CA's Innovative Strategy for Mainframe Management: *Changing the Way the Mainframe is Managed Forever* 

**Scott Fagen** Distinguished Engineer and Chief Architect Mainframe Business Unit - CA Technologies





#### abstract

- In 2008, CA announced the inception of the groundbreaking Mainframe 2.0 strategy, to change the way the mainframe is managed forever. In this session, the speaker will discuss the progress being made along this journey and the technology innovations can help you get more from your mainframe investments and quickly deliver value through an enhanced customer experience.
- Learn how, even with little or no mainframe experience, you can quickly automate and streamline your CA product acquisition, installation, deployment and maintenance with CA Mainframe Software Manager (CA MSM), a major component of CA's Mainframe 2.0 strategy.
- Additionally, the speaker will also discuss the need for an entirely new interaction model for managing the mainframe and how traditional product-centric administration transcends into intelligent role-based experiences. Learn how you can use this revolutionary innovation to enable greater productivity, derive greater business value from your mainframe investments and transfer knowledge to the next generation of mainframe IT staff





# agenda

- Mainframe 2.0, the Vision
- The Journey
- 2009 Delivered
- 2010 Deliverables
- 2011 Deliverables
- CA Mainframe Chorus, Extending the Vision





#### summary

#### Continued delivery on Mainframe 2.0 strategy

- Extraordinary reception of strategy and wide adoption of deliverables
- Announced CA MSM r3.0 and CA Mainframe Stack as part of May Mainframe Madness 2010
- Investment and innovation across CA Technologies product portfolio

#### CA Mainframe Chorus: Revolutionary mainframe management paradigm

- Modern, role-based interaction model
- DB2 Management first role to be delivered
- Introduces next generation management
- CA Technologies is the leading the challenge to sustain critical mainframe skills

# CA Technologies Differentiation

- ✓ Breakthrough innovation
- ✓ Investment leadership
- Thought-leadership in mainframe management
- ✓ Broadest and deepest portfolio
- Consistent delivery –
   Promises kept





# Changing the way the mainframe is managed forever!



#### **4. THE PROGRAMS**

Promises Made		Promises Kept	
Maximize Value	1	Customer Engagement Technology Exploitation	
Simplify Management	2	Mainframe Software Mgmt Mainframe Stack	
Practical Innovation	3	Integration, Productivity, and Insight	



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## the programs

Promises Made		Promises Kept
Maximize Value	1	• Customer Engagement: MVP, MSAC, Training, Best Practices, Publications
	Ţ	• <i>Technology Exploitation:</i> Specialty Engines, Application Performance & Tuning
Simplify Management	2	<ul> <li>CA Mainframe Software Manager (CA MSM)</li> <li>CA Mainframe Stack</li> <li>Health Checks</li> <li>Integrated System Testing</li> </ul>
Practical Innovation	3	<ul> <li>Cross Enterprise APM</li> <li>Risk and Compliance Management</li> <li>Development Environment Integration</li> <li>Workload Automation</li> </ul>





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#### Mainframe 2.0: customer success

#### – Large Manufacturer

- Mainframe 2.0 strategy and CA MSM were catalyst to consolidating from six vendors on to CA Technologies
- US Brokerage
  - Mainframe 2.0 Strategy and CA MSM differentiated CA Technologies from Compuware and LRS. Proved CA Technologies was the better choice to invest in.
- European Financial
  - MVP recommendations increased output, reduce costs, and defined best practices. Helped CA Technologies replace BMC.

