#### Mainframe 2.0 from CA Technologies:

Simplifying the Installation, Deployment and Configuration of CA Technologies Products for z/OS (The Final Chapter)

Session 09679

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**Nigel Forbes – CA MSM Architect** 





#### abstract

In this session you will learn how, even with little or no mainframe experience, you can quickly automate and streamline your CA Technologies product acquisition, installation, deployment, configuration and maintenance with CA Mainframe Software Manager™ (CA MSM), a major component of CA Technologies Mainframe 2.0 strategy. The speaker will demonstrate this amazing technology innovation that can help you get more from your mainframe investments and quickly deliver value through an enhanced customer experience



#### agenda

- Datacenter Challenges and Mainframe 2.0 Strategy
- The Journey
- CA MSM Overview
- Demonstration
- Looking ahead
- Q&A



#### **CA Technologies mainframe strategy**

#### Change the way the mainframe is managed forever!

#### **Challenges**

- Control Costs
- Sustain Critical Skills
- Increase Agility

#### **Strategy**

- Maximize Value
- Simplify Management
- Practical Innovation



#### enabling a new generation of mainframe managers

Vendor
Software
Lifecycle
Management

NextGeneration
Mainframe
Management

#### **Vendor Software Lifecycle Management**

—CA Mainframe Software Manager™

#### **Next-Generation Mainframe Management**

-CA Mainframe Chorus

Customer
Application
Design and
Deployment

Sustain Critical Skills

#### **Customer Application Design & Deployment**

-CA 3Tera AppLogic

#### **Sustain Critical Skills**

-CA Mainframe Academy







## Mainframe Software Management the journey

- Aggressive three-year journey to deliver on our promises and the virtues of the platform
- Delivering a new mainframe software management experience
- Delivering a CA Mainframe Stack

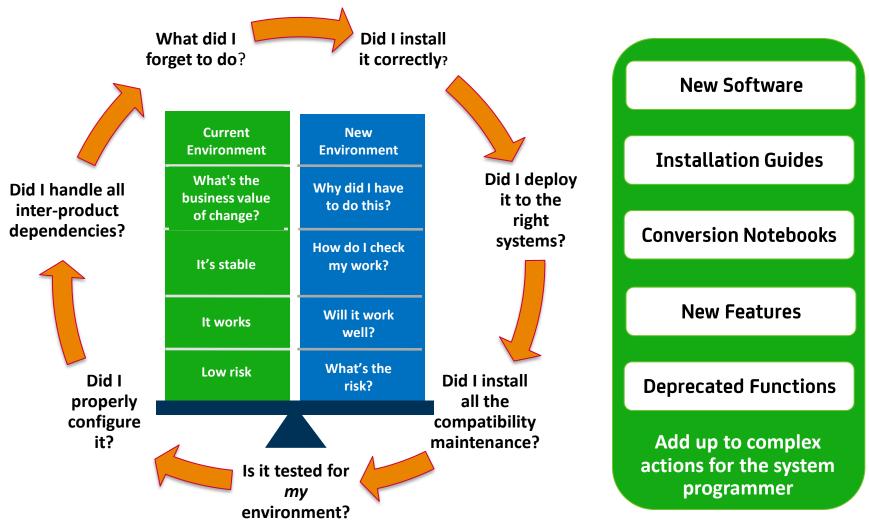
#### 2009 2010 2011 CA MSM r2.0 CA MSM r3.0 CA MSM r4.0 Software Deployment Software Product Acquisition **Configuration Service** and Software **Service Installation Services** Service Enablement Serviceability Features Health Checks ■ More Health Checks More Health Checks Best Practice Guides Integrated System ■ The CA Mainframe **Testing** Stack IVPs and EVPs

#### Continued Innovation, New Products, Technology Exploitation



#### install, deploy, configure and maintain

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#### reducing complexity = improved QoS

#### Reducing choice:

- Enables the product to better enforce "best practices" for product installation and configuration
- Reduces the likelihood of a systems programmer making an error or misinterpreting instructions

■ Enabling a product (or providing a structure) to handle activities normally tackled by system programmers eliminates errors and automates the enforcement of standards

Both sides of the equation improve the experience of the platform

Both are crucial to reduce the skills requirement while not compromising the strengths of the z/OS platform



## CA MSM Overview



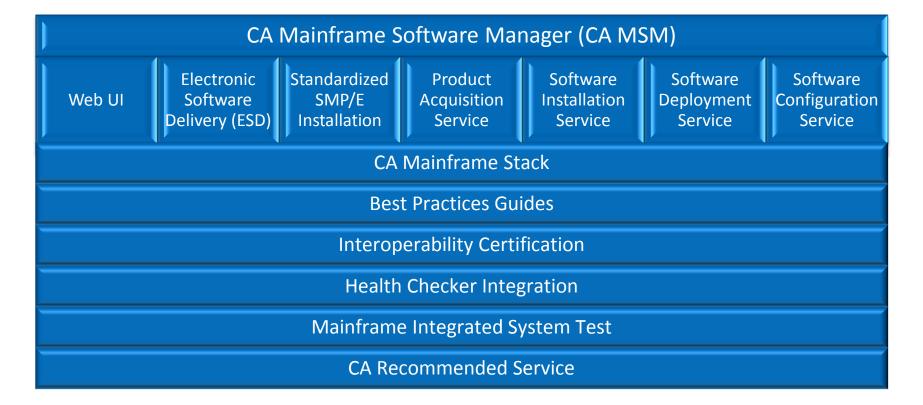
#### **CA MSM major components**

**Promises Made** 

Simplification through Automation

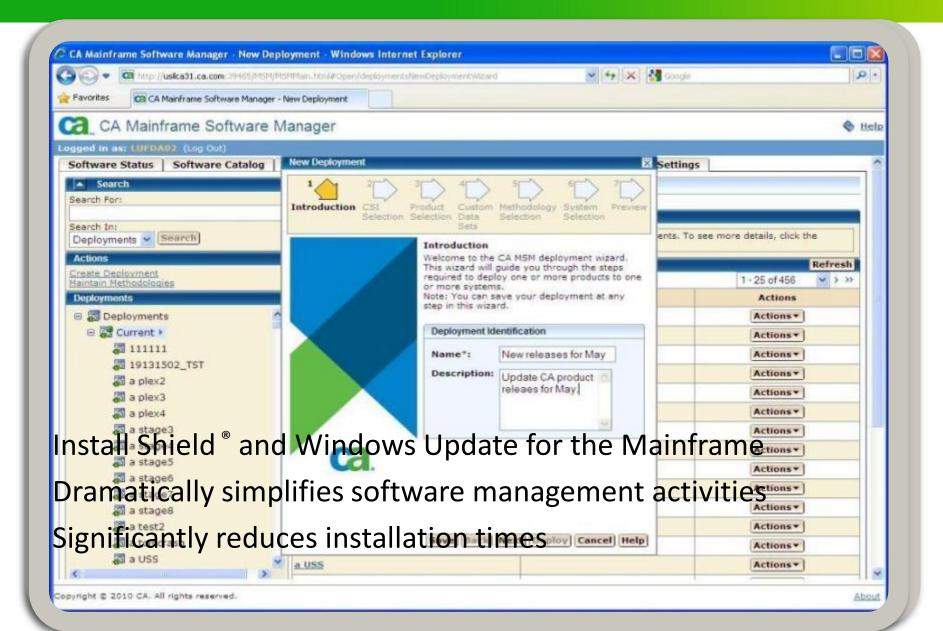
**Promises Kept** 

Mainframe Software Management





## simplify management: CA Mainframe Software Manager (CA MSM)

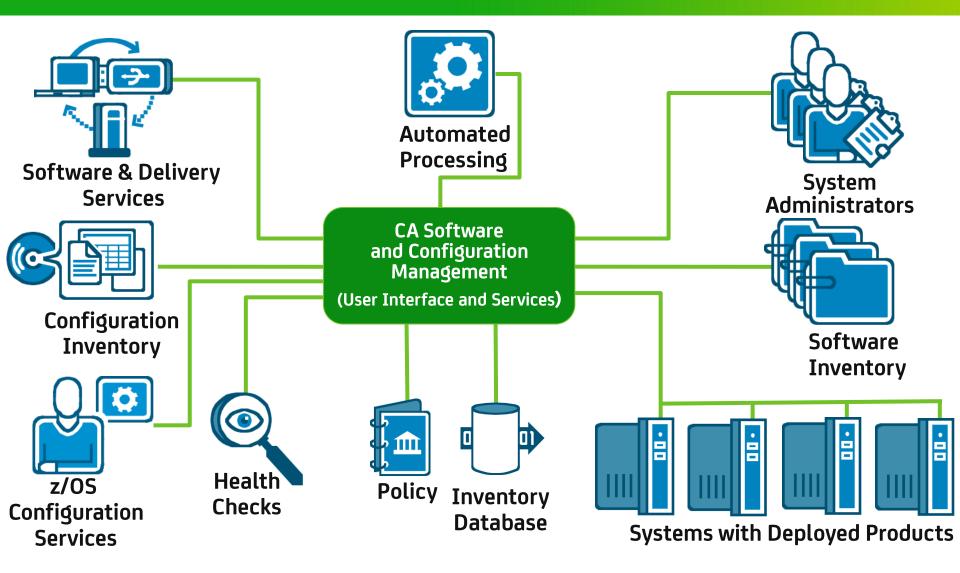


#### what does CA MSM do?

- Downloads software products and service from CA Support Online
  - Includes other artifacts (e.g. PDFs, letters, etc.)
- Creates CSIs
- Evaluates and installs software into CSIs
- Evaluates and installs maintenance into CSIs
- Adds "External Maintenance"
  - e.g. ++APARs, ++USERMODS
- Installs "External Package"
  - e.g. Beta products, other vendor products
- Migrates existing CSIs
- Maintains relationships between products and CSIs



#### **CA MSM architecture**





## CA MSM proof points



#### **CA MSM time savings – installation**

Time to <u>mistate</u> to maintaine Applications								
Product	Mainframe Expert Install			Mainframe Novice Install				
	Traditional	With CA MSM	Improve- ment	Traditional	With CA MSM	Improve- ment		
CA 1® Tape Management	36 min	9 min	4X	3 hrs 12 min	14 min	14X		
CA Auditor for z/OS	26 min	7 min	4X	2 hrs 22 min	8 min	18X		
CA Datacom®	1hr 14 min	6 min	12X	3 hrs 8 min	10 min	19X		
CA JARS Resource Accounting	37 min	5 min	7X	1 hr 11 min	6 min	12X		
CA Librarian®	28 min	2 min	14X	1 hr 13 min	6 min	12X		
CA MIM™ Resource Sharing	30 min	5 min	6X	1 hr 31 min	5 min	18X		
CA OPS/MVS® Event Management and	36 min	6 min	6X	1 hr 50 min	7 min	16X		

Time to Install 10 Mainframe Applications

87% productivity gains for mainframe experts and 94% for novices! \*\*

18X

8X

12X

<u>8X</u>



14X

12X

40X

**17X** 

5 min

6 min

6 min

**73 min** 

54 min

40 min

38 min

6 hrs 39 min

3 min

5 min

3 min

**51 min** 

**Totals** 

Automation

CA Panyalet®

**CA SMF Director** 

CA SymDump<sup>®</sup> for CICS

1 hr 11 min

1 hr 10 min

4 hrs 3 min

20 hrs 51 min

#### **CA MSM time savings – maintenance**

Time to Install Maintenance for 7 Mainframe Applications								
Product	Number of Fixes	Mainframe Expert Install			Mainframe Novice Install			
		Traditional	With CA MSM	Improve -ment	Traditional	With CA MSM	Improve -ment	
CA Auditor for z/OS	14	23 min	1 min 22 sec	17X	41 min	1 min 30 sec	27X	
CA Cleanup for CA ACF2™	1	6 min	38 sec	10X	33 min	1 min 13 sec	27X	
CA Easytrieve®	9	24 min	1 min 24 sec	17X	60 min	1 min 59 sec	31X	
CA Endevor® Software Change Manager	19	32 min	5 min 5 sec	7X	46 min	10 min 2 sec	5X	
CA Librarian®	15	45 min	1 min 58 sec	23X	38 min	2 min 55 sec	13X	
CA Panvalet®	12	27 min	1 min 39 sec	17X	62 min	2 min 25 sec	26X	
CA View®	4	32 min	1 min 48 sec	18X	37 min	1 min 39 sec	22X	
<u>Totals</u>		<u>3 hrs 09 min</u>	<u>13 min 54 sec</u>	14X	<u>5 hrs 17 min</u>	<u>21 min 43 sec</u>	15X	

93% productivity gains for mainframe experts and 94% for novices! \*\*

**Source: CA Technologies Lab Results** 



#### **CA MSM time savings – deployment**

Time to <u>Deploy</u> 10 Mainframe Applications								
Product	To A Single Remote System			To Six Remote Systems				
	Traditional	With CA MSM	Improve- ment	Traditional	With CA MSM	Improve- ment		
CA 1 Tape Management	55 min	2 min 9 sec	25X	2 hr 30 min	5 min 45 sec	26X		
CA 11™ Workload Automation	45 min	1 min 56 sec	23X	1 hr 45 min	3 min 32 sec	30X		
CA Cleanup for CA ACF2	39 min	1 min 52 sec	21X	1 hr 22 min	3 min 22 sec	24X		
CA Copycat	37 min	2 min 1 sec	18X	1 hr 20 min	3 min 15 sec	25X		
CA Deliver™	36 min	2 min 17 sec	16X	1 hr 17 min	5 min 36 sec	14X		
CA Endevor SCM	55 min	3 min 19 sec	17X	2 hr 10 min	11 min 24 sec	11X		
CA NetMaster® Suite	1 hr 15 min	6 min 5 sec	12X	3 hr 20 min	21 min 58 sec	9X		
CA SYSVIEW® Performance Management	1 hr 40 min	4 min 16 sec	23X	5 hr 10 min	13 min 42 sec	22X		
CA TPX	43 min	3 min 41 sec	12X	1 hr 10 min	11 min 1 sec	6X		
CA View	58 min	6 min 19 sec	9X	2 hr 40 min	13 min 55 sec	12X		
<u>Totals</u>	<u>9 hrs 3 min</u>	<u>33 min 55 sec</u>	<u>16X</u>	<u>22 hr 44 min</u>	<u>93 min 30 sec</u>	<u>15X</u>		

