CA Mainframe Chorus for Storage Management

Chris Culver – Engineering Services Architect

SHARE 2013

Introduction / Agenda

1. The Mainframe Today/Tomorrow
2. Key Challenges
3. Chorus the Platform for CA Solutions
4. CA Chorus for Storage Management Overview
5. Marquee Features - Demo
6. Roadmap

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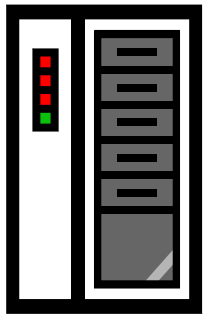
CA Mainframe Modernization and Optimization

Mainframe Today



17 M

8 M 2005

40 new customers

1500 Servers

99.999 %

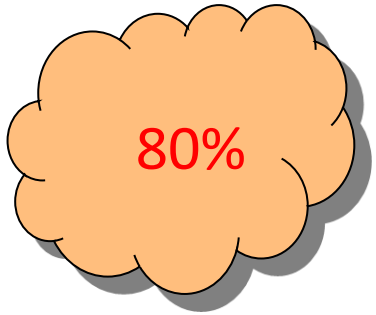
Scalability

Reliability

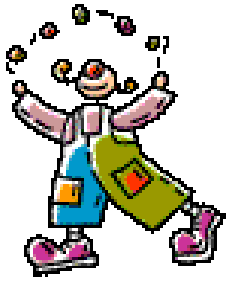
New Normal

Mainframe Tomorrow

85 %



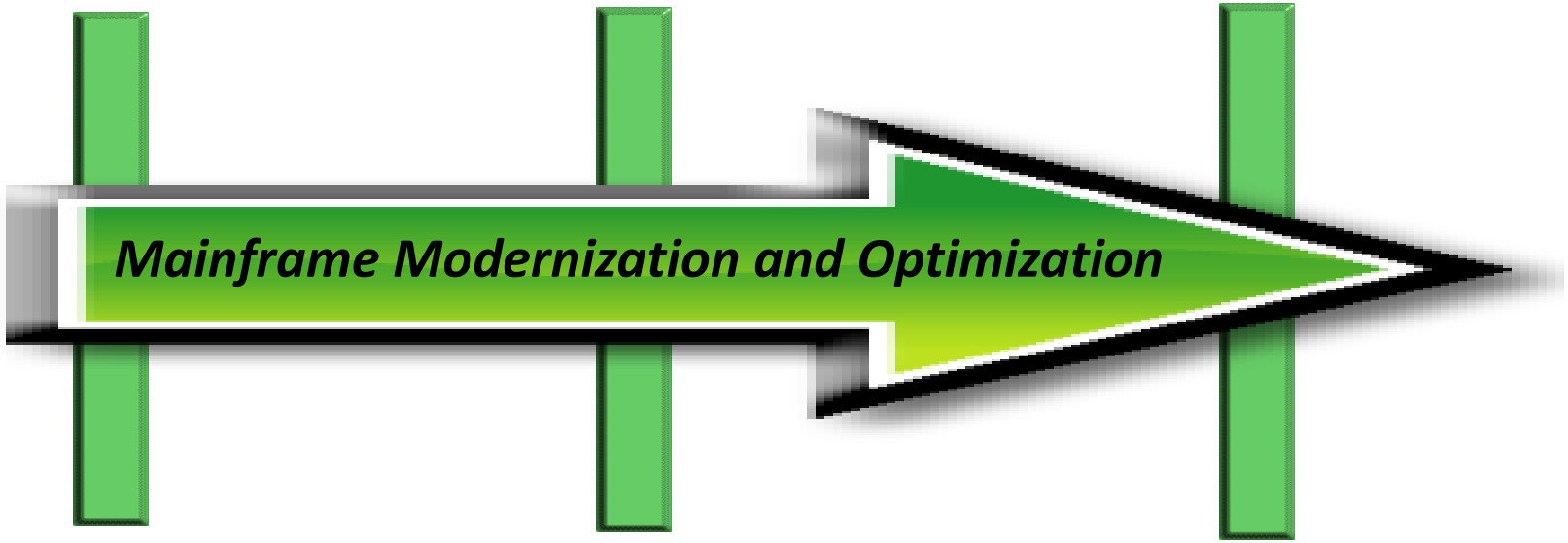
Mainframe



Distributed

MSAC Identified Key Challenges

Reduce Cost | **Sustain Skills** | **Hybrid I/T Management**



Maximize

Rationalize

Consolidate

CVP MSRP z/LINUX

Simplify I/T Management

MSM / CA RS / Chorus

EDUC -MF Academy

E2E Visibility & Mgmt.

