify® for CICS Automated Regression Testing  
CA Verify® for VTAM Automated Regression Testing  
CA View®  
CA Vtape™ Virtual Tape System  
CA Workload Automation ESP Edition  
CA Workload Automation Restart Option for z/OS Schedulers  
CA Workload Automation CA 7® Edition  
CA XCOM™ Data Transport® for z/OS

# CA Mainframe Stack maintenance improvement goals

- Improve the preventive maintenance experience for all products in the CA Mainframe Stack
  - Provide a consistent process across all products
- Provide thorough, integrated testing across CA products, z/OS releases and related subsystems (CICS, DB2, etc.)
- Provide recommended preventive service over predictable intervals
  - Let customers choose to install current service whenever it fits their maintenance schedules
  - Make it easy to keep all CA products at the same maintenance level
  - Remove PTFs from “recommended” status if problems are discovered
- Simplify planning for “external events”
  - z/OS upgrades, new hardware installations, etc.

# CA Mainframe Stack maintenance improvements



- PTFs are tested by product QA and affected customer(s), then published to CA Support Online (CSO)
    - Immediately available for download if needed for corrective service
    - No change here
  - After publication, PTFs are installed into a new Integrated System Test (IST) environment
    - Additional level of testing above and beyond what was done previously
  - Each quarter, we publish a list of PTFs that have successfully completed IST testing and are now “CA Recommended”
  - Customers install CA Recommended Service whenever they choose
  - Service Packs for individual products are no longer provided
- Note: The above applies to CA Mainframe Stack products **only***

# Integrated System Test

- The Integrated System Test (IST) environment provides an additional level of testing *after* PTFs are published
  - Battery of test cases, simulating customer-like workloads
    - Currently includes 2800+ test cases
  - Similar to IBM's Consolidated Service Test (CST)
- The IST is comprised of systems in a sysplex running different combinations of software, including:
  - All current z/OS releases
  - Popular subsystems (DB2, CICS, IMS) at different releases
  - CA Mainframe Stack products
    - Installed and maintained using CA MSM
- Two types of testing environments:
  1. All published PTFs
  2. PTFs that are candidates for the next CA RS level