93% productivity increase using CA MSM for Deployment! \*\*

Source: CA Technologies Lab Results



# recent key deliverables



### **CA MSM V4.0 GA June 2011**

- CA MSM V4.0.0
  - Enhanced SIS/SDS features
  - Configuration support for new installations of CA products only
    - Functionality to use and validate with the supported products
- CA MSM V4.1 in Nov 2011 will include enhanced features and many more configurable products
- Java
  - 64 bit Java support
  - Java 6.0.1 support, leveraging z196 instructions
- Datacom r12
  - Offloads to zIIP processors



### CA MSM v4.0 usability enhancements and features

- CA MSM Software Deployment Service (SDS)
  - SDS Methodology Create/Delete, including allowing for the use of unit/volser information for more granularity and user control of the product deployment process
  - Improve the SDS Wizard to allow for changes/edits to remote credentials, methodologies and data destinations within the Wizard; also include print capability for Summary
  - User symbolics for all data set nodes for deployment



### CA MSM v4.0 usability enhancements and features

- CA MSM Software Configuration Services (SCS)
  - New deployments and new configurations for a select set of products
  - Populate environmental variables from manual entry or from System Registry
  - Populate product variables
  - Configuration summary report
  - Implement configuration
  - Delete configuration



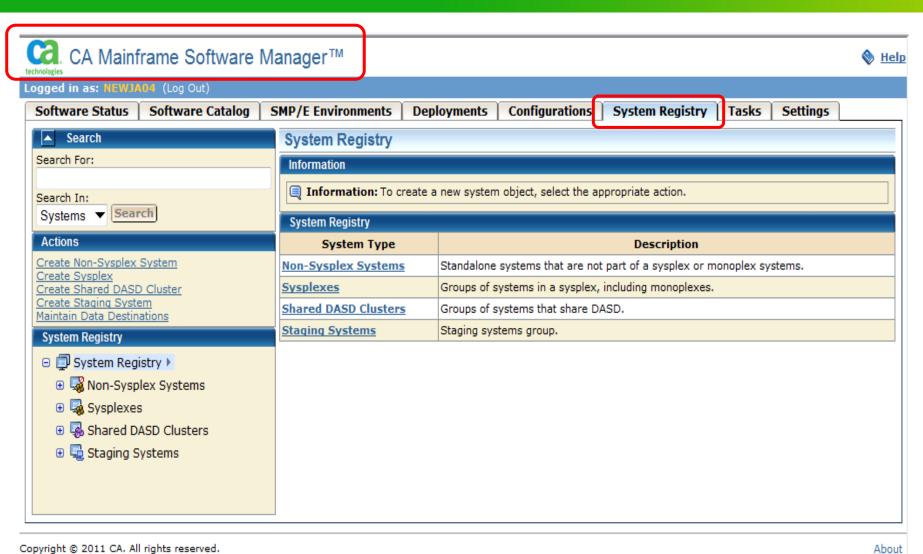
## CA MSM Demonstration

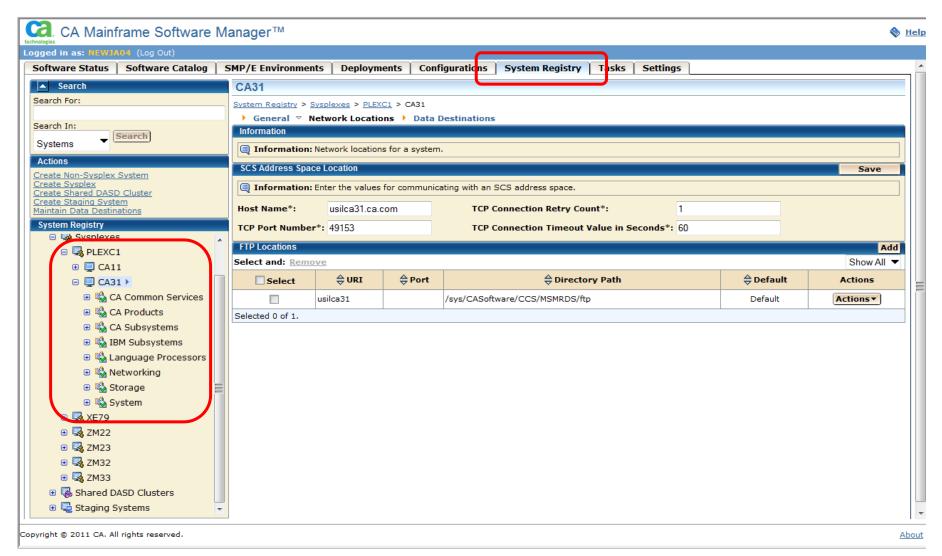


## MSM v4.0 UI changes for product configuration

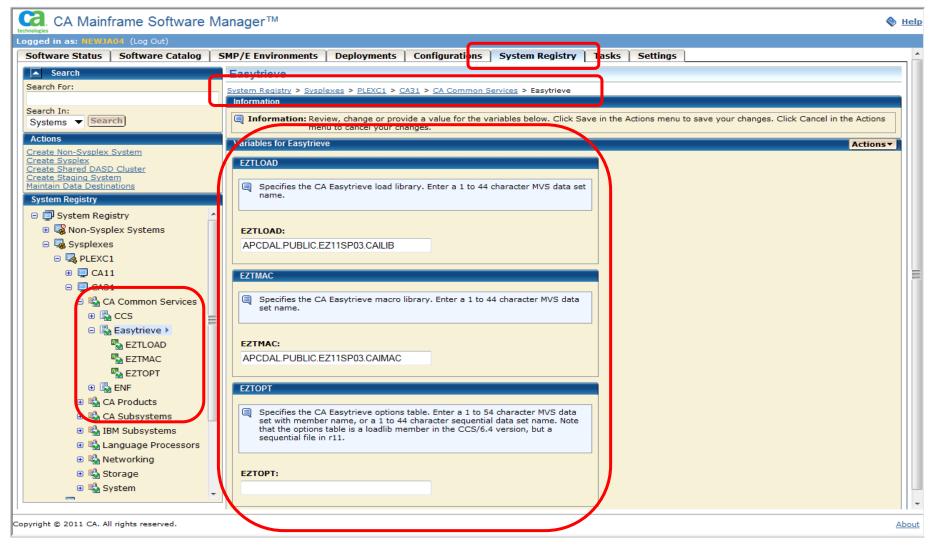
- System Registry
- Deployment (MSM UI and Processing)
- Configuration (Create, Validate, Implement)
- > Task Manager