E2E APM

Workload Automation

Compliance Management

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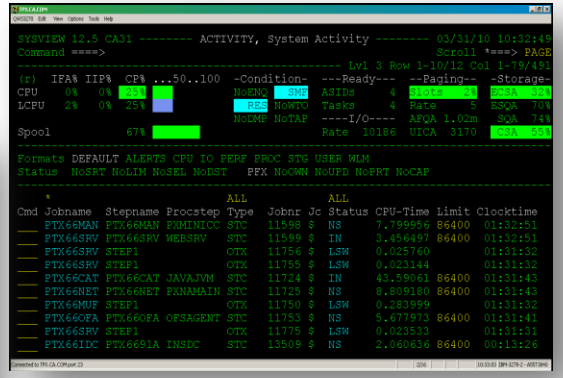
CA Technologies solution to sustain skills and simplify I/T management

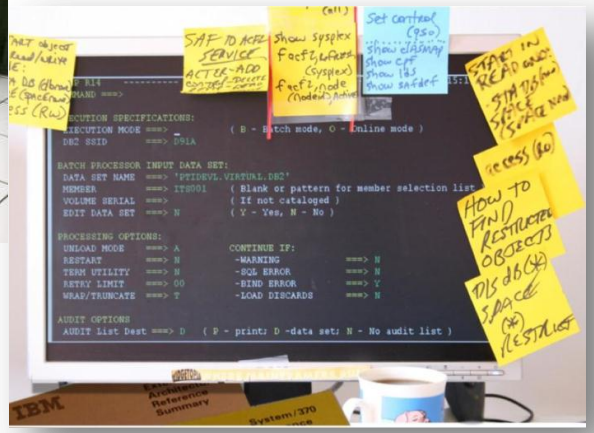
CA Mainframe Chorus

Our generation's mainframe management…

Command Centric

Green Screen



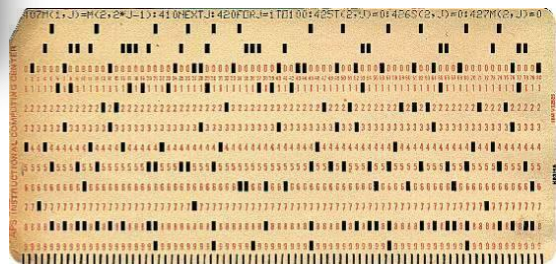


Knowledge & Collaboration

REPORT-1A anscicc SAMPLE CONTROL TOTALS BY DIVISION
07/31/1994
AREA/

DIVISION	REGION	GROSS	EXPENSE1	EXPENSE2	COUNT
10001	10	4,537,955.30-	5,100.00-	.00	2
10001	18	-2,086,572.19	-1,940.73	1,000.00	19
10001	30	(182,278.43)	(30.00)	.00	
10001	42	8,781,387.65DB	.00	1,500.00	
10001	43	209,763.01db	.00	.00	
10001	46	374,581,409.14CR	57,430.54DB	1,677,766.72	5
10001	47	94,607,014.40cr	.00	188,304.38	
10001	48	88,316.54	.00	.00	
10001	56	10,270,858.01	31,631.87db	16,141.81	1
10001	57	14,607,781.18	.00	.00	
10001	58	478,384.64	.00	.00	
10001	59	7,510,761.24	.00	1,200.00	
10001	60	42,050,758.13	290,277.32CR	127,815.39	565
10001	61	56,692,016.18	11,040.64cr	85,622.08	217
10001	62	3,487,976.08	1,526,728.16	204,677.42	2
10001	64	15,058,472.40	6,281.97	3,313.60	8
10001	65	124,752,634.30	55,680.22	15,825.35	6
10001	71	70,907.69	.00	.00	
10001	73	5,866,884.77	22.00	.00	
10001	75	5,858,917.56	.00	.00	
10001	76	64,515,051.60	7,947.08	.00	1
10001	79	.00	.00	.00	
10001	80	7,988,907.67	16,931.23	3,564.73	29

Reports



Process Automation

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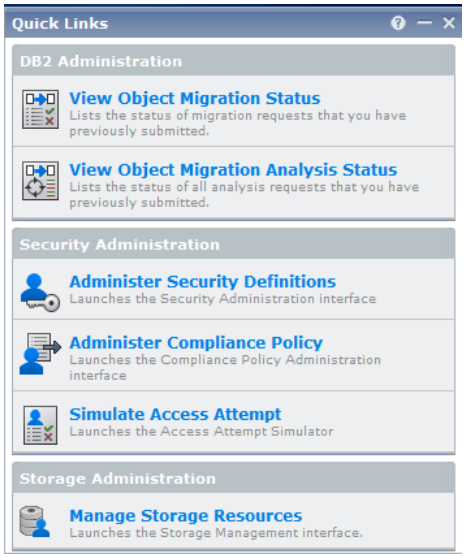
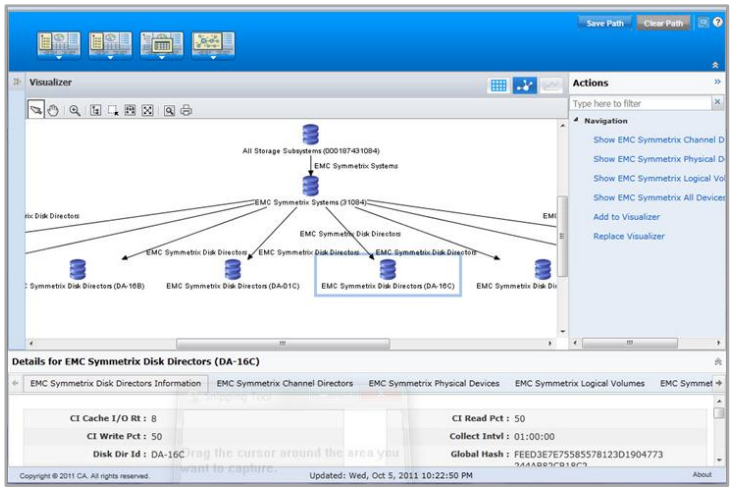
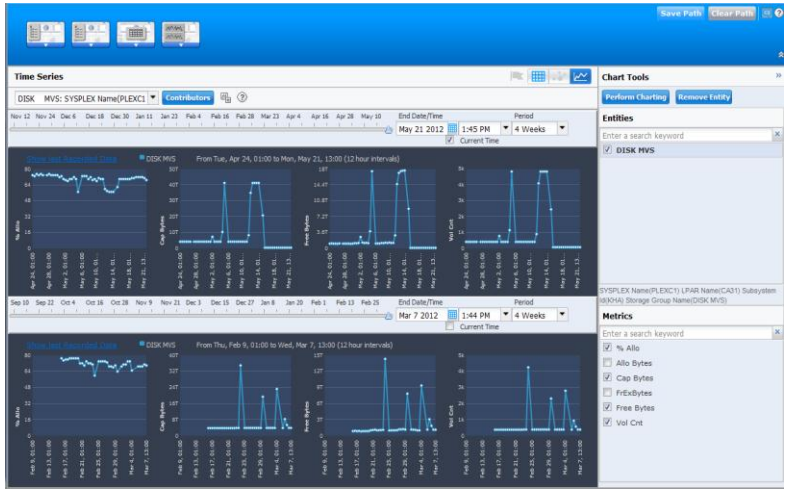
Simplify IT Management and Sustain Skills …..