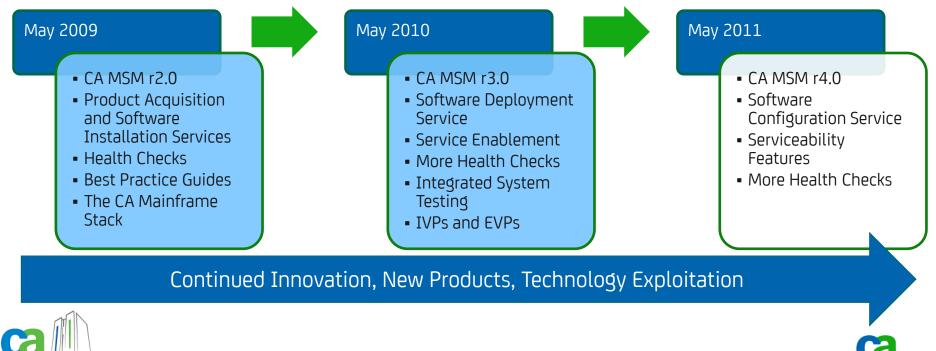




# mainframe software management the journey

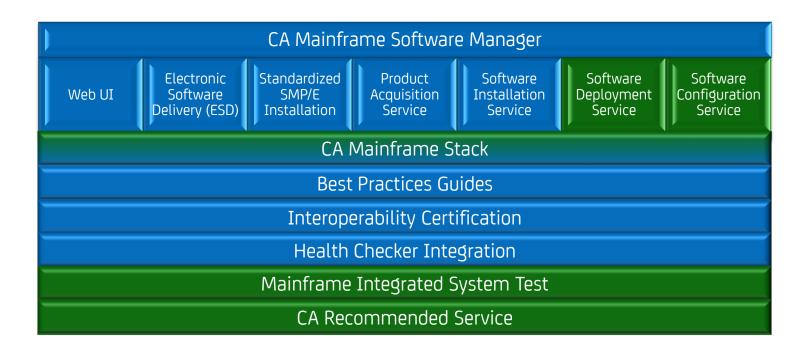
- An aggressive three-year journey to deliver on our promises and the virtues of the platform
- Delivering a new CA mainframe software management experience
- Delivering a CA Mainframe Stack

Mainframe 2.0



# technology delivered in 2009 CA Mainframe Stack and CA MSM r2.0

Promises Made	Promises Kept
Simplify Management	CA Mainframe Software Manager

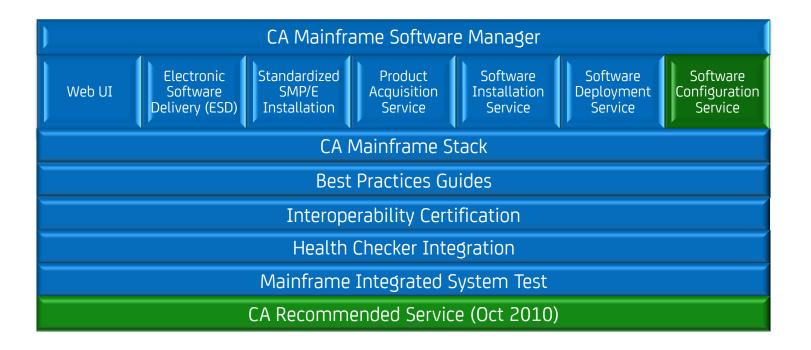






# technology delivered in 2010 CA Mainframe Stack and CA MSM r3.0

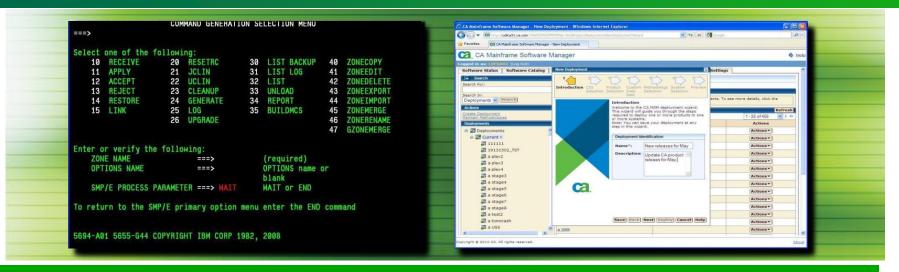
Promises Made	Promises Kept
Simplify Management	CA Mainframe Software Manager







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



#### Over 250 Customers Using CA MSM!

- InstallShield<sup>®</sup> and Windows Update for the Mainframe
- Dramatically simplifies software management activities
- Significantly reduces installation, deployment, and maintenance times
- Huge productivity increases for both mainframe experts and novices
- More than 120 deployable products across all major product families
- Included at no additional charge for any active CA Technologies
- mainframe customers

Mainframe 2.0



#### 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 time savings - installation

Time to Install 10 Mainframe Applications <sup>*</sup>							
	Main	frame Expert Ins <sup>.</sup>	tall	Mainframe Novice Install			
Product	Traditional	With CA MSM	Improvemen t	Traditional	With CA MSM	Improvemen t	
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 <sup>™</sup> Resource Sharing	30 min	5 min	6X	1 hr 31 min	5 min	18X	
CA OPS/MVS® Event Management and Automation	36 min	6 min	6X	1 hr 50 min	7 min	16X	
CA Panvalet®	54 min	3 min	18X	1 hr 11 min	5 min	14X	
CA SMF Director	40 min	5 min	8X	1 hr 10 min	6 min	12X	
CA SymDump <sup>®</sup> for CICS	38 min	3 min	12X	4 hrs 3 min	6 min	40X	
<u>Totals</u>	<u>6 hrs 39 min</u>	<u>51 min</u>	<u>8X</u>	<u>20 hrs 51 min</u>	<u>73 min</u>	<u>17X</u>	