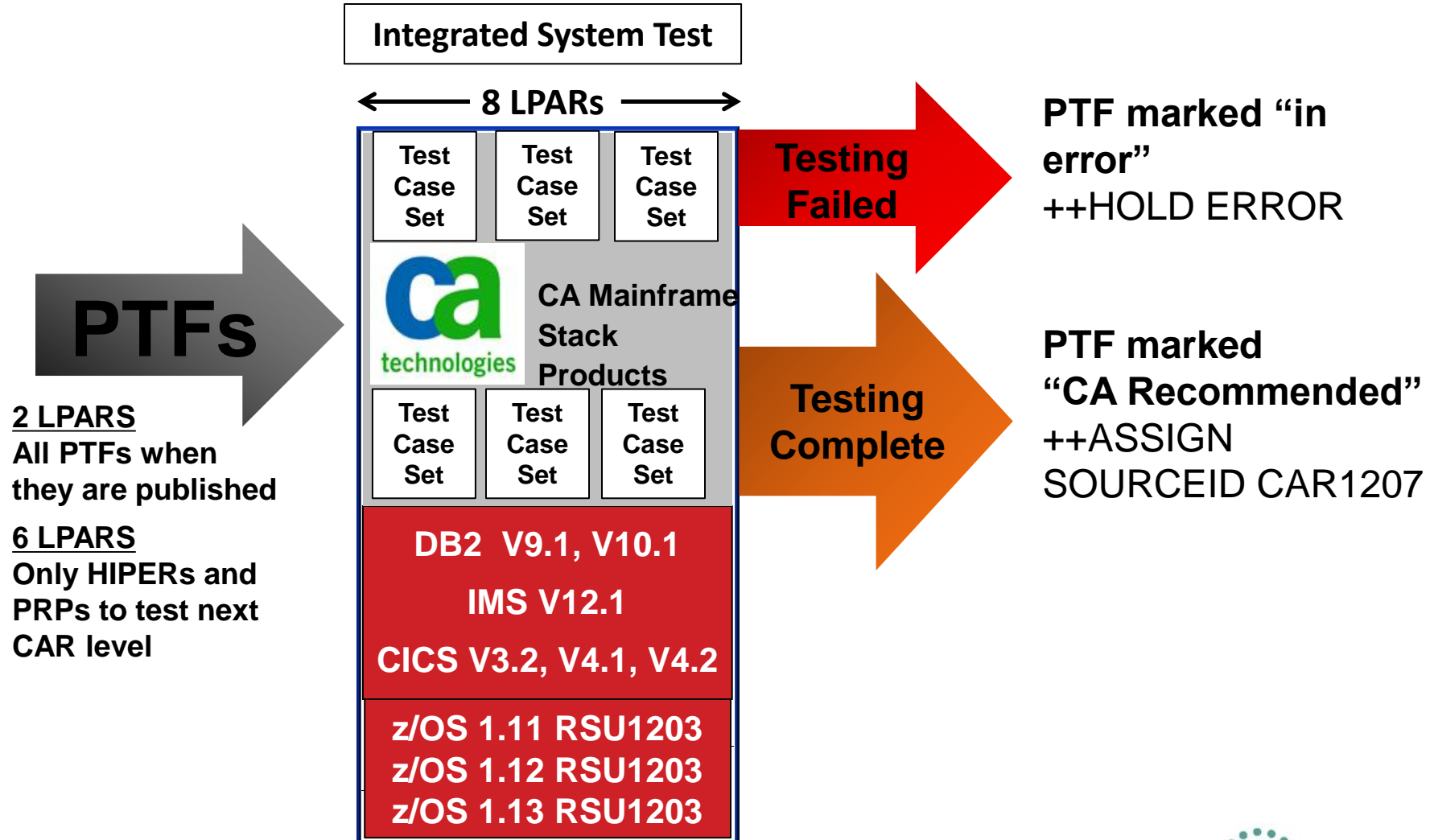
**low risk**

# CA Recommended Service (CA RS)

- CA Recommended Service (CA RS) provides a way to “flag” PTFs that have been tested in IST over a measured time cycle
  - At least 30 days for HIPER or PRP (PE Resolving) PTFs
  - At least 90 days for other PTFs
  - Similar to IBM’s Recommended Service Upgrade (RSU)
- Each quarter (January, April, July, October) we publish:
  - A list of PTFs tested in the IST environment during the previous quarter
    - SMP/E ++ASSIGN SOURCEID(CARyymm) statements
  - A Release Grid showing the IBM software and levels (z/OS releases, RSU levels, etc.) we tested against
- PTFs with a CARyymm SOURCEID that are not held by an ERROR hold are recommended for installation

# Integrated System Test and CA Recommended Service

July 2012 – creating CAR1207





# CA RS Release Grid

- Available from the *CA Recommended Service (CA RS)* CSO page
- For each CAR level, documents what was tested and against what IBM software levels

CA RS Level detail+B16s						IBM software stack used during the testing				
CA RS SOURCEID	Publish Date	PTF Date Range	HIPER/PRP Cutoff Date	CA MSM Level Used	MF 2.0 Stack Level(s)	z/OS Release	RSU Level	DB2 rels	IMS rels	CICS rels
CAR1207	7/5/2012	Jan'12 - Mar'12	May'12	4.1 build 664	2010, 2011 , 2012	1.13	RSU1203	10.1, 9.1	12.1	4.2, 4.1, and 3.2
CAR1207	7/5/2012	Jan'12 - Mar'12	May'12	4.1 build 664	2010, 2011 , 2012	1.12	RSU1203	10.1, 9.1	12.1	4.2, 4.1, and 3.2
CAR1207	7/5/2012	Jan'12 - Mar'12	May'12	4.1 build 664	2010, 2011 , 2012	1.11	RSU1203	10.1, 9.1	12.1	4.2, 4.1, and 3.2
CAR1204	4/4/2012	Oct'11 - Dec'11	Feb'12	3.1 build 228	MF2.0 2010 MF2.0 2011	1.13	RSU1112	9.1	12.1 and 10.1	4.2, 4.1, and 3.2
CAR1204	4/4/2012	Oct'11 - Dec'11	Feb'12	3.1 build 228	MF2.0 2010 MF2.0 2011	1.12	RSU1112	9.1	12.1 and 10.1	4.2, 4.1, and 3.2
CAR1204	4/4/2012	Oct'11 - Dec'11	Feb'12	3.1 build 228	MF2.0 2010 MF2.0 2011	1.11	RSU1112	9.1	12.1 and 10.1	4.2, 4.1, and 3.2
CAR1201	1/5/2012	Jul'11 - Sep'11	Nov'11	3.1 build 228	MF2.0 2010 MF2.0 2011	1.13	RSU1109	9.1	10.1	4.2, 4.1, and 3.2