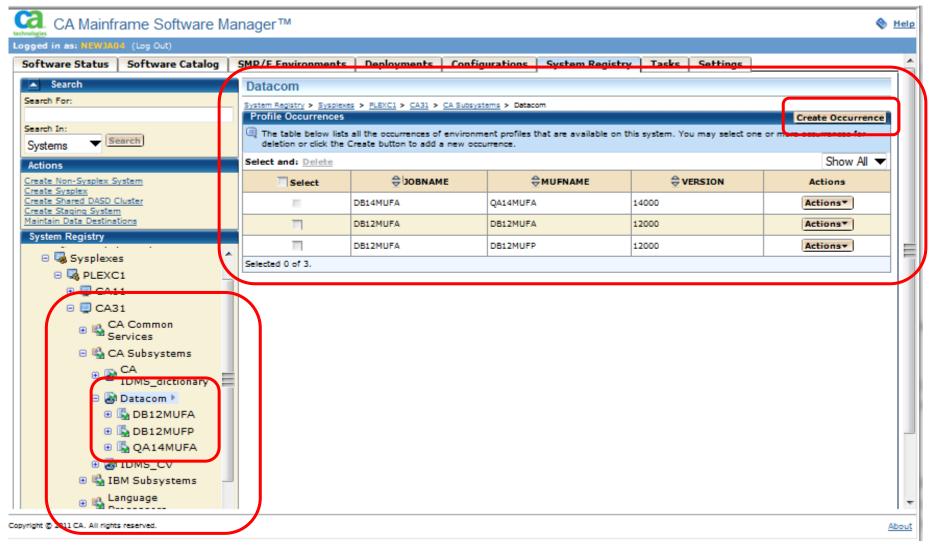


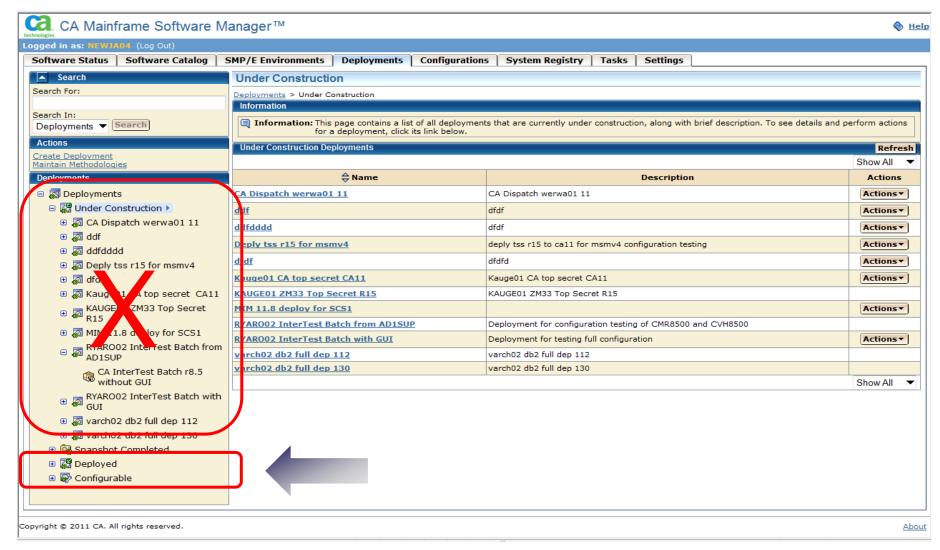




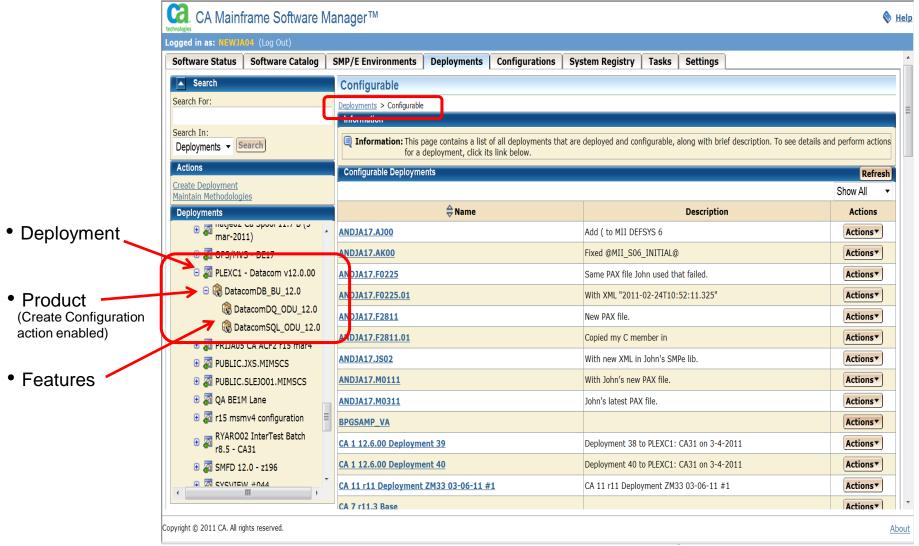






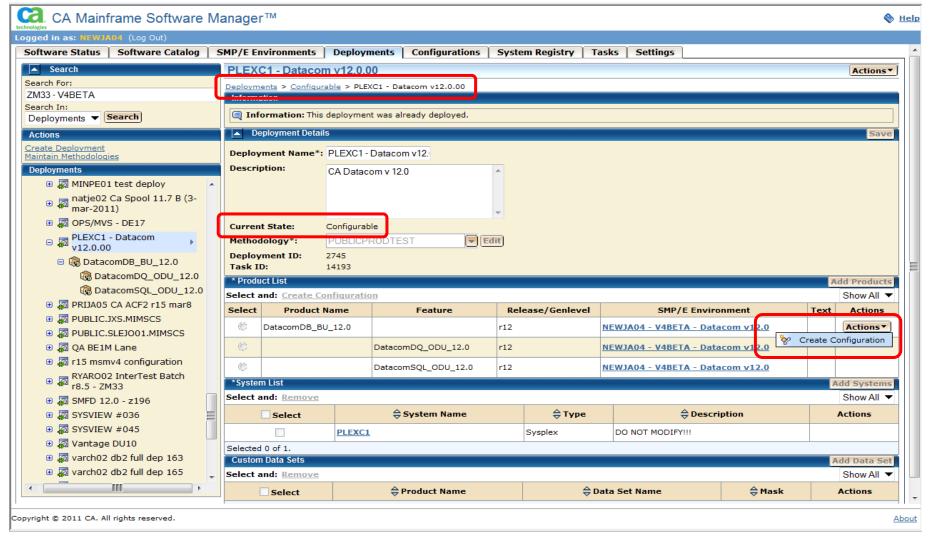




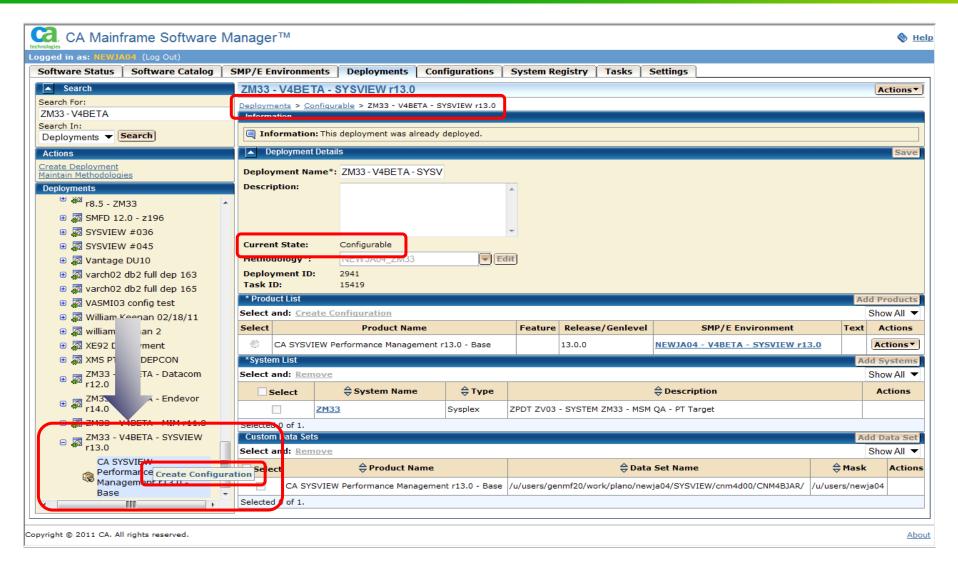


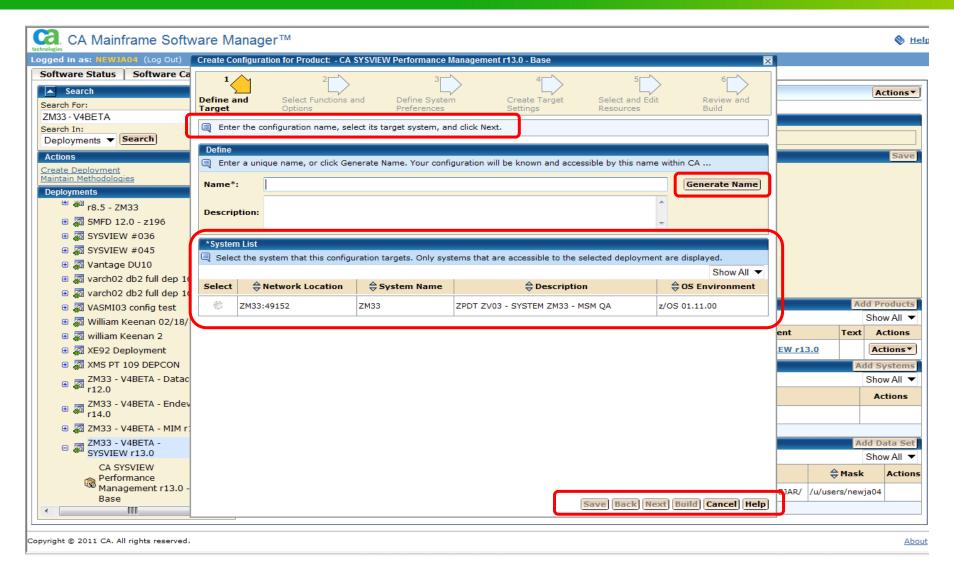


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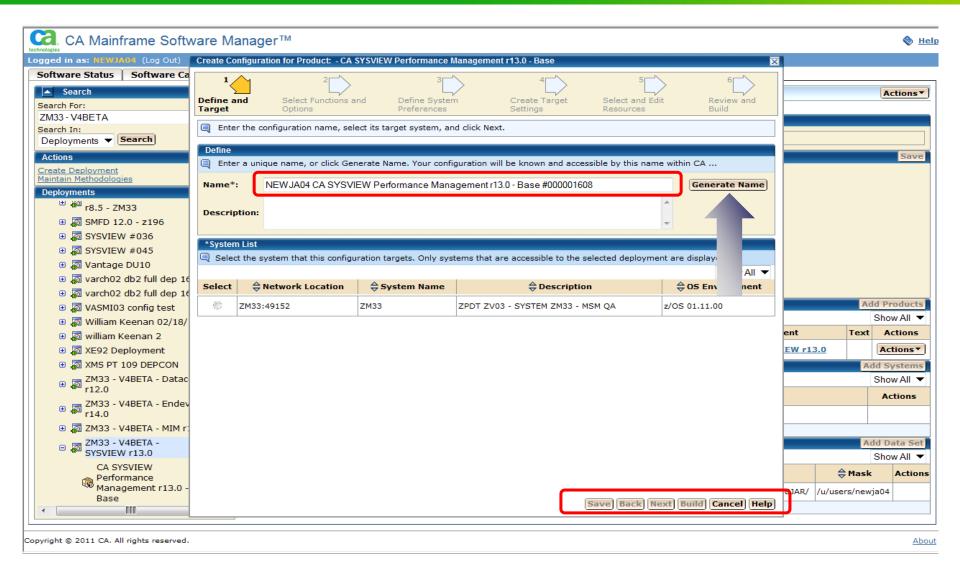