#### 87% improvement for installation; 93% improvement for maintenance

Source: CA Technologies Lab Results

Mainframe 2.0



## CA MSM time savings - maintenance

Time to Install <u>Maintenance</u> for 7 Mainframe Applications*							
	Number	Mainframe Expert Install			Mainframe Novice Install		
Product	of Fixes	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>	<u>15X</u>

Source: CA Technologies Lab Results

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





# CA MSM time savings - deployment

Time to Deploy 10 Mainframe Applications						
	To A Single Remote System			To Six Remote Systems		
Product	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 <sup>™</sup> 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	<b>18X</b>	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 <sup>®</sup> 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
СА ТРХ	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

Mainframe 2.0



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#### CA MSM demo

CA Mainframe Soft	ftware Manager - Main Window - Software Status - Windows Internet Explorer	×
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🚖 Favorites 🛛 🗔 CA	A Mainframe Software Manager - Main Window - Sof	
Ca Main	nframe Software Manager 🛛 🗞 🖞	elp
Logged in as: LUFD	DA02 (Log Out)	
Software Status		
Warning: 521 SMP/E Environmen Information: Information: Tasks Information: Information:	ere are 394 new HIPERs for 56 products.           View Details         Migrate an Existing CSI           New maintenance items are available for 86 products.         View Details           View Casuport Online Credentials         CA Support Online for CA MSM	
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#### products integrated with CA MSM http://support.ca.com/prodinfo/msmprods

products

#### CA MSM Enabled Products page on CA Support Online. Over 120 deployable products across all major product families

Support > Support By Product

#### Support Home

Support By Product

CA SUPPORT ONLINE

Download Center

Documentation

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Subscriptions

Compatibilities

**Contact and Resources** 

+

CA Programs

CA	Mainframe	Software	Managor	Enabled	Droducte
00	nannanne	Joitware	nanauer	LIGDIEG	FIOUUCC

communities & insights

#### Last Updated: July 19, 2010

CA Mainframe Software Manager, which automates product installation and maintenance, removes SMP/E complexities and enables easier management of your CA products for z/OS. The following products are currently available to be acquired, installed and maintained using the web-based user interface of CA Mainframe Software Manager (CA MSM):

partner

login register My CA

services, education & support

Product	MSM r2.0 (Product Acquisition, Software Installation and Maintenance)	MSM r3.0 (Deployment, Product Acquisition, Software Installation and Maintenance)
CA 1 Copycat Utility	11.0 SP3	12.0 (via CA Copycat)
CA 1 Tape Management	11.5 SP5	11.5 SP6 and 12.0
CA 1 Tape Management Copycat Utility	11.0	11.5 SP6 and 12.0
CA 7 Workload Automation	11.1 and 11.3	11.1 and 11.3
CA 11 Workload Automation Restart and Tracking	3.0 and 11.0	3.0 and 11.0
CA ACF2 for z/OS	14.0	14 SP1 and 15.0
CA ACF2 Option for DB2	1.2 SP3	1.2 SP3 and 1.3 SP0
CA AION Business Rules Expert	11.0	11.0
CA Allocate DASD Space and Placement	12.0 SP1, 12.0 SP2 and 12.5	12.0 SP2 and 12.5
CA Auditor for z/OS	12.0 SP1 and 12.1 SP0	12.0 SP1 and 12.1 SP0
CA Bind Analyzer for DB2 for z/OS	12.0 and 14.0	14.0
CA Cleanup for ACF2	12.0 and 12.1	12.0 and 12.1
CA Cleanup for RACF	12.0 and 12.1	12.0 and 12.1
CA Cleanup for Top Secret	12.0 and 12.1	12.0 and 12.1
CA CMDB Connector for z/OS	1.0	1.0