# installing CA Recommended Service with CA MSM



- Click the **Settings** tab
- Click 'Software Catalog' under the **Systems Settings** tree
- Scroll down to the **CA RS Settings** and **HOLDDATA Settings** at the bottom of the page
- Click the **Update Immediately** buttons under each to download the latest from information from CSO
- Click the **SMP/E Environments** tab
- Click the name of the CSI you want to upgrade
- Click the **Actions** dropdown, then **Upgrade CA RS Level**
- This will launch the **CA RS Installation wizard**
  - CA MSM will automatically download any needed PTFs from CSO

# installing CA Recommended Service without CA MSM

Tip: Use CA MSM instead

1. Download all available PTFs
  - More on this in a minute
2. Download current HOLDDATA and CAR assign statements
  - ftp://ftp.ca.com/pub/HoldData
  - ftp://ftp.ca.com/pub/ASSIGNS/ (published quarterly)
3. RECEIVE and APPLY:

```
//SMPHOLD    DD DSN=holddatafile,DISP=SHR
//SMPPTFIN    DD DSN=ptffile,DISP=SHR
//           DD DSN=carsfile-1,DISP=SHR
//           DD DSN=carsfile-2,DISP=SHR
//           DD DSN=carsfile-n,DISP=SHR
//SMPCNTL     DD *
              SET BDY(GLOBAL).
              RECEIVE.
              SET BDY(target-zone).
              APPLY SOURCEID(CAR*) BYPASS(HOLDSYS) .
```

**Need all quarterly files created since the last CAR install**

# installing CA Recommended Service without CA MSM

getting the latest maintenance

Tip: Use CA MSM instead

- Get a ZIP file from CSO
  - ‘Download Center’ → ‘Published Solutions’
    - Check **Add All to Cart** check box
    - Click ‘View Download Cart’ then ‘Checkout’
  - CSO will create a zip file that contains all selected maintenance

# installing CA Recommended Service without CA MSM

getting the latest maintenance



Tip: Use CA MSM instead

- Download and unzip on your PC – directory contains .bin file PTFs
  - Binary upload each file to z/OS and RECEIVE -or-
  - Use the *CA Concatenate* utility to concatenate the bin files into a single file that can be uploaded and RECEIVE'd
    - 'Download Center' under **Freeware Utilities / Toolbox** section

# installing CA Recommended Service without CA MSM

getting the latest maintenance

Tip: Use CA MSM instead

- FTP the CSO ZIP file to a USS directory on the mainframe
- Run CAUNZIP utility against the ZIP file in USS

COMING  
SOON!

```
//CAUNZIP EXEC PGM=IKJEFT01,DYNAMNBR=10,REGION=0M
//STEPLIB DD DISP=SHR,DSN=&I.LINKLIB
//PTFFILE DD DSN=yourhlq.SMPPTFIN,
//PTFHOLD DD DSN=yourhlq.HOLDDATA,...
//PTFTEXT DD DSN=yourhlq.PTFTEXT,...
//ZIPRPT DD SYSOUT=*,RECFM=FBA
//SYSTSPRT DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//STDOUT DD SYSOUT=*
//STDERR DD SYSOUT=*
//SYSTSIN DD *
CAUNZIP ZIPPATH(/YOUR/USS/PATH/) ZIPFILE(SCARTX.ZIP)
/*
```