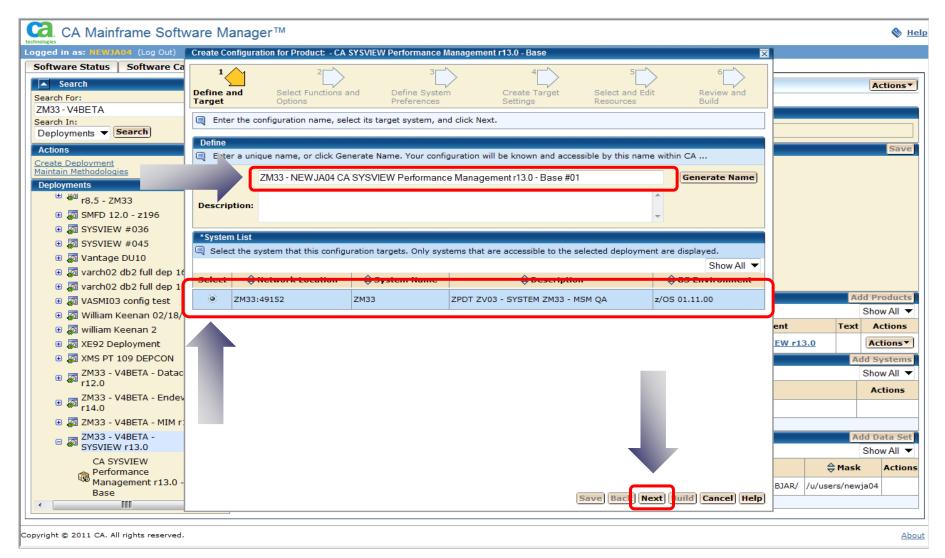




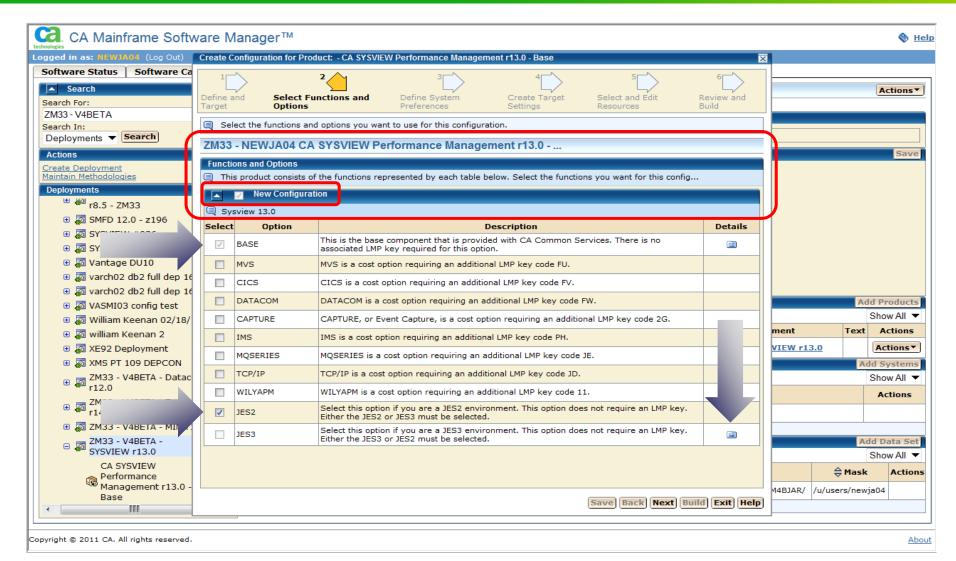


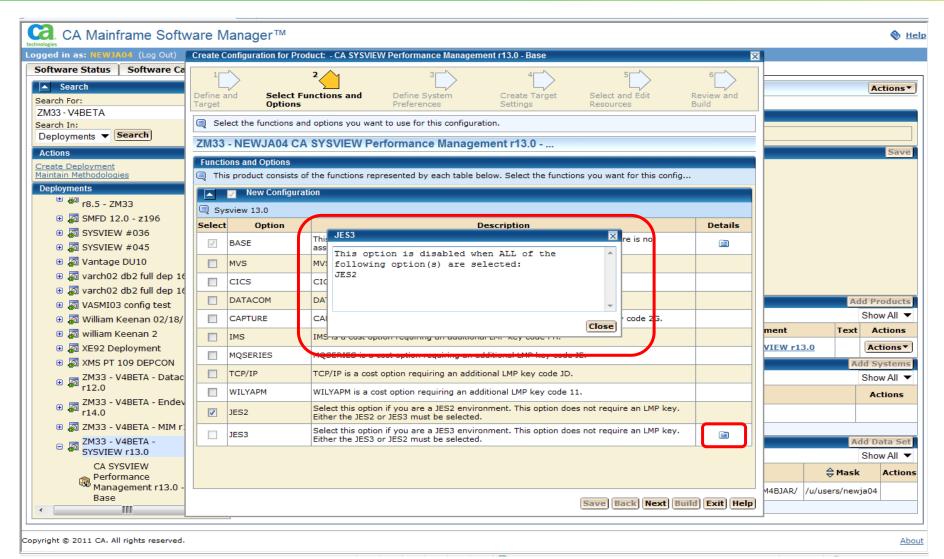


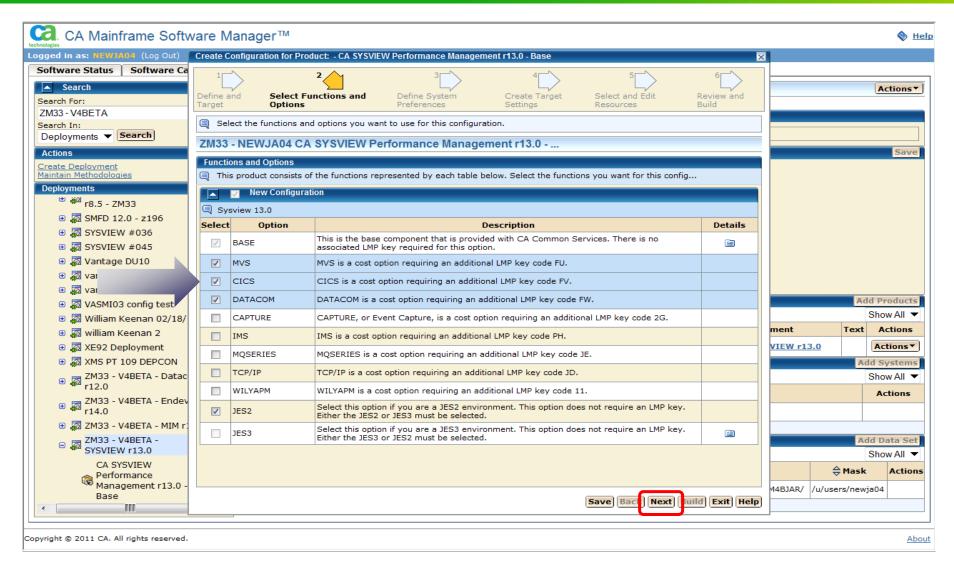


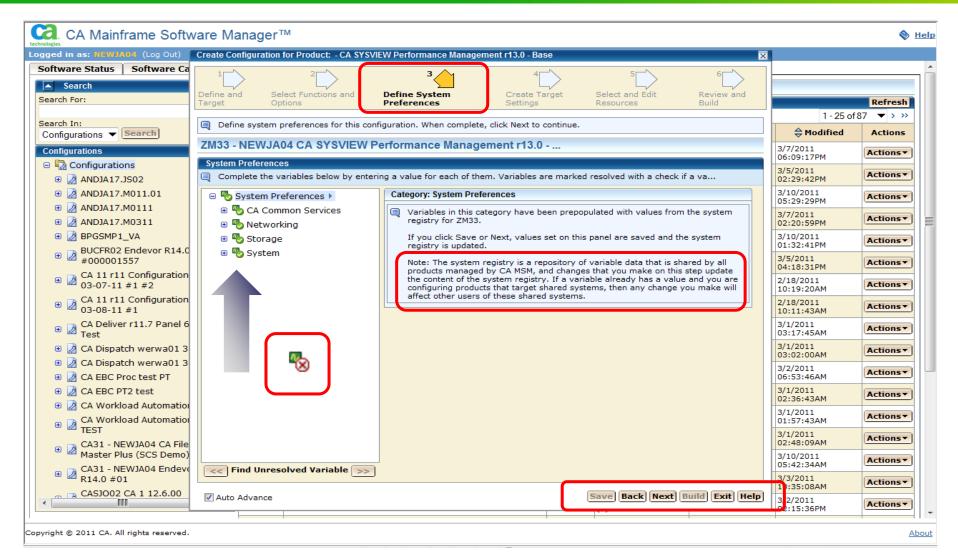


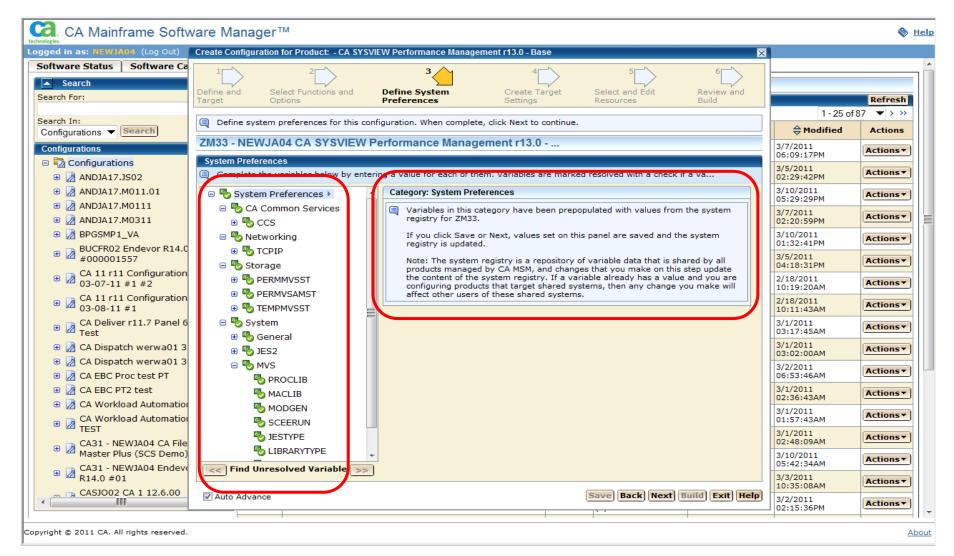




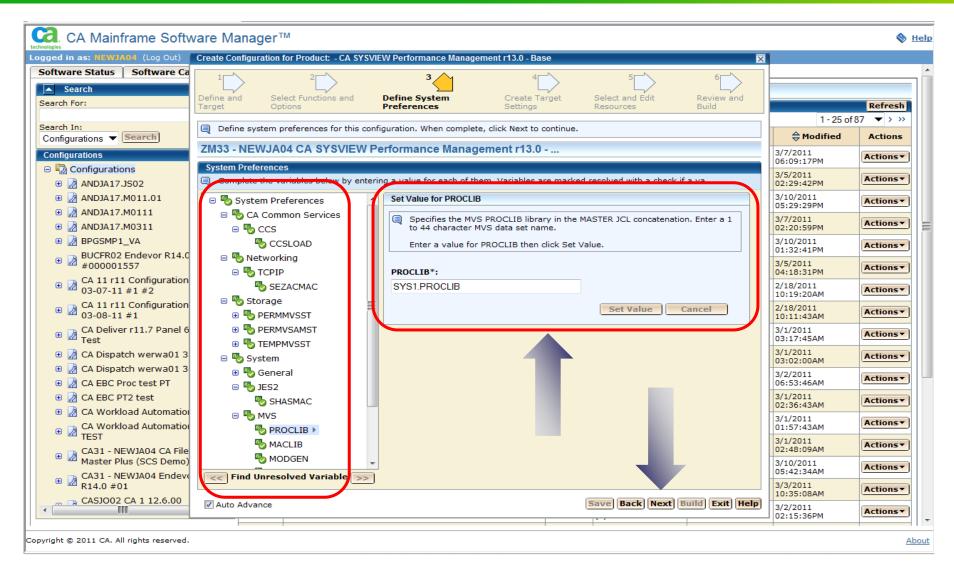


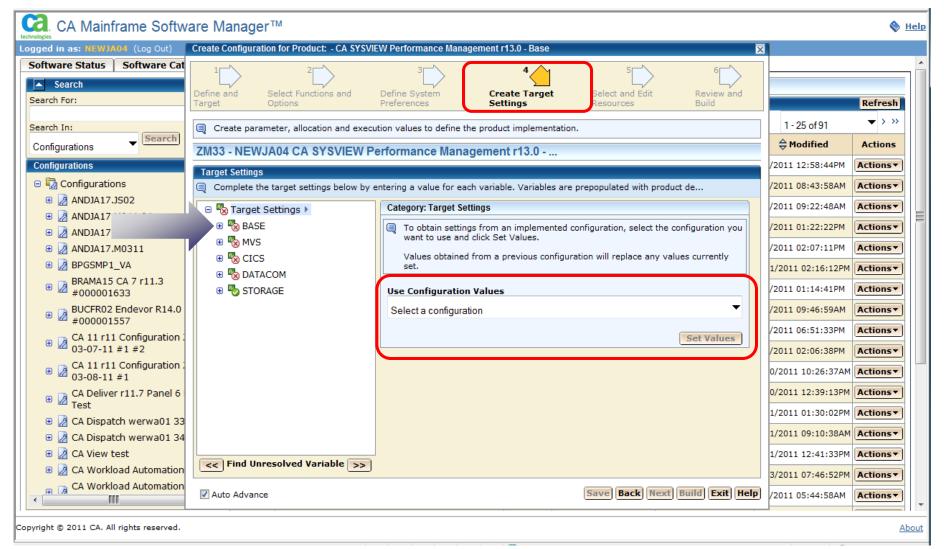


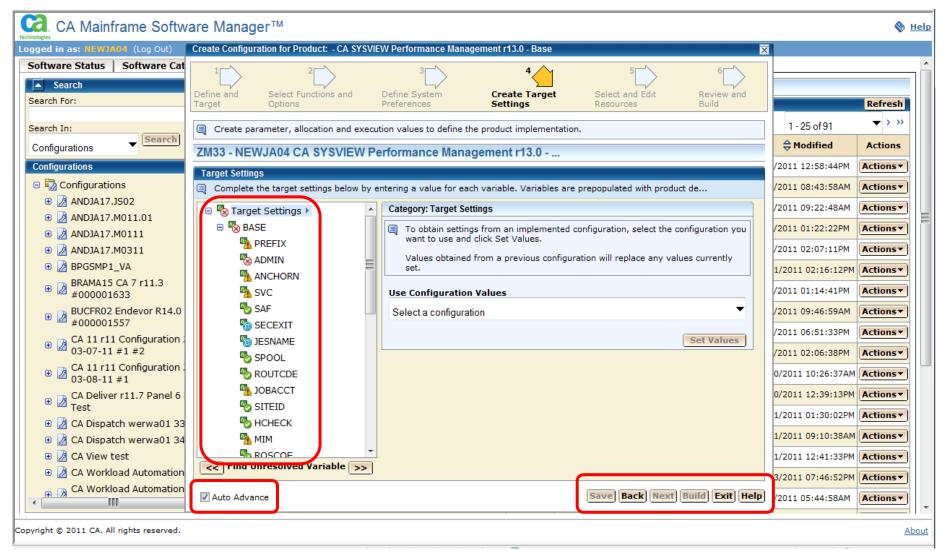




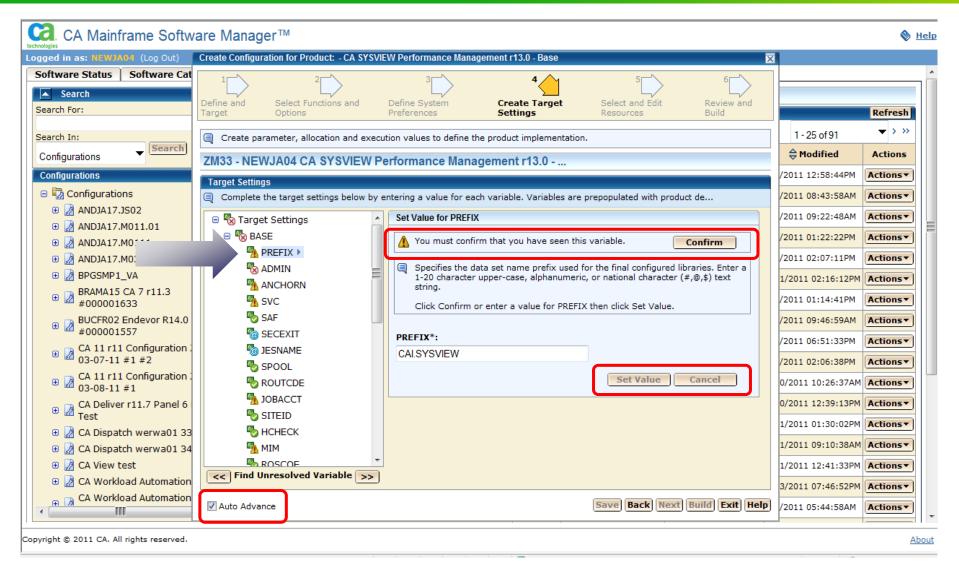


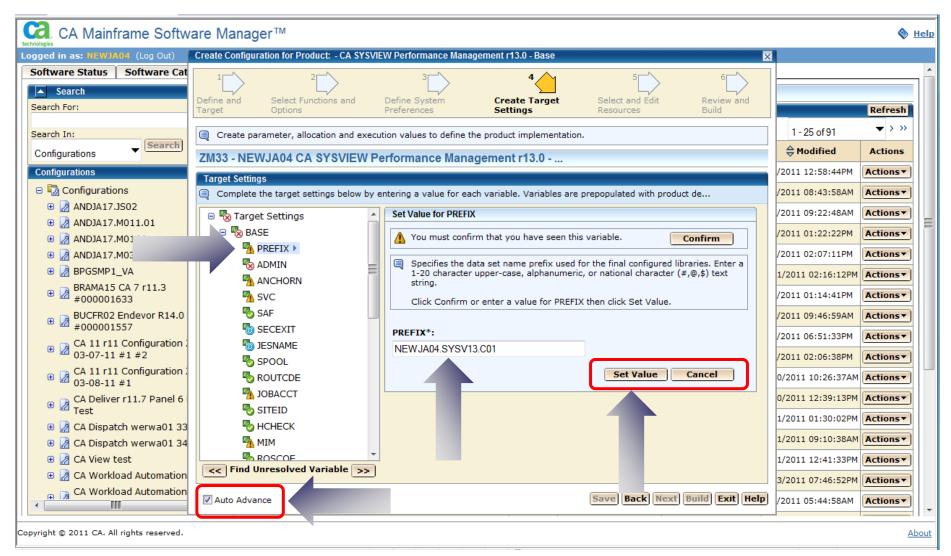


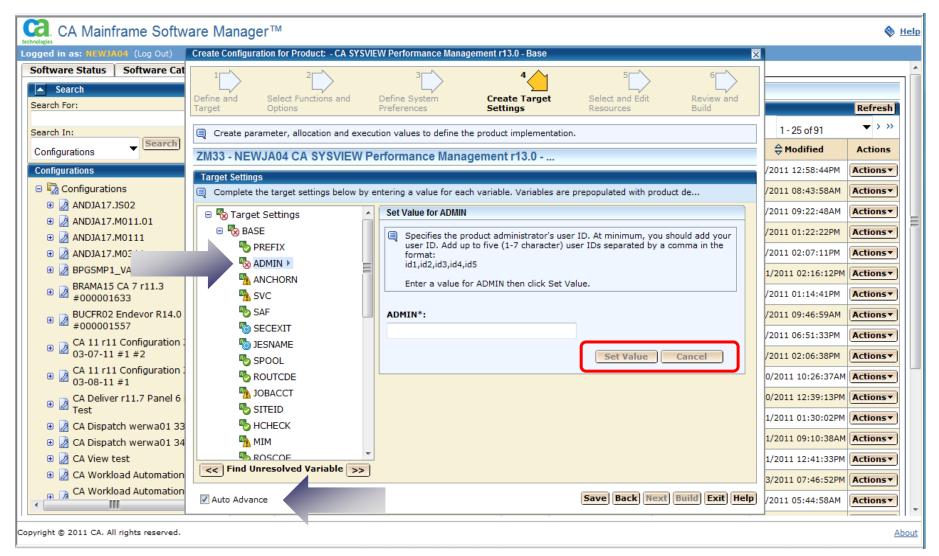




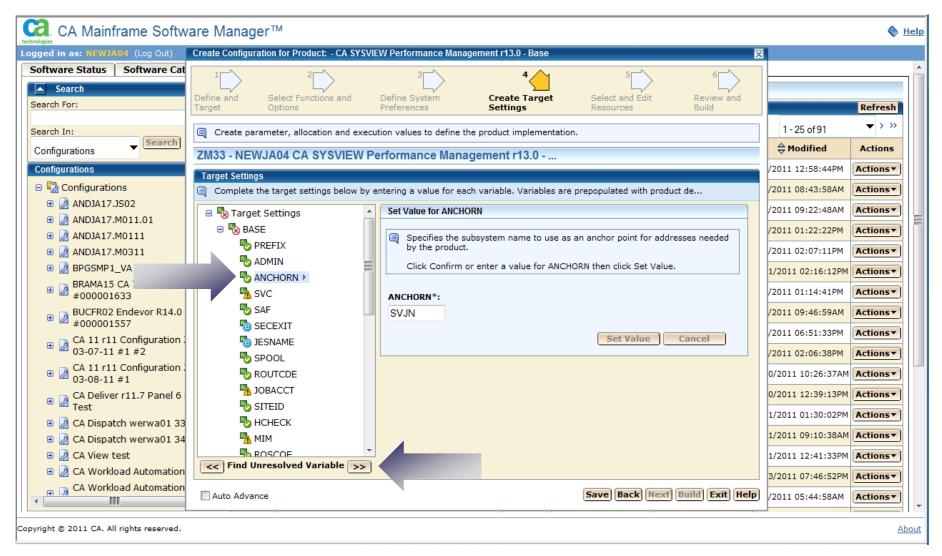
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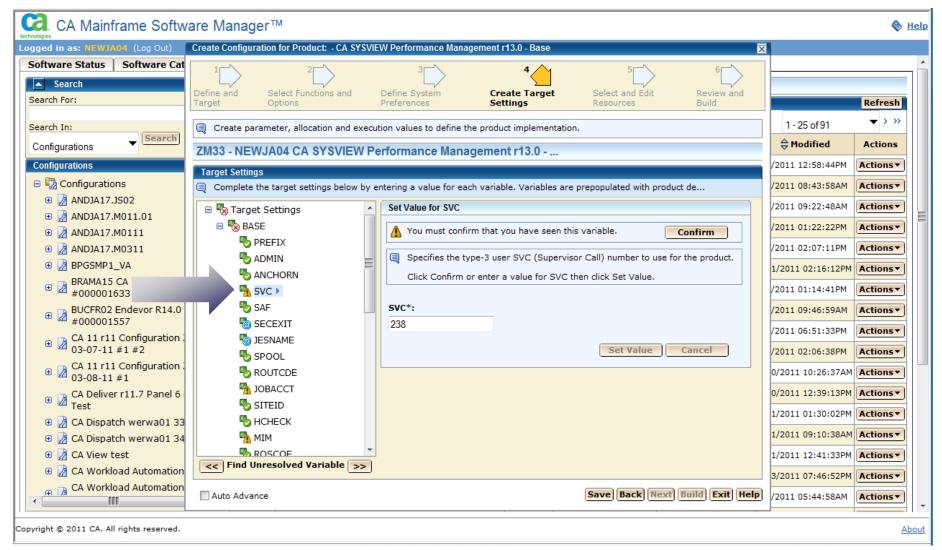