#### health checks for CA products http://support.ca.com

#### Health Checks page on CA Support Online. Over 200 Health Checks across all major product families

login register My CA

services, education & support

As part of the CA Mainframe 2.0 initiative, many CA products are providing health checks that run under the IBM Health Checker for z/OS. The Health Checker is a base

CA product health checks continuously monitor the active system environment to ensure CA solutions are optimally configured, alerting customers to any potential

CA health checks are written by product developers and included with the product, weaving expert product configuration knowledge directly into the software. With the capability of CA products to inspect themselves, customers no longer need to deploy staff with specialized CA product skills - to confirm that CA products are working

partner

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#### Support > Support By Product

Print

#### Health Checks for CA Products

products

Support By Product

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Documentation

Licensing

Support

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CA Tech Insider

Subscriptions

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CA Programs

The following are required to run CA product health checks:

validate that best practices are being followed

1. z/OS 1.8 or higher

2. The IBM Health Checker for z/OS must be active on the system

check that recommended product parameter settings are in use

3. The CA Health Check Common Service feature must be installed (see RI05071 for details)

component of z/OS that identifies potential problems before they impact availability or cause outages.

problems so they can be repaired before they impact work on the system. Specifically, checks:

monitor product resources to ensure they remain at or below predefined thresholds

optimally; customers merely need to ensure that no health check exceptions are present.

communities & insights

4. The level of the CA product that delivers health checks must be installed

The following table shows CA products that provide or will soon provide health checks and the level of the product required to obtain the health checks.

verify that recent product enhancements are being utilized to ensure maximum return on the customer's investment in CA technology

CA 1 Tape Management	r11.5 SP5
CA 11 Workload Automation Restart and Tracking	r11
CA 7 Workload Automation	r11.3
CA ACF2 for z/OS	r14
CA Allocate DASD Space and Placement	r12 SP1
CA CMDB Connector for z/OS	r1
CA Common Services for z/OS & OS/390	r12
CA Database Management Solutions for IMS for z/OS	r12 plus PTF UTSA014
CA Datacom	r12





# CA Mainframe Stack and CA Recommended Service (CA RS)

#### CA Mainframe Stack

- Technologies delivered on a yearly basis, certified for interoperability with:
  - CA Technologies products
  - Latest release of IBM z/OS
  - Latest release of major z/OS
     Subsystems and middleware
- Serviceability standards
- Unified, standardized CA Technologies software lifecycle delivery
- Increased quality on day one

#### CA Recommended Service (CA RS)

- A new way for customers to perform preventive maintenance
- Aligns with IBM Recommended Service
   Upgrade (RSU)
- Provides customers with a way to manage risk while keeping their software environment up-to-date
- Planned for October 2010



# May 2010 – product families in the CA Mainframe Stack

CA DB2 for z/OS Tools r12 and r14	CA Librarian®	CA Tape Encryption	
CA Database Management Solutions for DB2 for z/OS	CA MIM <sup>™</sup> Resource Sharing	CA Telon® Application Generator	
CA Disk™ Backup and Restore	CA NetMaster® Products	CA TLMS® Tape Management	
CA Dispatch™	CA OPS/MVS® Event Management and Automation	CA Top Secret® for z/OS	
CA Easytrieve®	CA Optimizer®/II	CA TPX <sup>™</sup> Session Management	
CA Encryption Key Manager	CA PanAPT®	CA Vantage™ Storage Resource Management	
CA Endevor® Software Change Manager	CA Panvalet®	CA Verify® Automated Regression Testing	
CA ESP Workload Automation	CA PDSMAN® PDS Library Management	CA Deliver™	
CA File Master™ Plus	CA Report Facility	CA Vtape™Virtual Tape System	
CA Gen	CA SMF Director	CA XCOM <sup>™</sup> Data Transport®	
CA InterTest™	CA Spool™	CA View®	
CA JARS® Resource Accounting	CA SymDump®		
CA JCLCheck™ Workload Automation	CA SYSVIEW <sup>®</sup> Performance Management		
	r14 CA Database Management Solutions for DB2 for z/OS CA Disk™ Backup and Restore CA Dispatch™ CA Easytrieve° CA Encryption Key Manager CA Endevor° Software Change Manager CA ESP Workload Automation CA File Master™ Plus CA Gen CA InterTest™ CA JARS° Resource Accounting CA JCLCheck™Workload	r14CA Librarian®CA Database Management Solutions for DB2 for z/OSCA MIM™ Resource SharingCA Disk™ Backup and RestoreCA NetMaster® ProductsCA Dispatch™CA OPS/MVS® Event Management and AutomationCA Easytrieve®CA OPS/MVS® Event Management and AutomationCA Easytrieve®CA Optimizer®/IICA Encryption Key ManagerCA PanAPT®CA Endevor® Software Change ManagerCA Panvalet®CA Endevor® Software Change ManagerCA Panvalet®CA Endevor® Software Change ManagerCA Panvalet®CA EndevorCA SpolTMAN® PDS Library ManagementCA File Master™ PlusCA Report FacilityCA GenCA SMF DirectorCA JARS® Resource Accounting CA JCLCheck™WorkloadCA SYSVIEW® Performance	