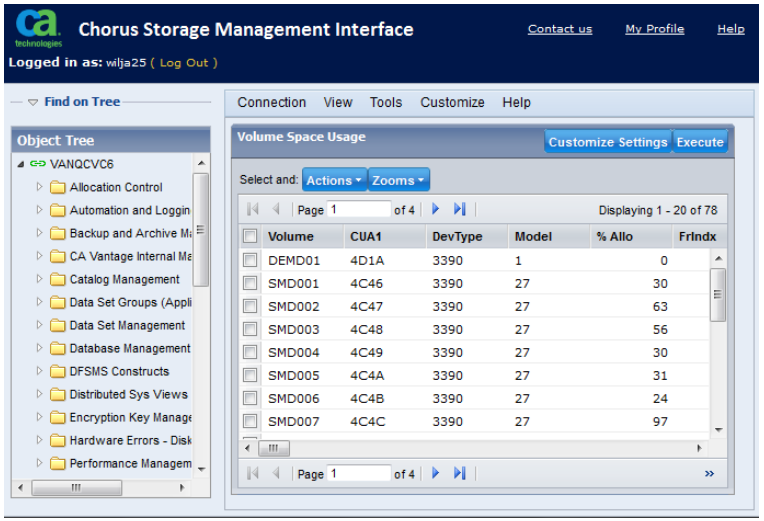
- Predefined monitors and alerts watch storage for you
- Solution based storage analysis
- Storage topology views
- Historical storage trend analysis charts and graphs
- Full administrative capabilities through Quick Links
- Knowledge management and collaboration tools