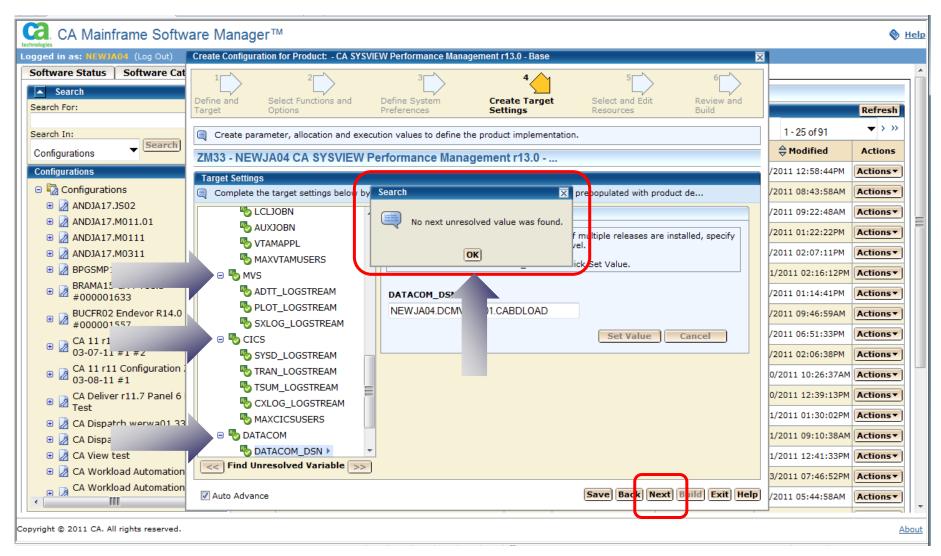




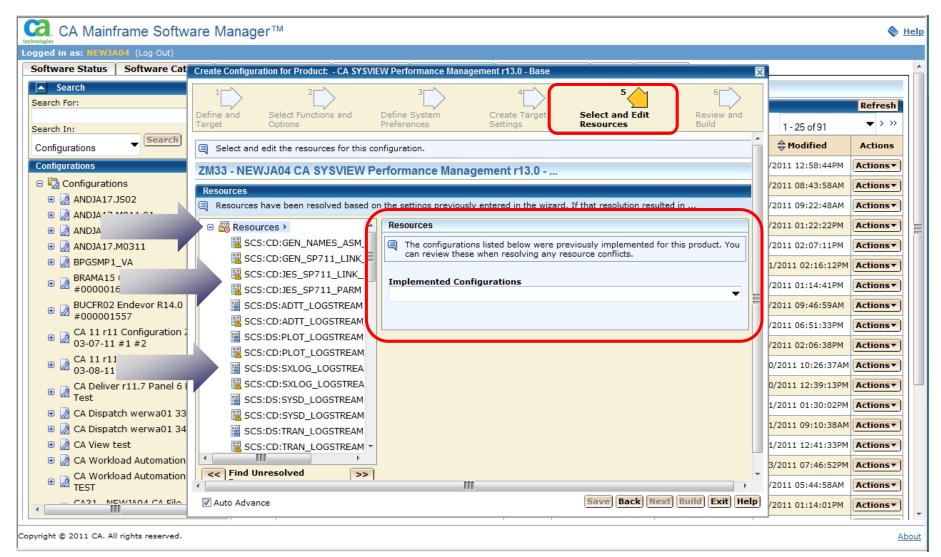


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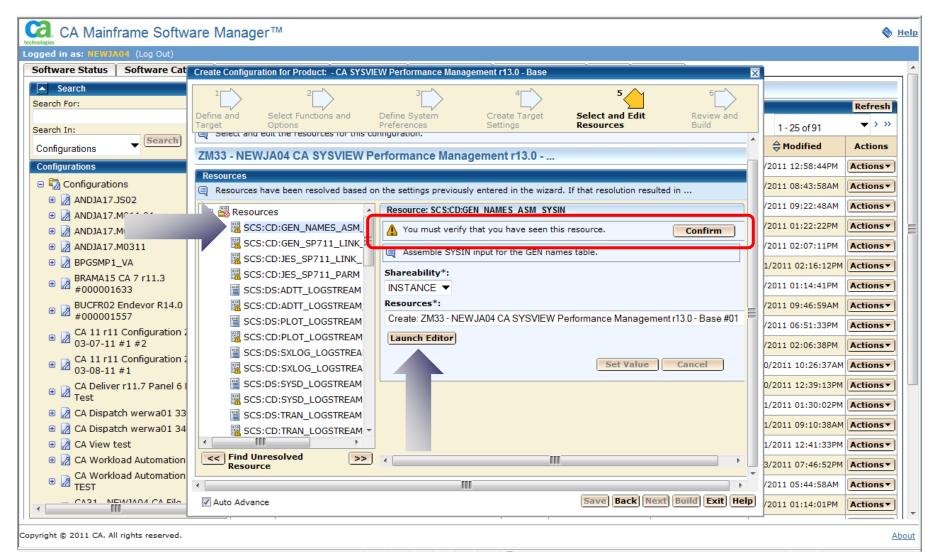
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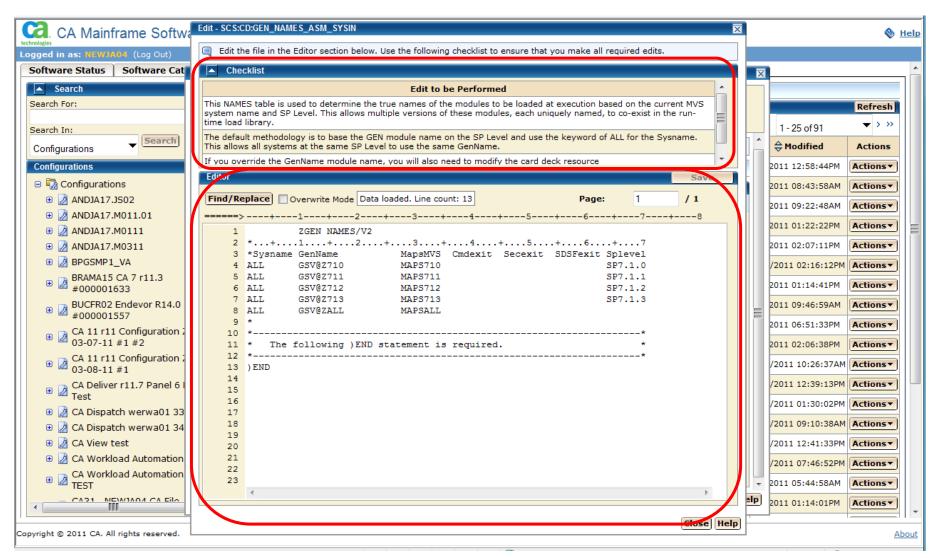