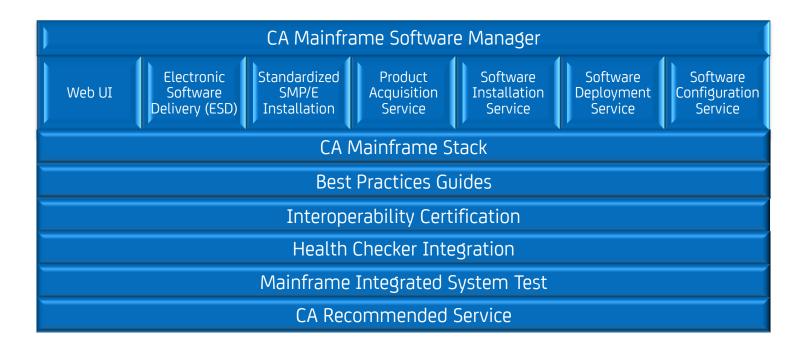


# technology planned for delivery in 2011 CA Mainframe Stack and CA MSM r4.0

Promises Made	Promises Kept
Cimplify Manadoment	CA Mainframe Software

**Simplify Management** 

Manager







# CA Mainframe Chorus extending the Mainframe 2.0 vision

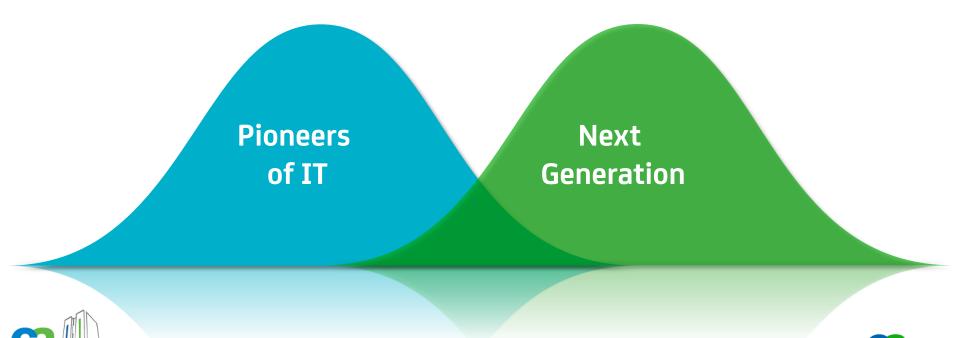




# what's your plan?

Mainframe 2.0

- Sustain critical skills and enable next generation mainframer
- On-ramp to mainframe mastery is long & steep
- "Net Generation" thinks and works differently





#### CA Technologies approach an integrated approach





Studied best-in-class user-centric technology

Best & brightest talent from CA Technologies



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our customers

Program Objectives:

Design Principles:

## Interaction Model:

- Appeal to non-mainframe IT professionals
- Boost productivity of current mainframe experts
  - Engaged with external industrial design firm
- Immersive research process with our customers (co-design/development)
- Next generation management paradigm with:
  - Customizable workspaces
  - De-siloed applications
  - Contextual actions
  - Drill through attributes
  - Utilities in context
  - Data visualization
  - Collaboration

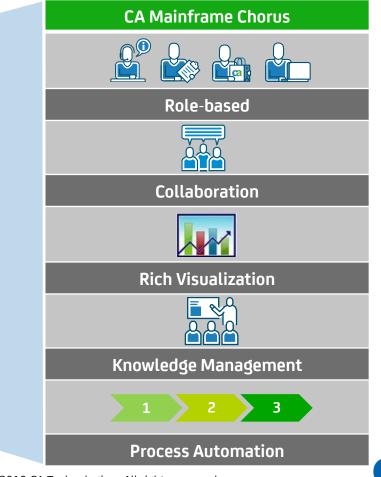




## what is CA Mainframe Chorus?

 Object-oriented workspace, with a new role-based interaction model that incorporates rich features and data visualization and leverages CA Technologies product portfolio as a single bank of features and functions