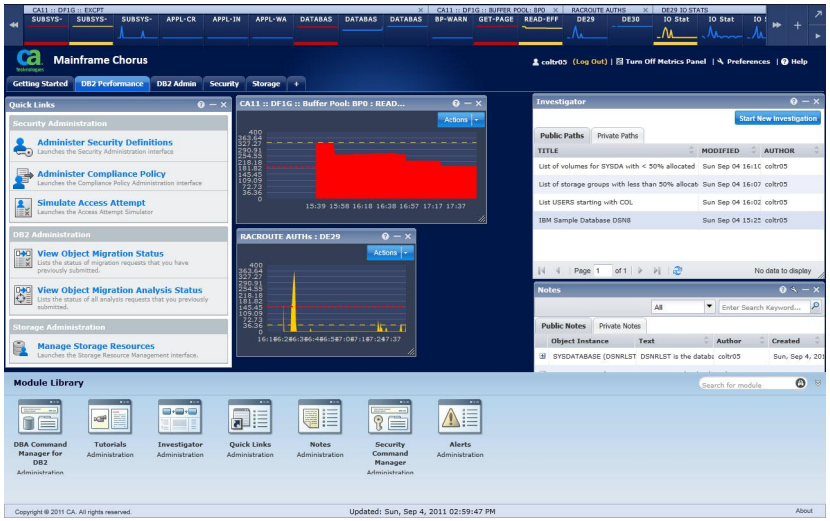


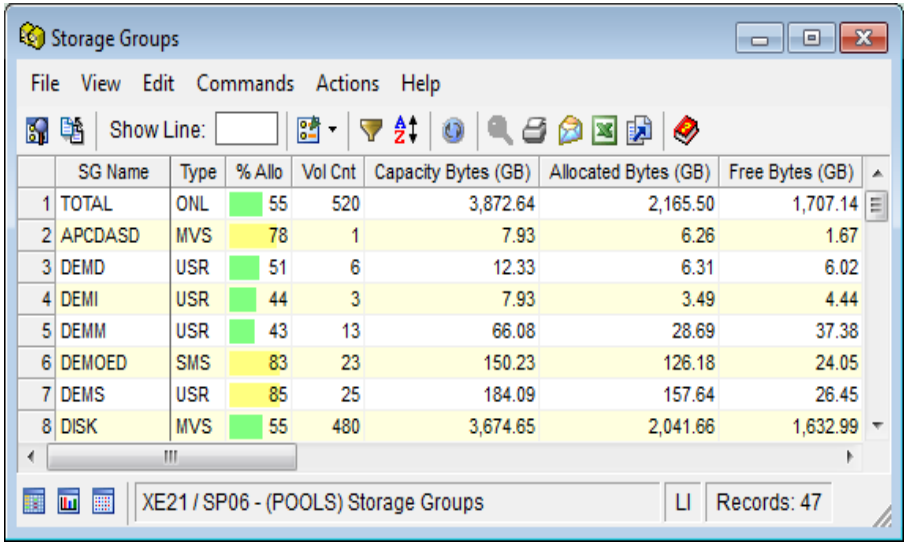




CA Storage Solution with Automation, User Views and Storage Management Analysis







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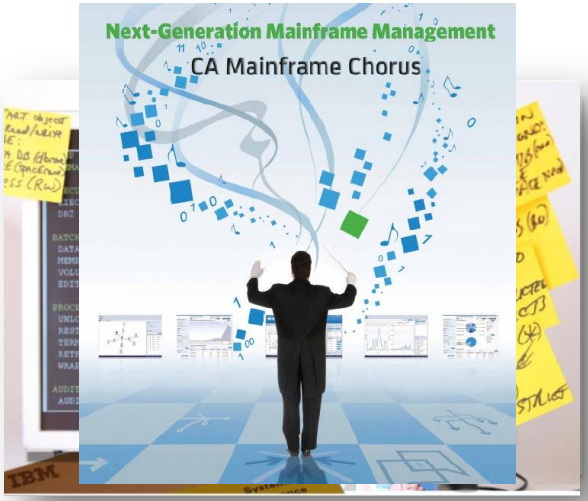
Next generation mainframe management

Integrated Workspace

Rich Visualization



Robust Reporting

Knowledge & Collaboration

Process Automation

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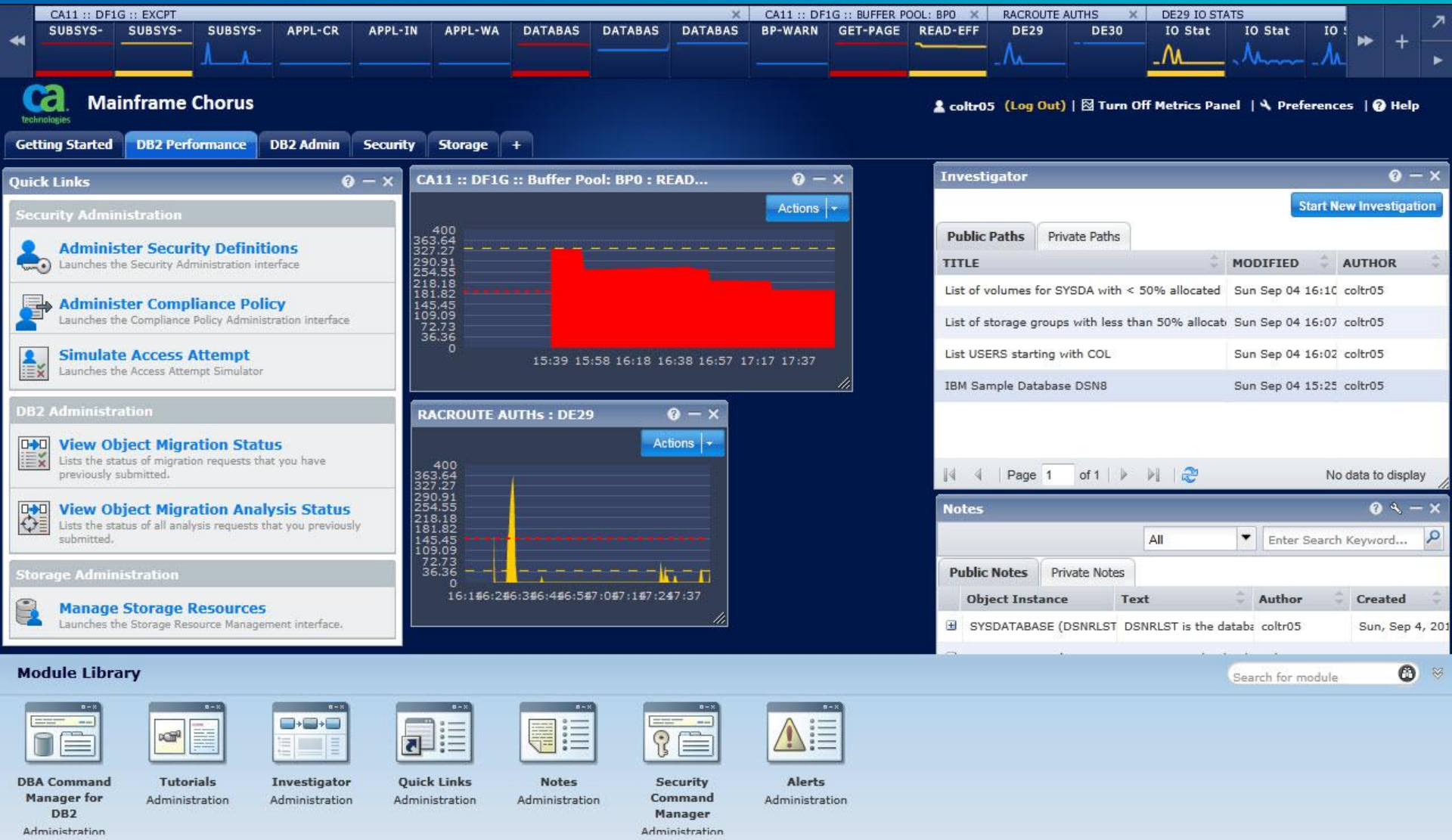
The next generation of mainframe management