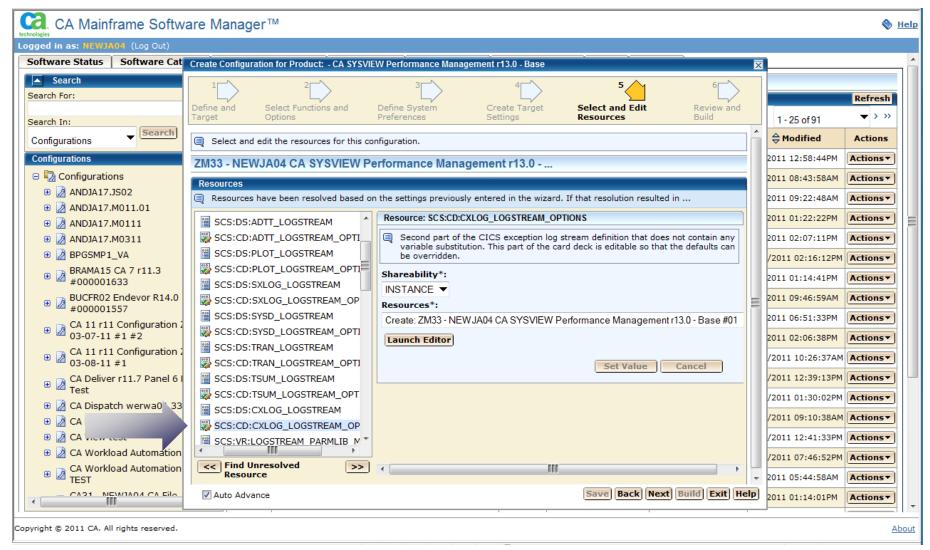




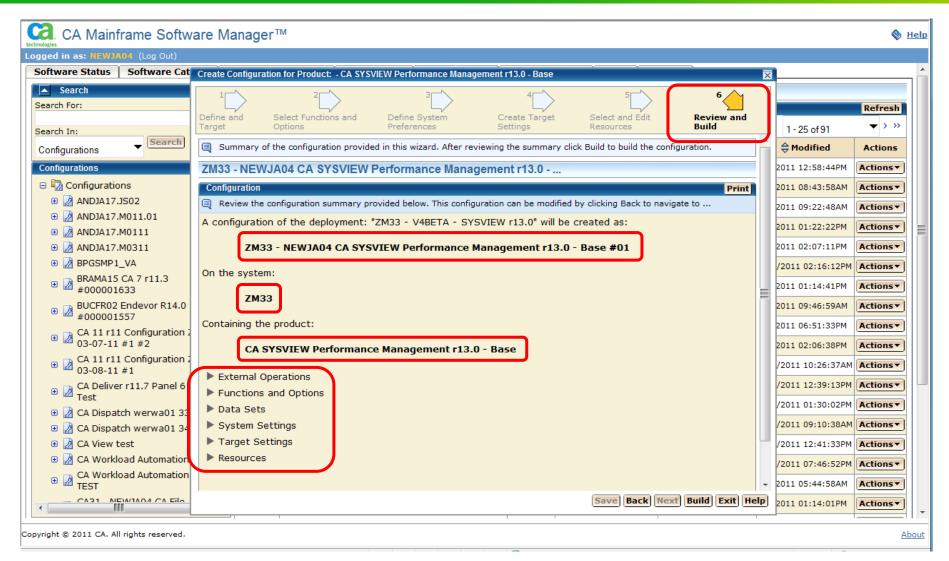




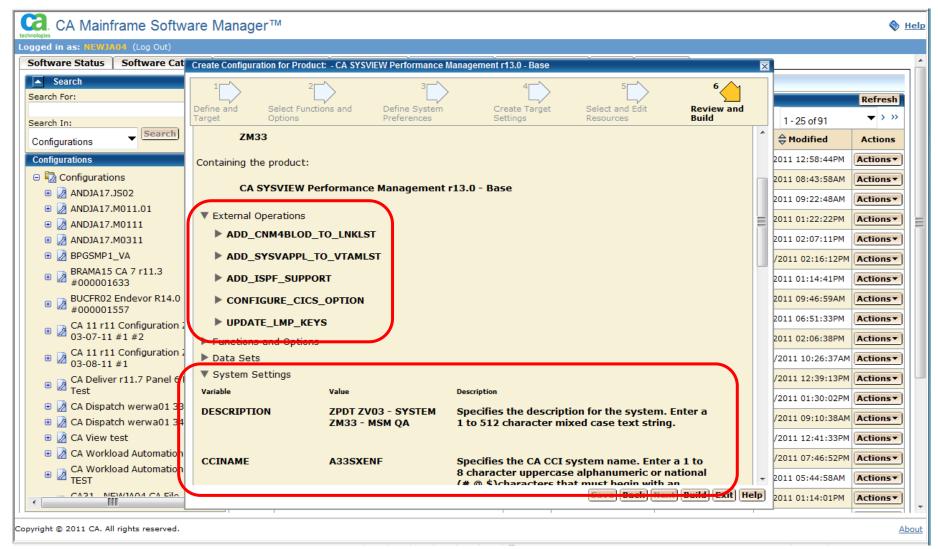


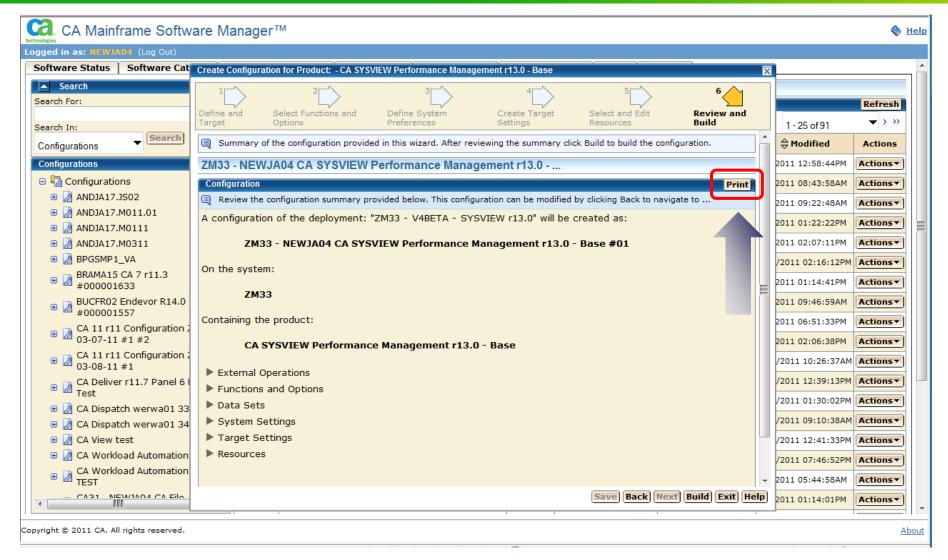




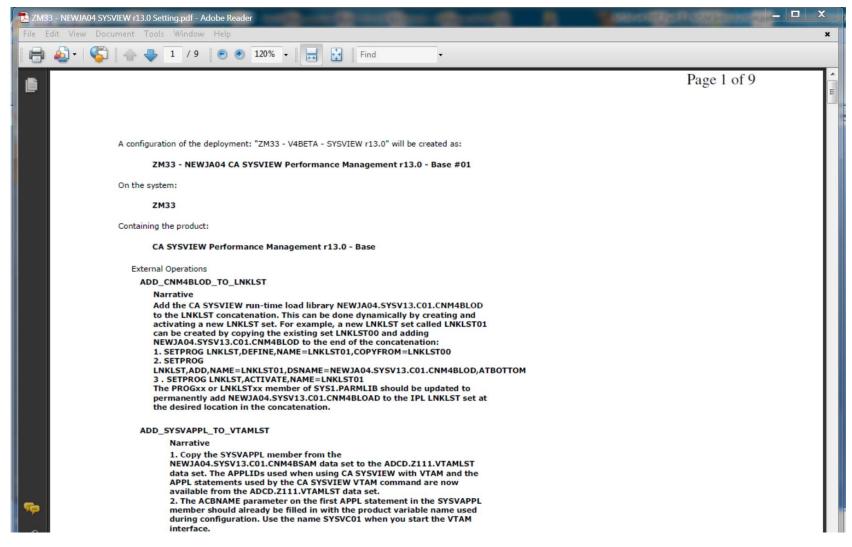




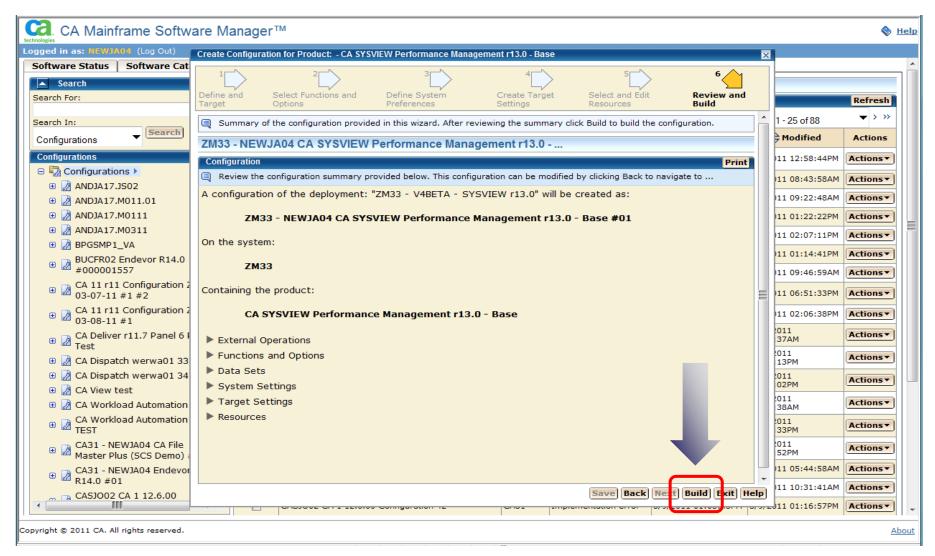




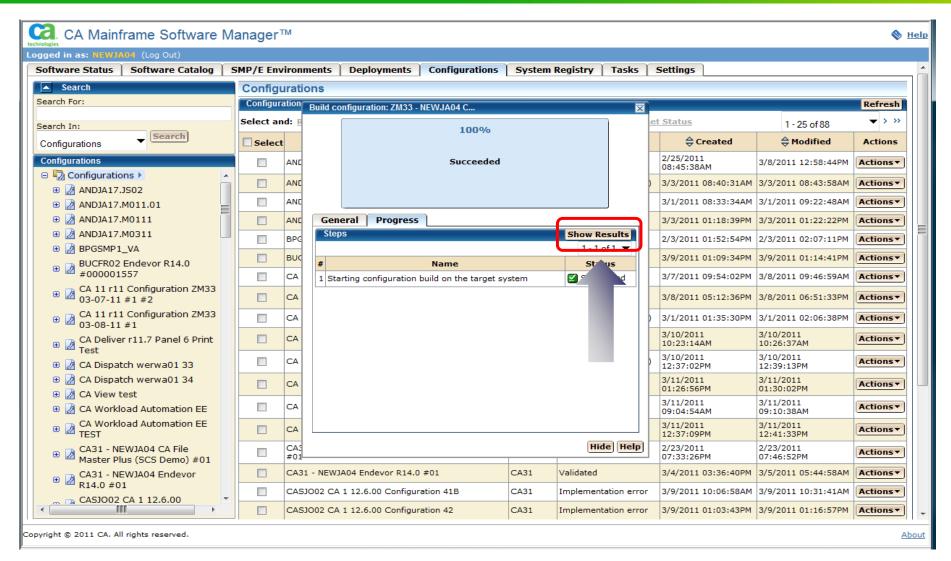




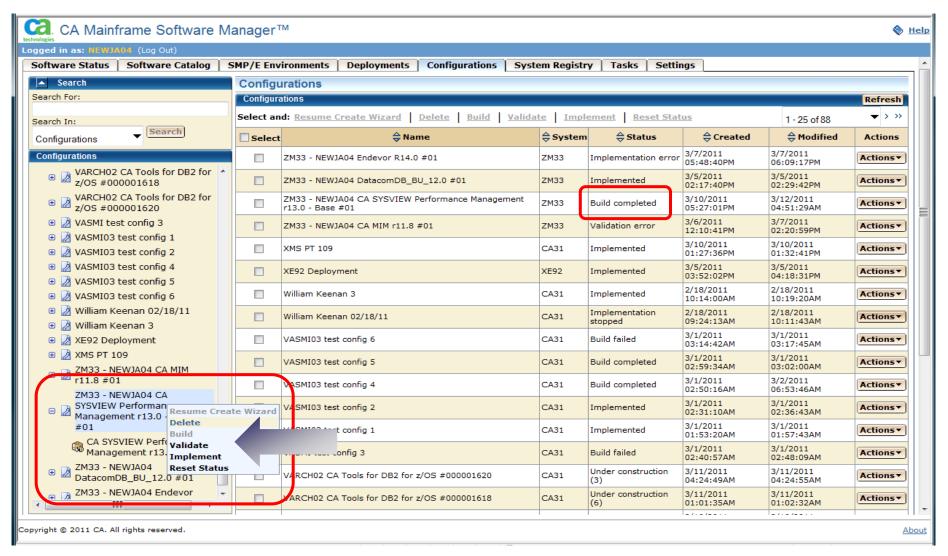




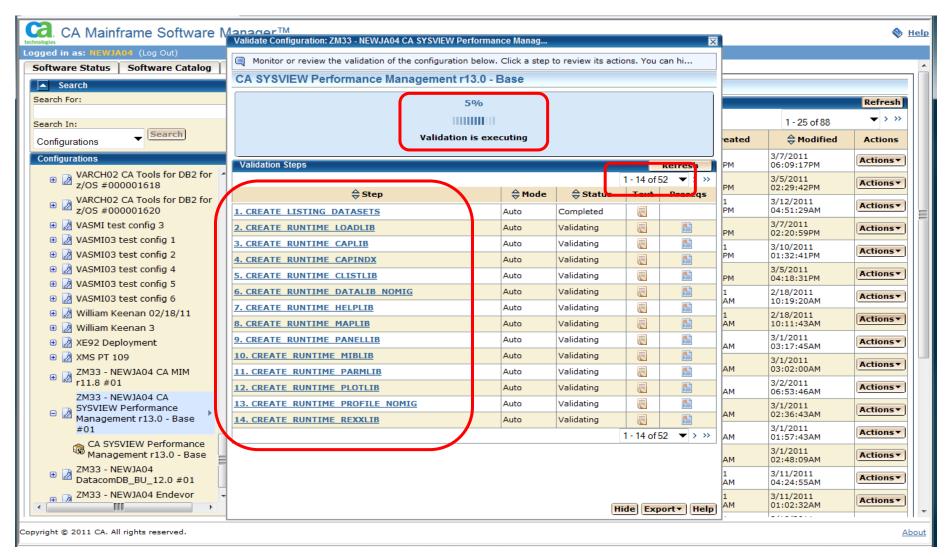


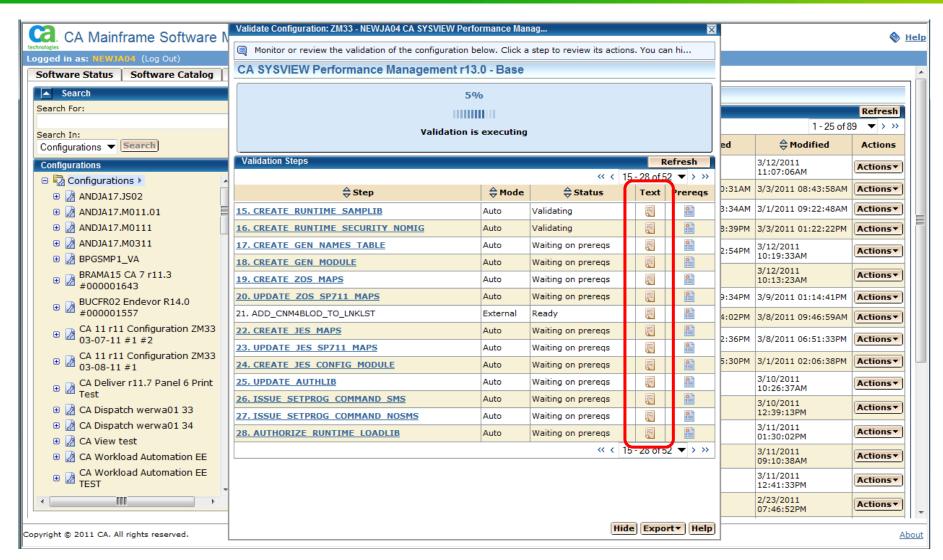




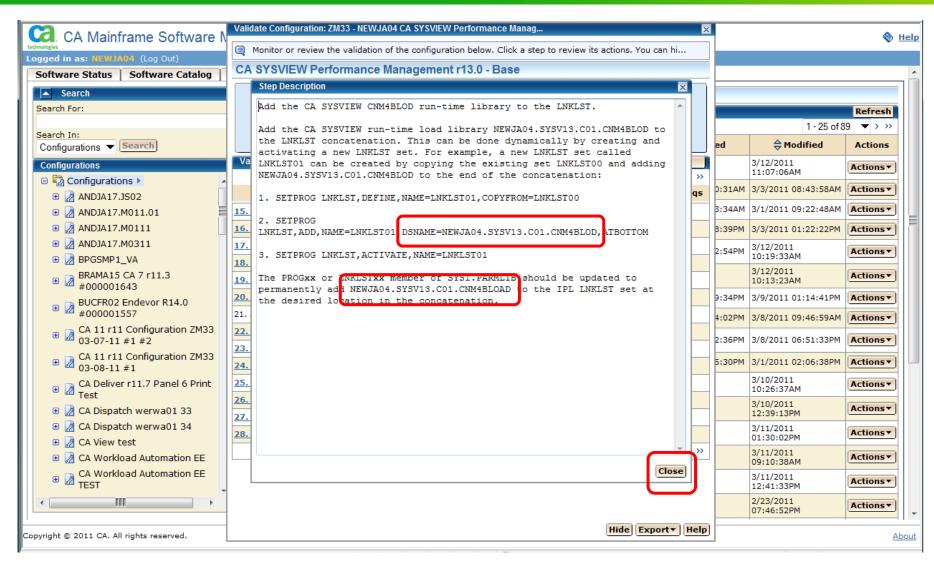




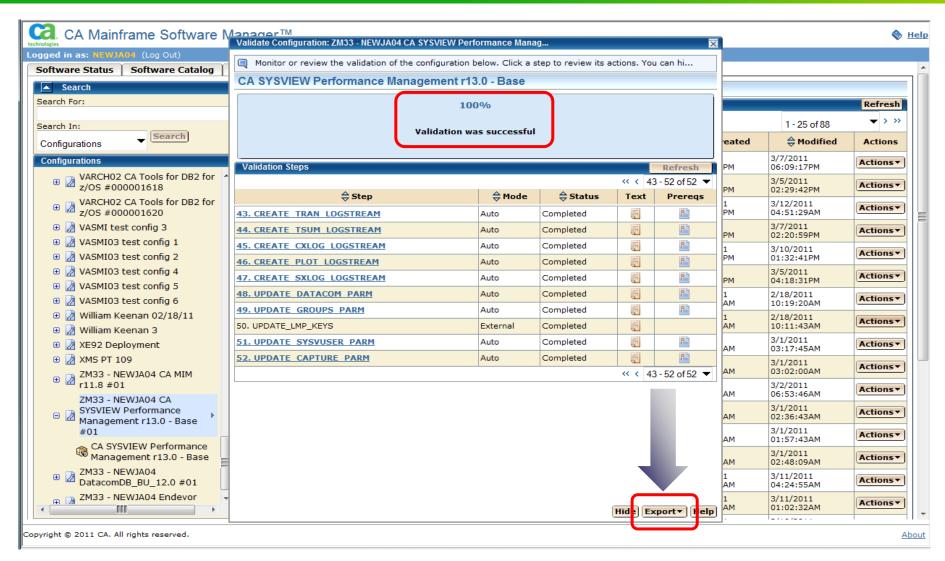




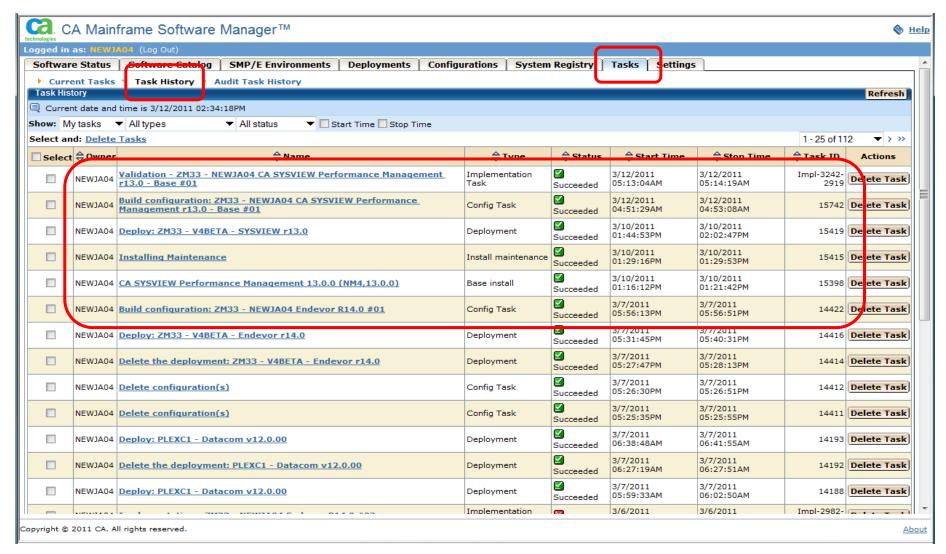




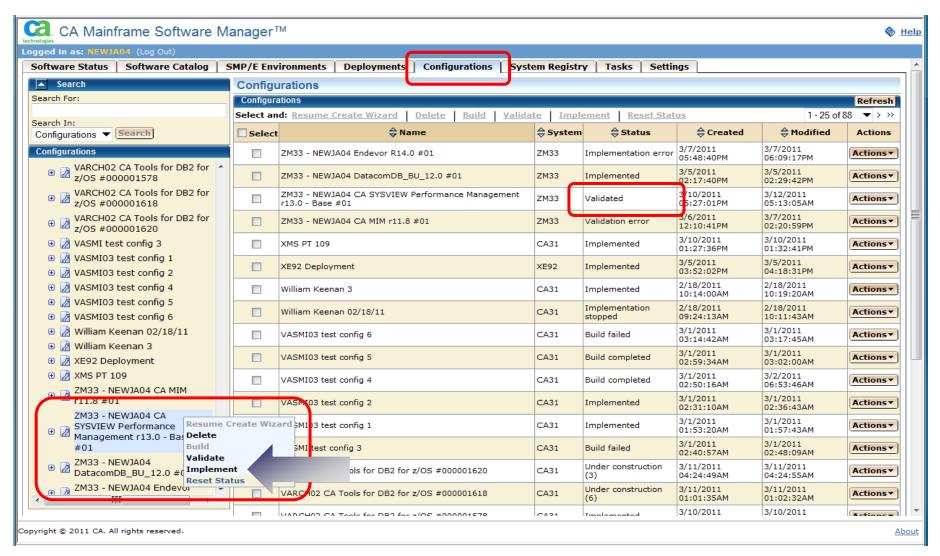




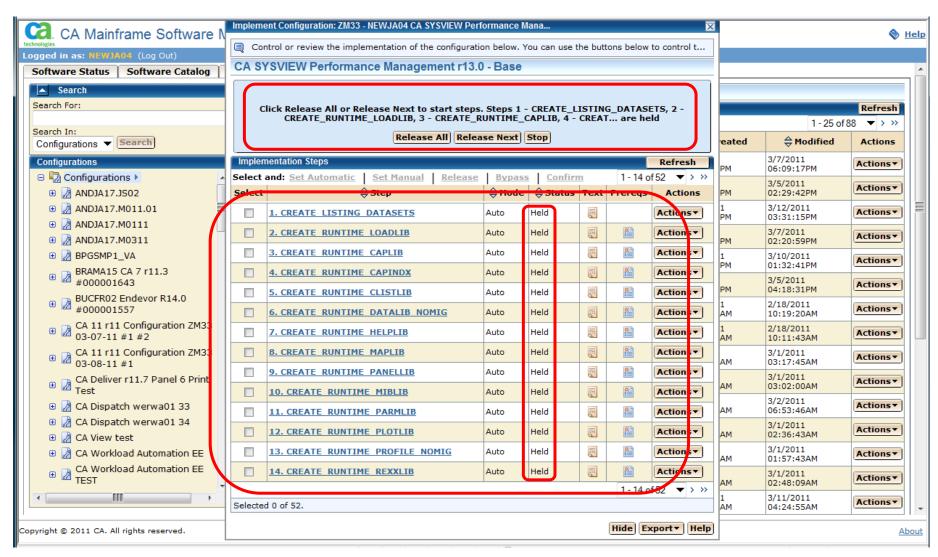




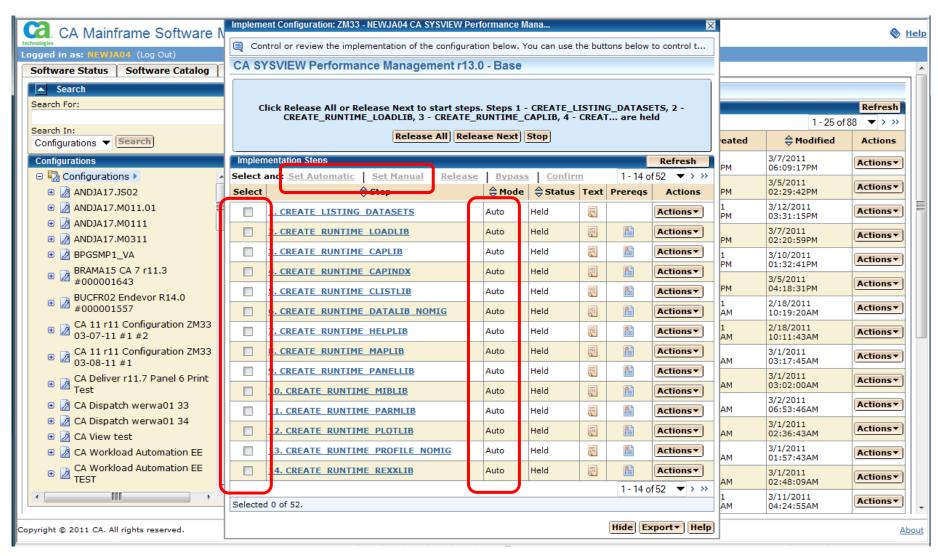


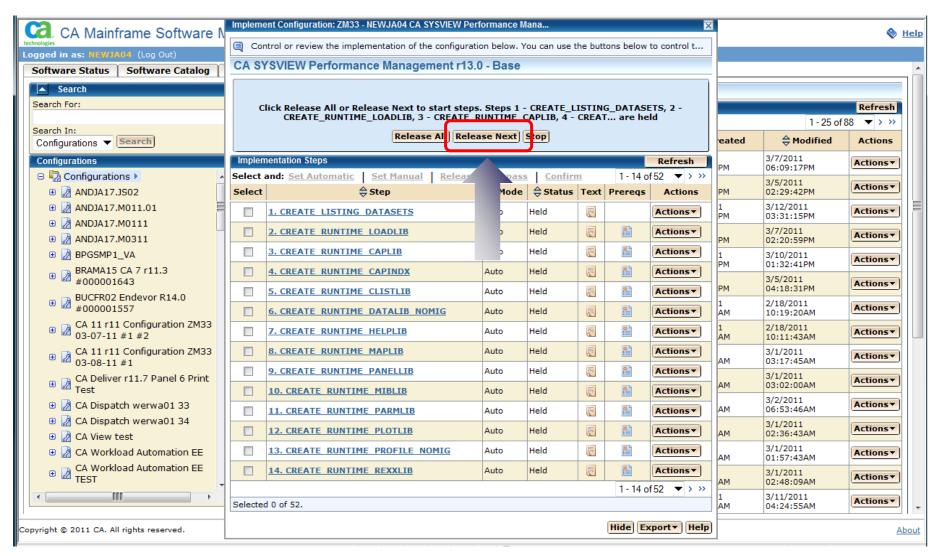




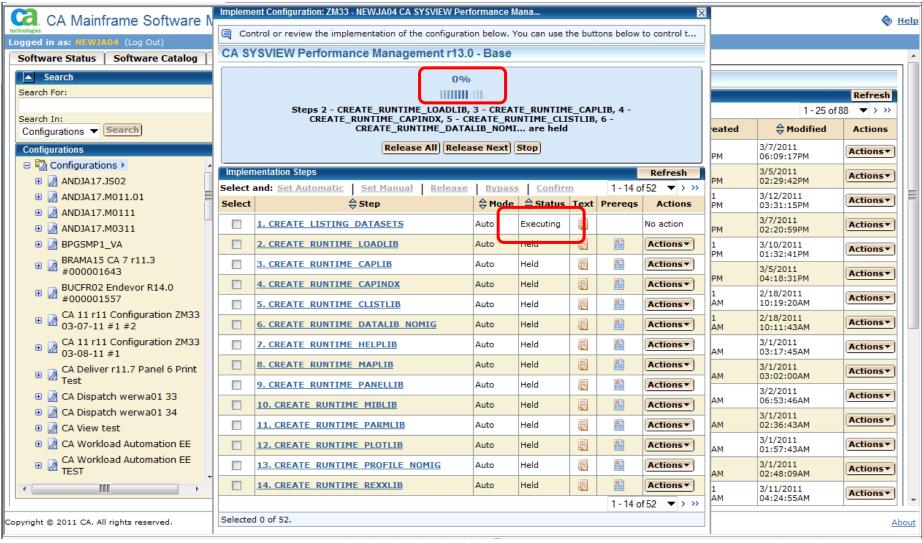


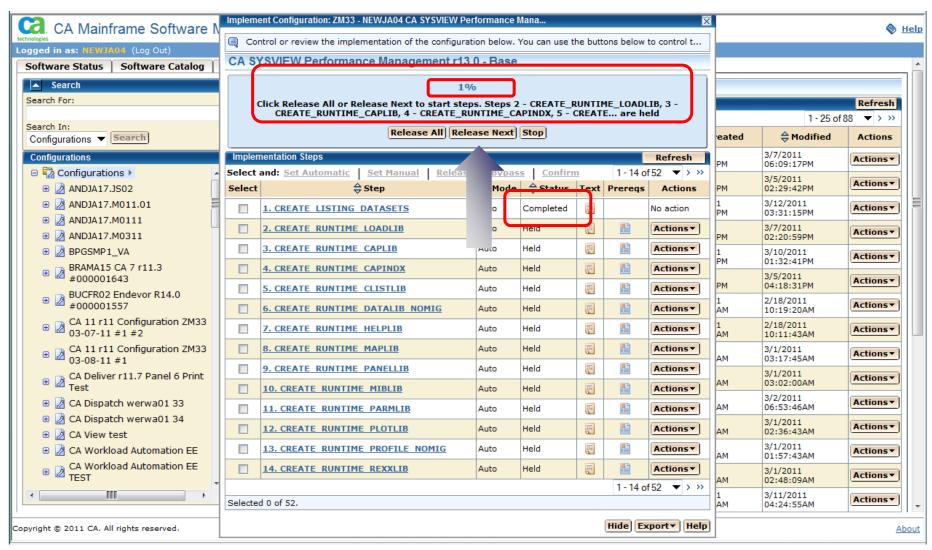


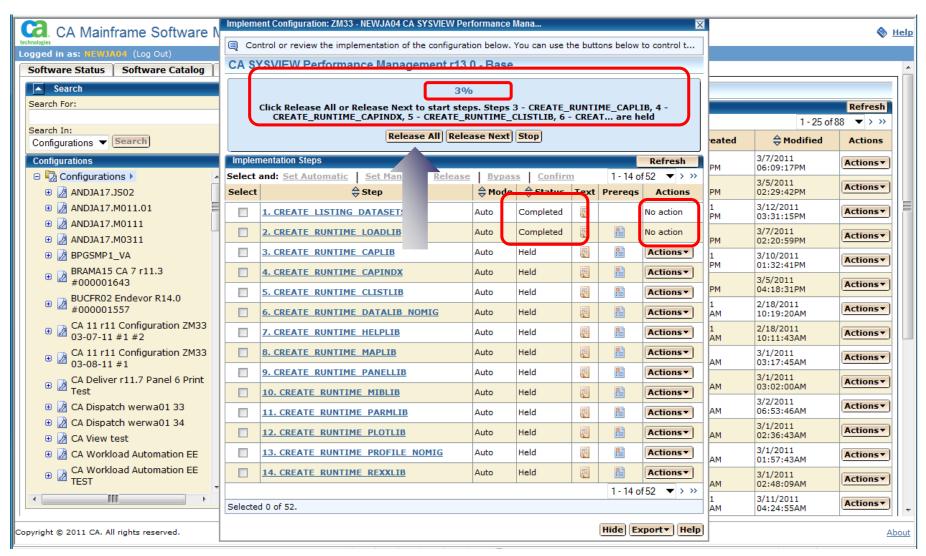


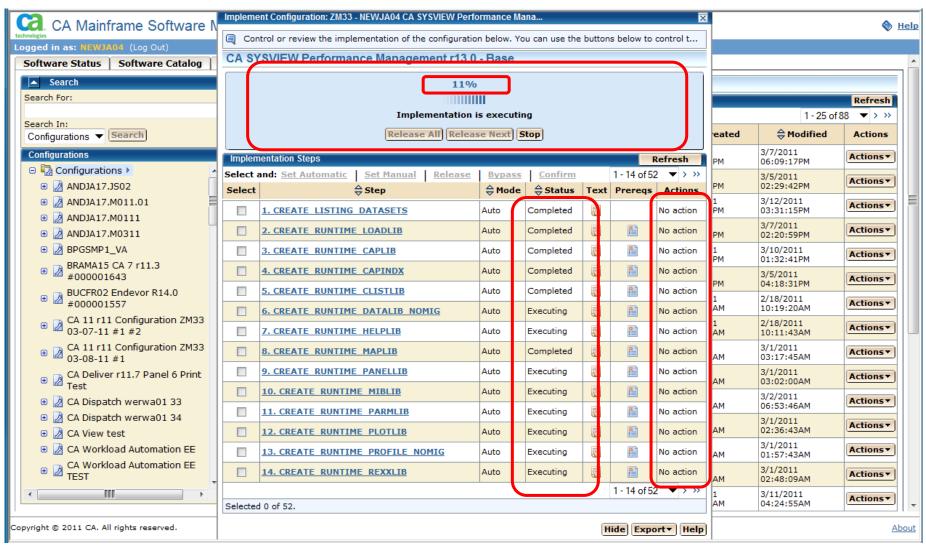


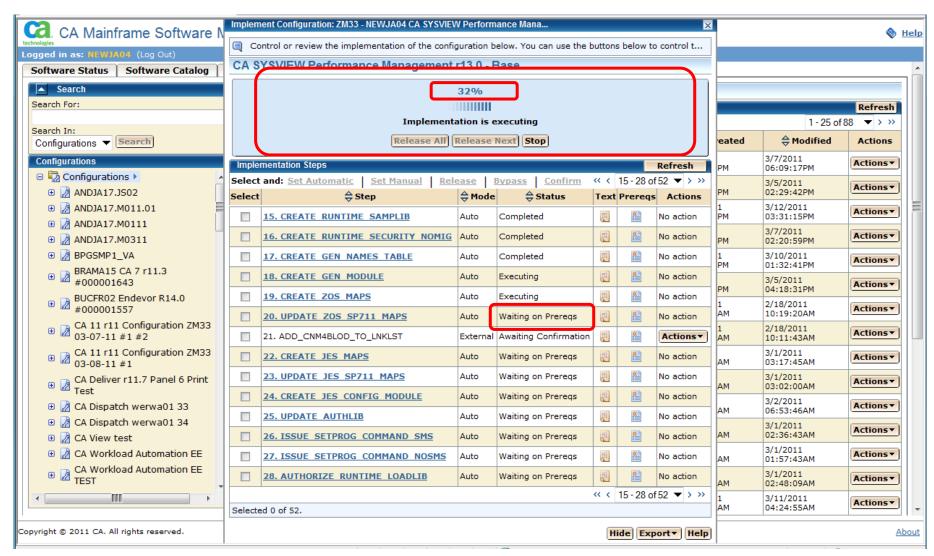






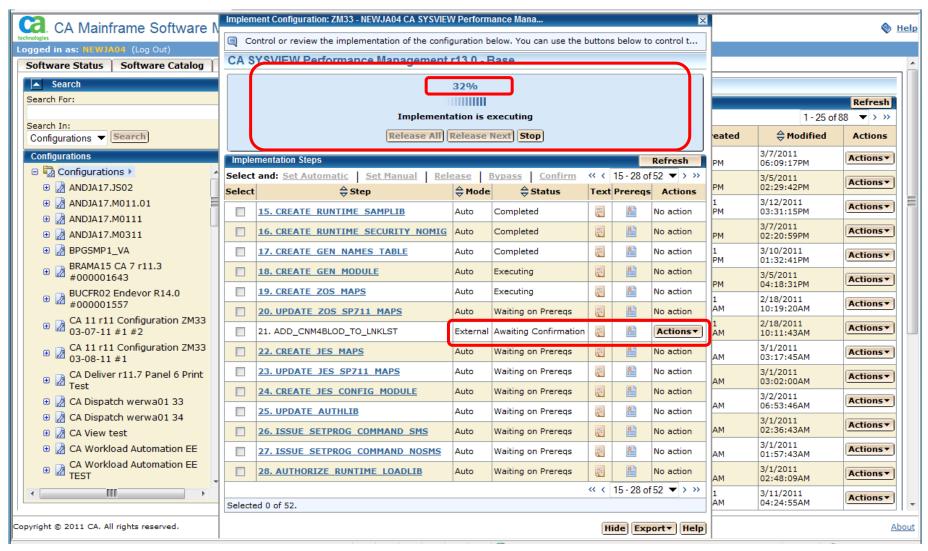




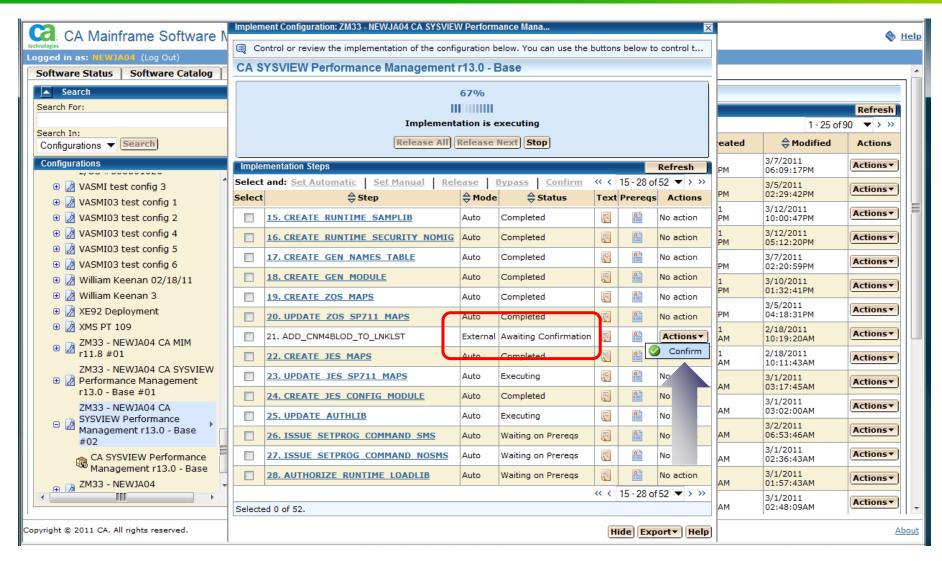




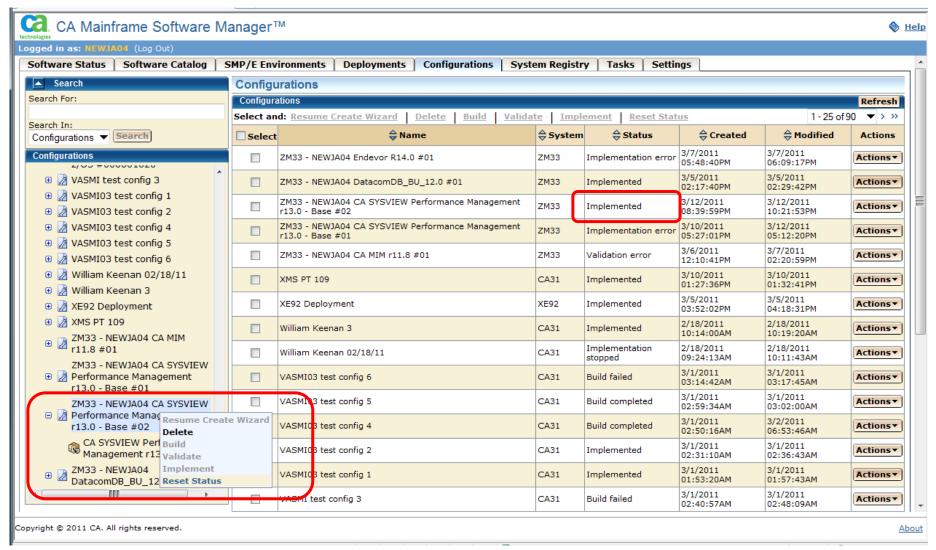
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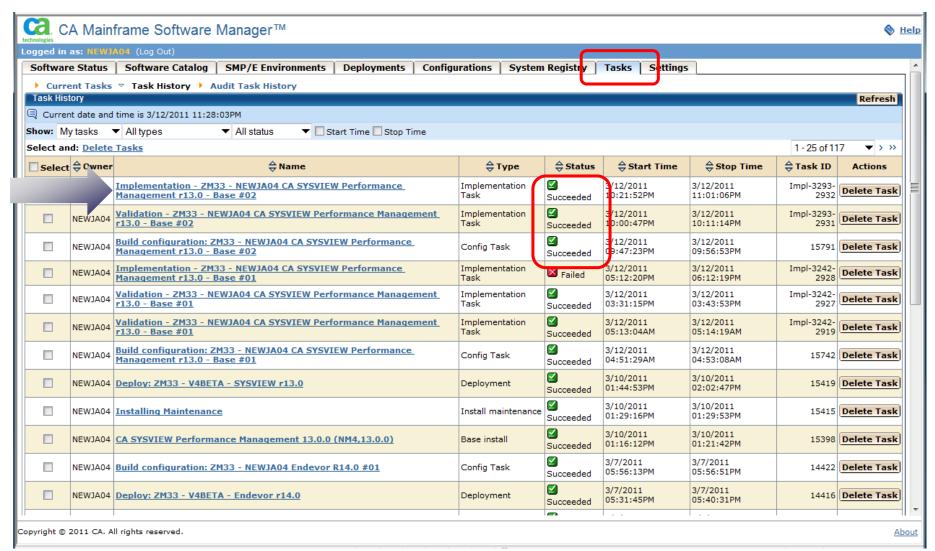




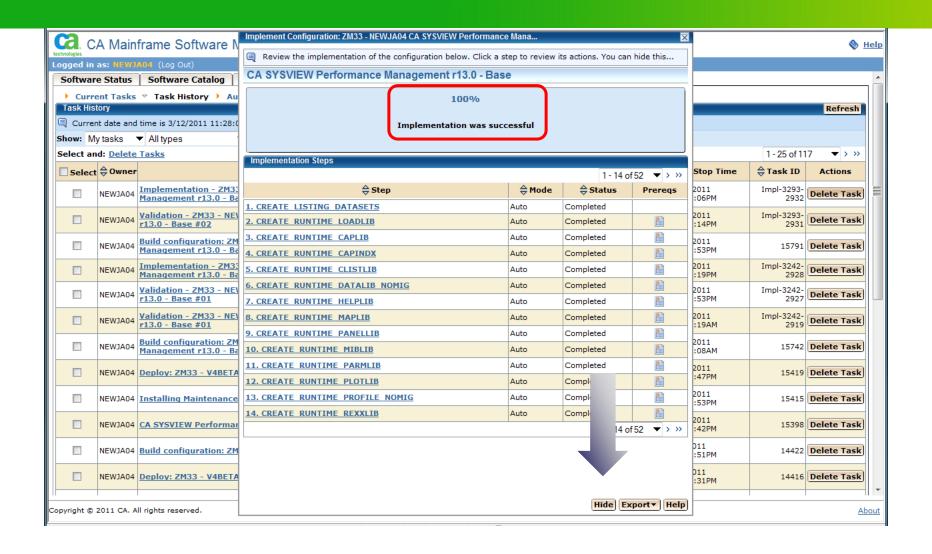








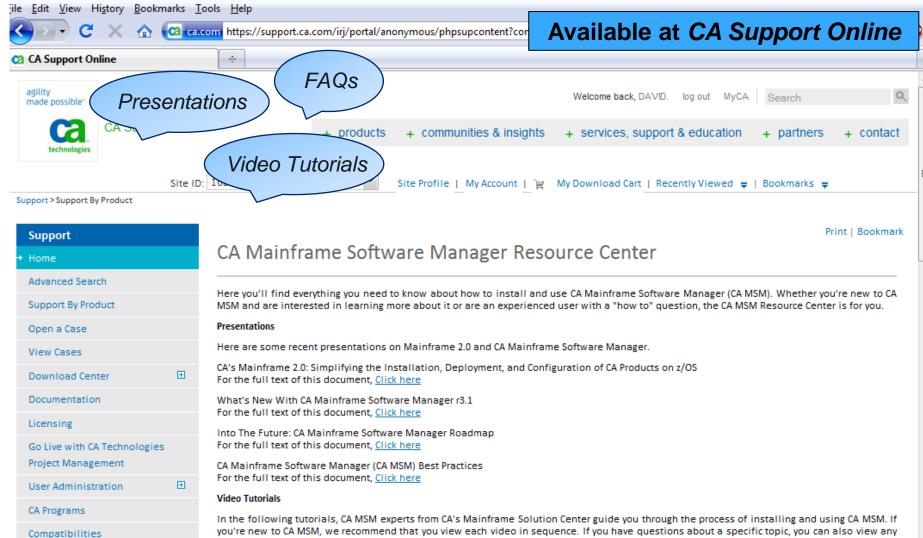






#### getting Started – The CA MSM Resource Center







of the videos individually. Topics 1-7 will generally be of interest only to those installing and maintaining CA MSM, while topics 8-12 will be of

# early results - CA MSM time savings configuring products

	Configure One Remote System		
	Traditional Method	With CA MSM	Time Savings
CA 1® Tape Management	3 hr 32 min	11 min	95%
CA 7	3 hr 26 min	20 min	90%
CA ACF2™	3 hr 20 min	9 min	96%
CA Datacom®	2 hr 18 min	8 min	94%
CA Easytrieve®	45 min	3 min	93%
CA Endevor® SCM	4 hr 20 min	3 min	99%
CA MIM	3 hr 55 min	21 min	91%
CA OPS/MVS	5 hr 4 min	56 min	82%
CA SMF Director	1 hr 48 min	4 min	96%
CA SYSVIEW® Performance Mgmt.	5 hr 38 min	36 min	89%