Pass this data set to  
SMP/E via the  
SMPPTFIN DDNAME



# Service Packs vs. CA Recommended Service

Service Packs	CA Recommended Service
Self-contained maintenance package for a specific product	<ul style="list-style-type: none"> <li>PTFs (acquire via CA MSM PAS or ZIP file from CSO)</li> <li>CAR files (++ASSIGN statements)</li> <li>HOLDDATA files (++HOLD ERROR stmts)</li> </ul>
<ul style="list-style-type: none"> <li>Provided by each individual product team for that product only</li> <li>Can have significant packaging differences between products</li> </ul>	Provided across all CA Mainframe Stack products in a common way using standardized packaging
Inconsistent delivery schedule	Consistent delivery each quarter
Must upgrade to the Service Pack level	Upgrade to any available CA RS level desired
Tested by the individual product QA team	Tested in IST with all Mainframe Stack products against various IBM software levels
Once included, PTF cannot be removed from a service pack	PTF can be removed from recommended status at any time by marking it PE

# FIXCAT exploitation

- FIXCAT
  - New type of HOLD to identify PTFs needed for:
    - New hardware levels (e.g. z196, z114)
    - New software levels (e.g. z/OS 1.13, DB2 V10)
    - New functionality (e.g. IPv6)
    - Etc...
  - SMP/E support was introduced in SMP/E 3.5
  - Category names define the support provided
    - Category assigned as SOURCEID to “fixing” PTF when FIXCAT HOLD is RECEIVED



# FIXCAT exploitation

- CA Technologies use of FIXCAT
  - CA began issuing FIXCAT HOLDS for CA products in July 2011
  - FIXCAT type ++HOLDS are included with ERROR ++HOLDS  
<ftp://ftp.ca.com/pub/HoldData>
  - Eliminates manual product-by-product research checking UPGRAD solutions and other “upgrade lists” on CSO
  - Just RECEIVE available PTFs and current HOLDDATA and APPLY fixes for desired categories