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CA Mainframe Chorus platform

Leverage the POWER of CA Technologies storage solutions

- **RAID Systems**
  - EMC, IBM, HDS and Sun StorageTek
- **Allocation and Quota Management -**
  - CA Allocate™ DASD Space and Placement
- **Backup and Restore**
  - CA Disk™ Backup and Restore
  - IBM DFSMShsm
- **Tape, Robotics and Virtual Tape Systems**
  - CA Vtape™ Virtual Tape System
  - IBM VTS Virtual Tape System
  - Sun StorageTek VSM Virtual Storage Manager
  - IBM and Sun StorageTek robotic tape systems
- **Tape Management**
  - CA 1® Tape Management
  - CA TLMS® Tape Management
  - IBM DFSMSrmm
  - Allen Systems Group ASG-Zar

- **Tape Encryption**
  - CA Tape Encryption

- **Database Management Systems**
  - CA Datacom®/DB Database
  - CA IDMS™/DB Database
  - IBM DB2
  - Software-AG ADABAS

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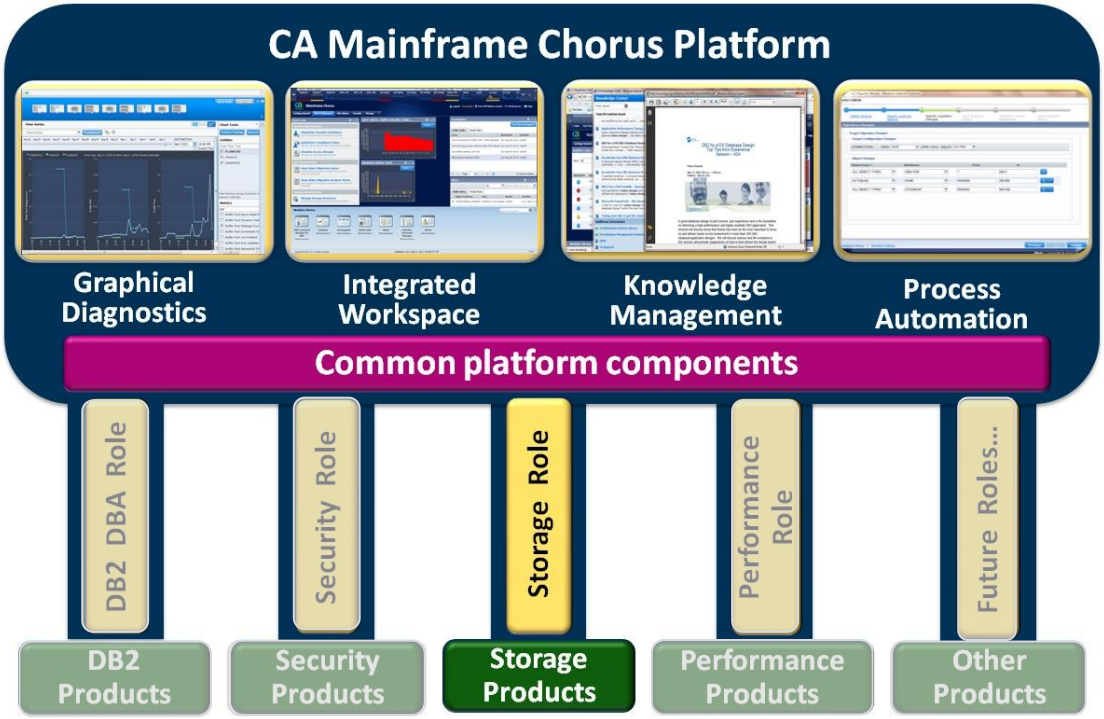
CA Mainframe Chorus Platform

- Object-oriented workspace
- New role-based interaction model
- Incorporates rich features and data visualization
- Leverages CA Technologies' portfolio of products as a single bank of features and functions



CA Mainframe Chorus for Storage Management r2.5 features

- Multi-host support:
  - Multiple instances of the storage engine can now be defined to the Chorus Storage Role
- Administrative Actions:
  - Storage Resource Administrative Actions allow you to manage your storage resource environment which includes managing storage assets, facilities, and information, e.g. delete a data set
- Solutions Category
  - New Solutions Category which lists CA Vantage Factory-supplied Summary Objects and user-defined Summary Objects has been added to the Storage Tree
- Cross-role Capabilities (Storage-Security)
  - Show users and their privileges for a selected data set; show users that have tried to access a selected data set but did not have authority
- Knowledge Center includes Storage Object Knowledge
  - the Knowledge Center results now include a topic that details the storage object and its available backend line actions

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CA Mainframe Chorus for Storage Management prerequisites