CA Top Secret™	2 hr 25 min	11 min	92%
TOTALS	36 hr 31 min	182 min	92%

Post configuration steps were not included in the Software Configuration Service times.

Your mileage may vary.

Source: CA Technologies Lab Results







#### **CA MSM v4.1**

- Many more CA products integrated with Configuration Service
- External Documentation for CA MSM integration, enabling 3rd parties and customers to package software integrated with CA MSM

#### — Features:

- SCS: Ability to modify a configuration during build or validate phase
- SCS: Rename a configuration or changed description at any time
- Improvements to the usability and management of maintenance within CA MSM (SMP/E tab)
- APPLY CHECK during an install of product via CA MSM
- Scalability improvements for supporting large CSI in MSM
- NTLM v2 Support for network proxy configuration



### configurable products by November 2011\*

- CA 1 Tape Management
- CA 7 Workload Automation
- CA 11 Restart and Tracking
- CA ACF2
- CA Datacom
- CA EasyTrieve
- CA Endevor
- CA ESP Workload Automation
- CA InterTest Batch
- CA MIM
- CA OPS/MVS
- CA SMF Director
- CA SYSVIEW
- CA Top Secret

- ACF2 for DB2
- Auditor for z/OS
- CA Common Services
- CA Mainframe Application Tuner
- Cleanup for ACF2
- Cleanup for RACF
- Cleanup for Top Secret
- CMDB Connector for z/OS
- Compliance Manager
- DB2 Tools
- Dispatch
- File Master Plus
- File Master Plus for IMS
- Gen

- Ideal
- IDMS
- IMS Tools
- InterTest CICS
- IPC
- NetMaster
- NetSpy
- PDSMAN
- PMO
- SOLVE:Access
- SOLVE:Operations
- Spool
- SymDump
- Top Secret for DB2
- View/Deliver



<sup>\*</sup> As of August 2011, this list may change by GA of CA MSM v4.1

#### **CA Technologies Now Providing FIXCAT HOLDDATA**

# What do you do when preparing to install new software or hardware to make sure you have all of the required CA maintenance applied?

#### **Current Process**

- Manually check compatibility charts for z/OS, CICS, DB2, etc...