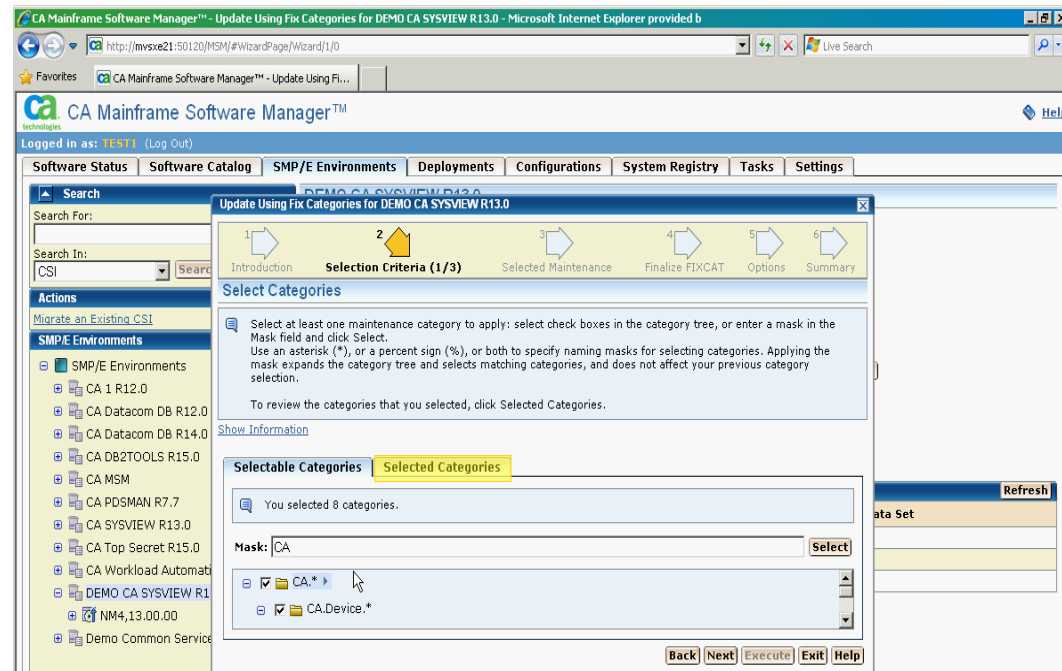
# FIXCAT categories provided by CA

CA.Device.Server.z10-BC-2098	CA.TargetSystem-RequiredService.CICS.V4R1
CA.Device.Server.z10-BC-2098.zIIP	CA.TargetSystem-RequiredService.CICS.V4R2
CA.Device.Server.z10-EC-2097	CA.TargetSystem-RequiredService.DB2.V9
CA.Device.Server.z10-EC-2097.zIIP	CA.TargetSystem-RequiredService.DB2.V10
CA.Device.Server.z196-2817	CA.TargetSystem-RequiredService.IMS.V10
CA.Device.Server.z114-2818	CA.TargetSystem-RequiredService.IMS.V11
CA.Function.EAV	CA.TargetSystem-RequiredService.z/OS.V1R11
CA.Function.HealthChecker	CA.TargetSystem-RequiredService.z/OS.V1R12
CA.Function.IPv6	CA.TargetSystem-RequiredService.z/OS.V1R13

Partial list - see the *FIXCAT* page on CSO for complete (and current) list.

# Installing FIXCAT PTFs with CA MSM

1. Click on 'SMP/E Environments' Tab
2. Click on name of desired CSI
3. Click 'CSI Information' Link
4. Click 'Update Using Fix Categories' Button
5. Follow steps in the Fix Categories Wizard



The Fix Categories Wizard will walk you through the process of installing FIXCAT PTFs with CA MSM. It will allow you to select FIXCAT categories from the available categories, download and RECEIVE any missing maintenance, and will apply the FIXCAT PTFs.

# installing FIXCAT PTFs without CA MSM

1. Download and RECEIVE all available PTFs and current HOLDDATA as discussed in *Installing CA Recommended Service*
2. APPLY using the desired FIXCAT category as the SOURCEID Example: Install all PTFs required for z/OS 1.13

```
//SMPCNTL DD *  
SET BDY(target-zone).  
APPLY SOURCEID(CA.TargetSystem-RequiredService.z/OS.V1R13)  
GROUPEXTEND BYPASS(HOLDSYS) .
```



# for more information: CA Support Online page



## CA Support Online – Main Page

CA Support Online

Support > Home

### Support

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- CA ARCserve® D2D
- CA ARCserve® D2D On Demand
- CA ARCserve® RHA (formerly CA XOsoft™)
- CA Access Control

Link to Mainframe 2.0 page

# for more information: CA Support Online page

## *maintenance for CA Technologies z/OS-based products*

CA Mainframe 2.0 - Mozilla Firefox

File Edit View History Bookmarks Tools Help

ca.com https://support.ca.com/phpdocs/0/8319/mainframe20\_support.html

CA Mainframe 2.0

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Businesses are constantly challenged to find new ways to lower costs, sustain critical skills, and increase agility. Mainframe 2.0 from CA Technologies is a revolutionary mainframe management strategy that can increase platform value and performance, and dramatically simplify mainframe management.

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- [Download Error HOLDDATA](#)
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**Other Mainframe 2.0 Initiatives**

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Links to detailed information about new maintenance topics

# Summary

- Our Next-Generation Mainframe Management initiative has implemented changes that improve quality and offer greater maintenance installation options for CA Mainframe Stack products
  - *Integrated System Test (IST)* provides an additional level of testing in varied environments that include different releases of z/OS, DB2, CICS, etc.
  - *CA Recommended Service* provides highly-tested preventive maintenance at predictable intervals
  - *FIXCAT* simplifies the research and effort to upgrade CA products to support new hardware, software releases, functionality, etc.
- CA MSM, in conjunction with the above enhancements, can dramatically simplify the installation and maintenance of CA Mainframe Stack products!

# THANK YOU!

- Please fill out your session evaluation!
  - Session number is 11846
  - Your vote counts!
- <http://support.ca.com>
- [Gregory.Shriver@ca.com](mailto:Gregory.Shriver@ca.com)



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