Who needs to be involved

Systems Programmer for z/OS

Storage Administrator

Security Administrator

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System requirements

Storage

- 1240 MB (CA Mainframe Chorus)
- 110 MB (CA Mainframe Chorus for Storage Management)

Processor

- Recommend at least 2 GP processors
- Highly recommend specialty engine zAAP

DISK

- Approximately 8500 cylinders for MSM to install and deploy
- Approximately 4500 cylinders for target and dlib datasets
- Approximately 400 cylinders of zFS space for user documentation and configuration

USS BPXPRMXX

- MAXFILEPROC(64000) – sets maximum file descriptions per USS process

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Software requirements - IBM

- IBM z/OS 1.11 or above
- IBM z/OS UNIX System Services (USS) support for zFS file systems
- IBM 64-bit SDK for z/OS, Java Technology Edition, Version 7 Release 0 Modification 0 (5655-W44), including optional JZOS batch launcher
- IBM 31-bit SDK for z/OS, Java Technology Edition, Version 7 Release 0 Modification 0 (5655-W43), is required to generate batch reports in CA Mainframe Chorus. This feature uses the CA Easytrieve service component of CA Common Services for z/OS.
- TCPIP Ports - Recommend reserving a range of at least 35

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Software requirements – CA Technologies

CA Common Services for z/OS

- Release 12 with maintenance
- Release 14.0 with maintenance
- Release 14.1

CA Common Services required components

- CAIRIM
- CA LMP
- CAMASTER
- CA Easytrieve CA Common Services (FMID CDX8E00)

Important! The CAMASTER address space must be running.

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Software requirements – CA Technologies

CA Mainframe Software Manager (MSM)

- Release 4.0
- Release 4.1
- Release 5.0

CA Mainframe Chorus requires an MSM installation!

CA Mainframe Chorus for Storage Management

- Release 2.5

CA Vantage SRM

- Release 12.6 base
- Vantage SRM Automation Option
- CA GMI

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Security Requirements

Security requirements for Chorus

- Target library CETJJCL(ETJI0095) contains sample definitions for RACF, ACF2 and Top Secret
  - Chorus user ID'S
  - Started Task Definitions
  - Resource definitions

- Passtickets used to avoid repetitive log in
  - 10 minute expiration
  - LPAR time zones

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Security Requirements

Security requirements for the installer

- Update access to target libraries and zFS high-level qualifier
- OMVS segment with valid home directory
- BPX.SUPERUSER
- BPX.FILEATTR.APF
- BPX.FILEATTR.PROGCTL
- BPX.FILEATTR.SHARELIB
- BPX.SERVER

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Installation process

- Must use MSM
- Install all pax files into the same SMPE CSI (Chorus 3rd Party Products, the Chorus Platform and roles)
- CA Mainframe Chorus Installation Quick Reference Guide
  - Step by step instructions for the Chorus Platform and available roles
  - Check list format
  - Worksheets for gathering and recording configurable items
- CA Mainframe Chorus Installation guides
  - Lots of detail and background
  - Use as a reference

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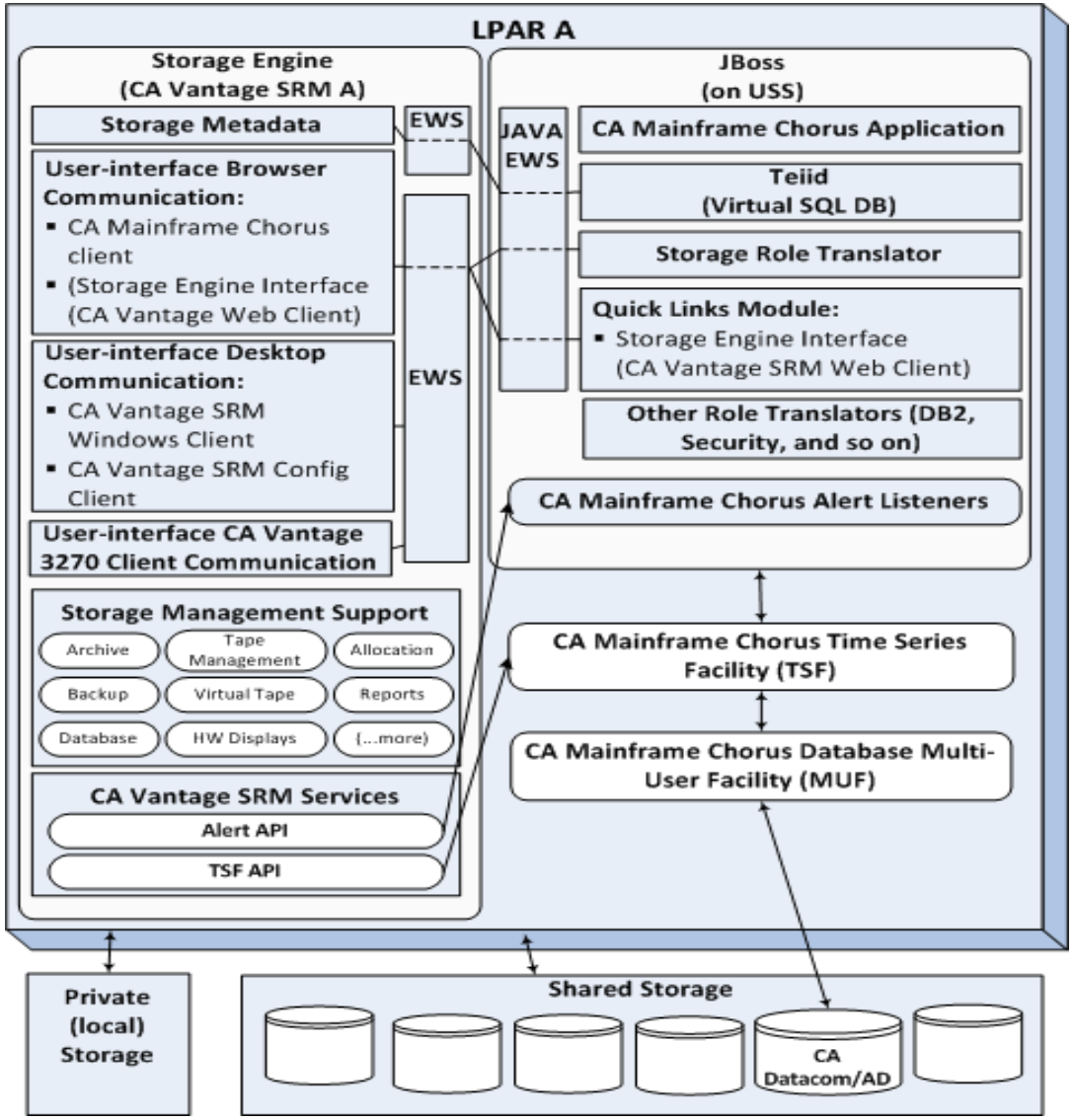
CA Mainframe Chorus for Storage Management
overview