  - e.g., <a href="http://www.ca.com/us/support/mainframe-compatibilites/zos-release-compatibility.aspx">http://www.ca.com/us/support/mainframe-compatibilites/zos-release-compatibility.aspx</a>
  - Read each solution to gather list of required PTFs

#### New for August 2011

- Use SMP/E FIXCAT HOLDDATA
  - https://support.ca.com/irj/portal/anonymous/phpsupcontent?contentID={1426C7AF-3D50-49C1-ACE7-FCC325DCC1B0}
  - CA Technologies supported categories are listed on this page
- Then
  - Acquire and install required maintenance.
  - Check back on CSO for updates just prior to upgrade.



#### **CA MSM direction**

- New releases twice a year (V4.1.0 in Nov 2011; V5.0.0 in May 2012)
- Continue to improve the usability and capabilities of CA MSM
- Support IBM service deliverables
- Continue to evolve CA MSM as a non-proprietary solution
- Support and exploit IBM zEnterprise
- Promote mainframe software management best practices
- Adopt Mainframe 2.0 initiatives such as Health Checks in CA MSM
- Integrate with other CA Technologies solutions such as CA Mainframe Chorus



# evolution of CA MSM to an open standard

- Developing as an open solution
- Available to mainframe software vendors
  - Working with ISVs to enable their integration with CA MSM
- Exploring options for making CA MSM available across the industry





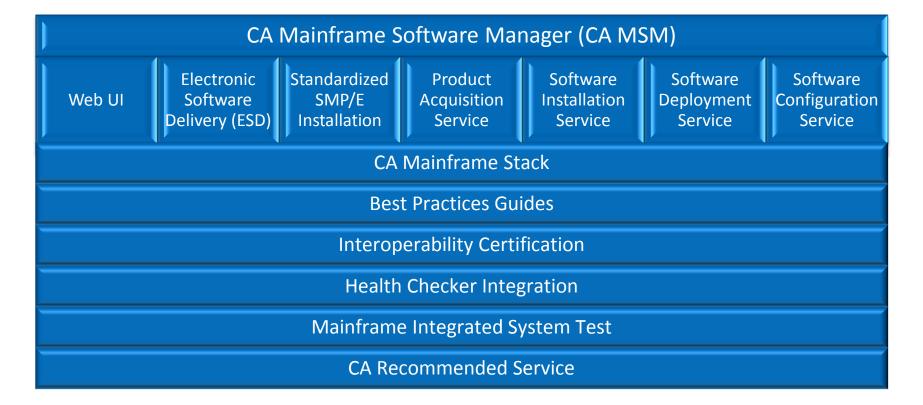
#### **CA MSM major components**

**Promises Made** 

Simplification through Automation

**Promises Kept** 

Mainframe Software Management





#### **Summary of CA MSM**



Provides a familiar
Web-based operating
environment for
software management
activities



Drastically reduces the human intervention required to take a product from delivery to execution



Standardizes the acquisition and management of CA Technologies software for z/OS



### for more information, please visit

– ca.com/mainframeFor all things mainframe

– ca.com/mainframe2Mainframe 2.0 page

– ca.com/msm
 CA Mainframe Software Manager™ page



#### legal

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