	Mainframe Technology Stack
	DB2 for z/OS Database Management
	Security Management
ints	Storage Management
pone	Workload Management
Functional Components	Performance Management
nal (	Systems Management
ctio	CA Datacom Database Management
Fun	CA IDMS <sup>™</sup> Database Management
	IMS for z/OS Database Management
	Operations Management
SCS	Base Common Services Mainframe WS Common Services



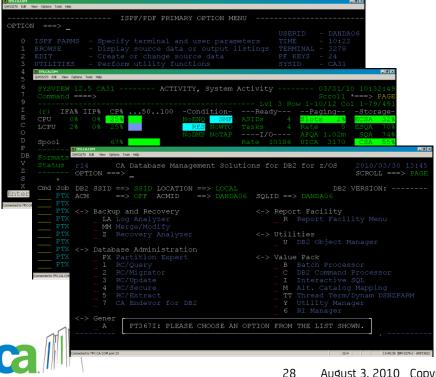


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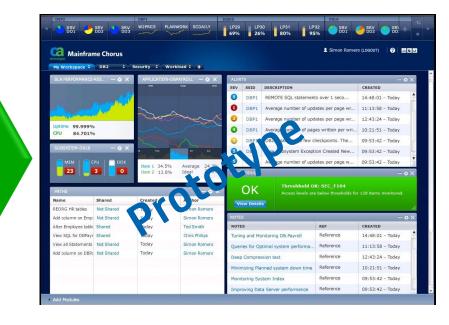


# CA Mainframe Chorus enhancing mainframe productivity

- A new and fundamentally different user interaction model
  - Based on how people do their jobs, not how they use specific products
  - Provides rich features and data visualization in a web-based workspace