Storage role architecture



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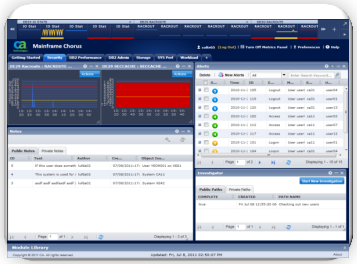
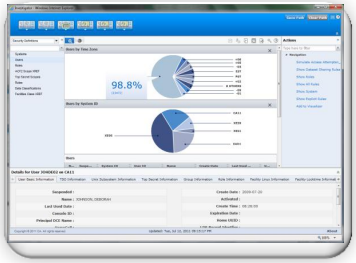
CA Mainframe Chorus for Storage Management
an overview…



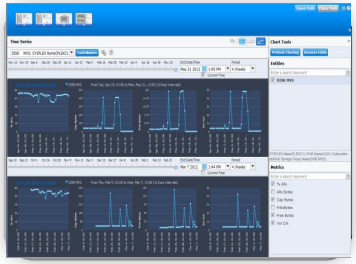
Integrated Workspace

- Singular interaction model
- Fast Learning Curve



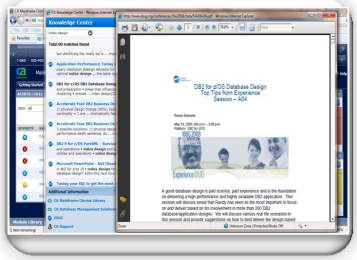
Role-Based Navigation

- Matches Job Functions
- Leverage people across platforms and disciplines



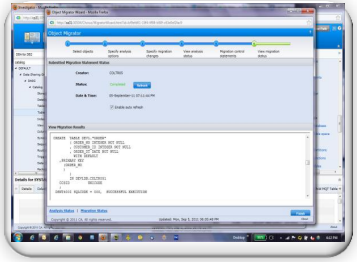
Graphical Diagnostics

- Historical performance graphing and comparison
- Solve problems faster



Knowledge Management

- Local knowledge and expertise at users fingertips including IDUG and QuickRef
- Increases the whole team's efficiency



Process Automation

- Wizard-like process for Object actions
- Reduces possibility of errors

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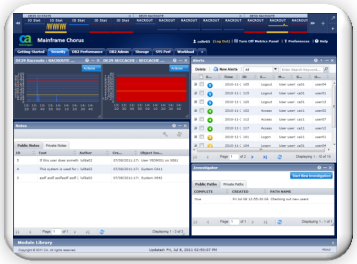
Integrated Workspace

CA Mainframe Chorus for Storage Management
an overview…



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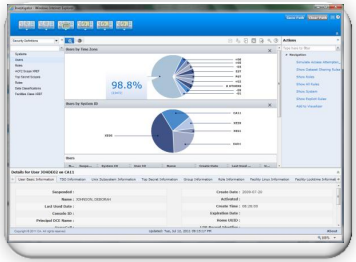

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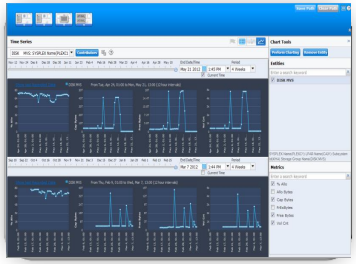

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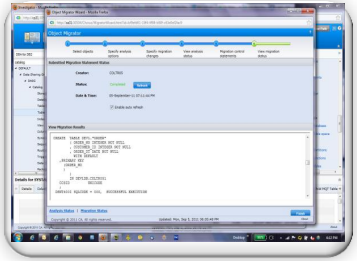