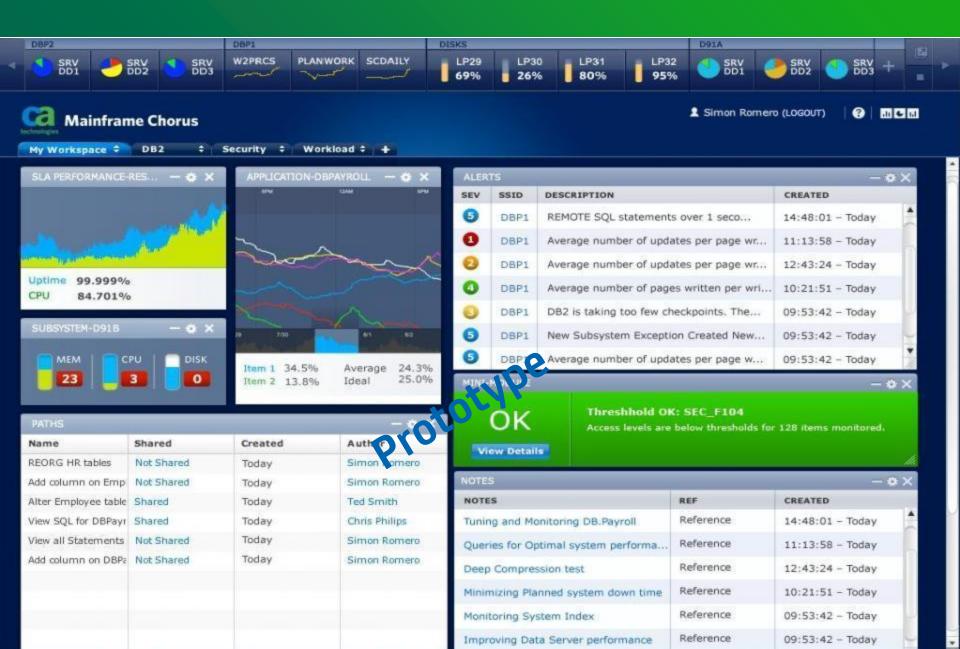
Mainframe 2.0





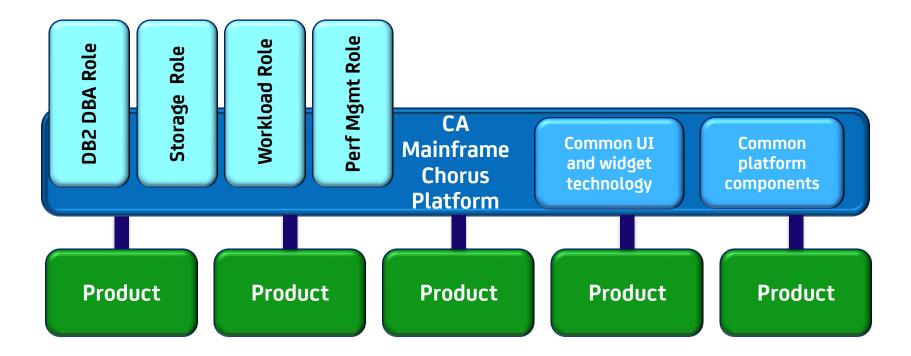
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#### CA Mainframe Chorus Demo



#### architecture

 Create new role-based products, including a modern workspace that leverages the best of the mainframe portfolio.







### CA Mainframe Chorus workspace and DB2 database management role features

#### CA Mainframe Chorus Workspace

- Rich visual presentation
- Third party integration
- Smart Objects intelligent interface
- Process capture "wizards"
- Collaboration tools

#### DB2 Database Management Role

- Time series data graphing
- Object-based navigation and management
- Alerts on DB2 threshold
   exceptions
- DB2 Knowledge Center
- Real time performance data





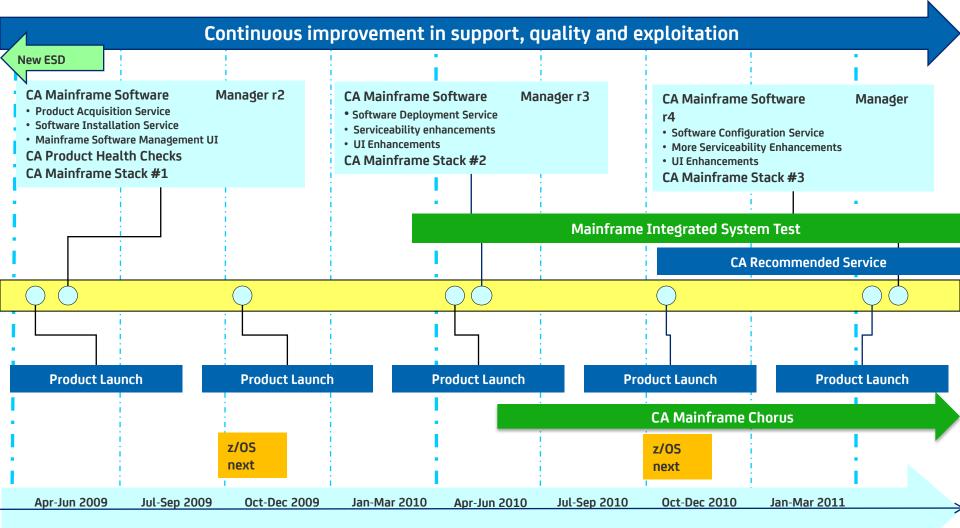
## **CA Mainframe Chorus for DB2 Database Management**

- Unique user experience for DB2 for z/OS database administration
- Harmonizes the different tools and processes required to accomplish daily database management tasks
- Leverages seven of CA Database Management products
  - CA Detector for DB2 for z/OS
  - CA Insight Performance Monitor for DB2 for z/OS
  - CA Plan Analyzer for DB2 for z/OS
  - CA Subsystem Analyzer for DB2 for z/OS
  - CA RC/Migrator for DB2 for z/OS
  - CA RC/Query for DB2 for z/OS
  - CA RC/Update for DB2 for z/OS
- Open for beta testing: <a href="mailto:ca.com/mainframe/chorus">ca.com/mainframe/chorus</a>





# delivering on Mainframe 2.0







#### summary

#### **Control Costs**

- Significant increase productivity of mainframe staff and reduced TCO
- Improve "Out-of-the-Box Experience" for CA mainframe products – less training required
- Minimize cost due to errors
- Maximize the overall usability and value of the z/OS platform

#### Sustain Critical Skills

- The "smarts" in the software
- Make routine tasks simple, freeing up bandwidth for more strategic initiatives
- "Getting it right" should not be left to chance
- Speed and accuracy are most important

#### **Increasing Agility**

- Automate and speed routine software maintenance tasks allowing greater responsiveness to business
- Making it possible to shift from maintenance to exploitation





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