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Role -based Navigation

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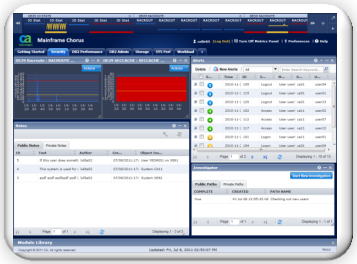

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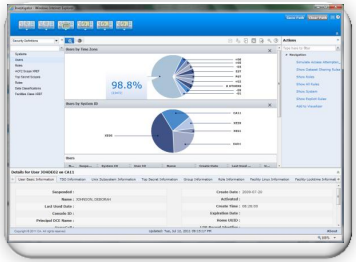

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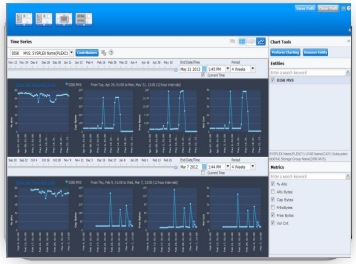

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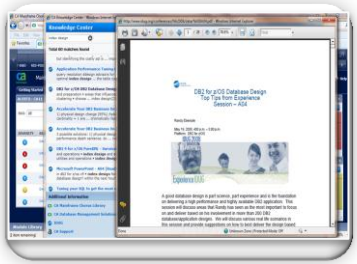

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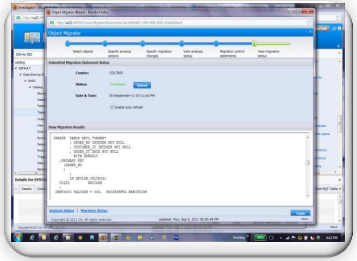

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CA Chorus for Storage – Graphical Diagnostics

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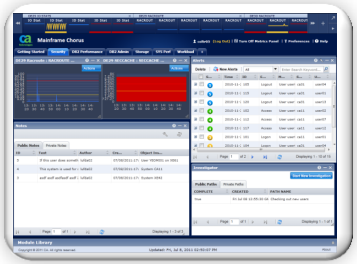
CA Mainframe Chorus for Storage Management
an overview…



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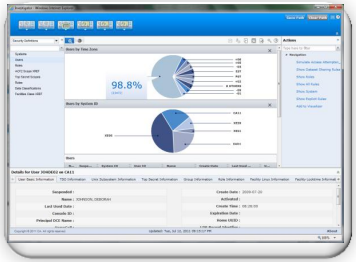

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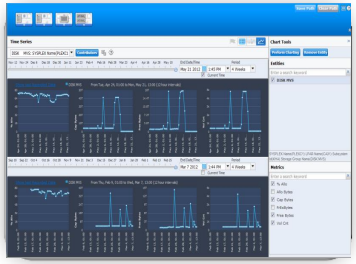

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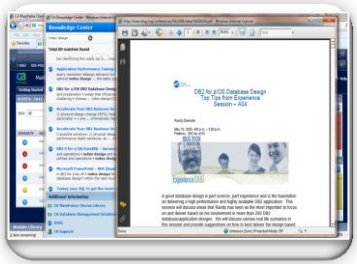

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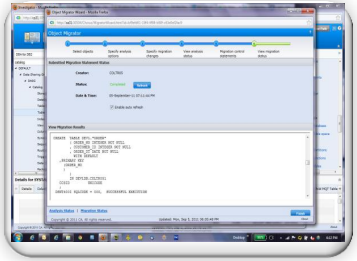

Process Automation

- Wizard-like process for Object migration
- Reduces possibility of errors

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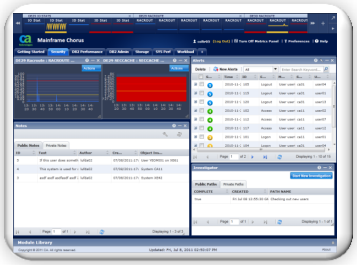
CA Chorus for Storage – Product Documentation, Notes and WEB UI

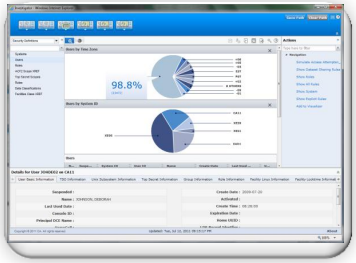
CA Chorus for Storage – Local documentation, URLs

CA Mainframe Chorus for Storage Management
an overview…



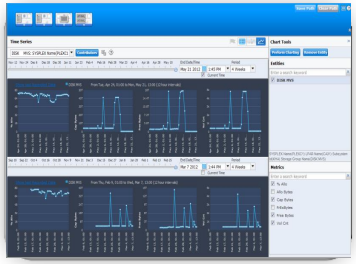
Integrated Workspace

- Singular interaction model
- Fast Learning Curve



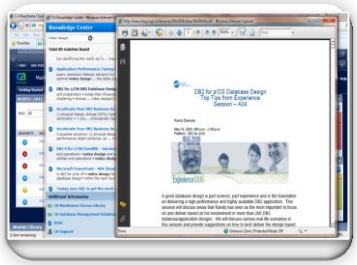
Role-Based Navigation

- Matches Job Functions
- Leverage people across platforms



Graphical Diagnostics

- Historical performance graphing and comparison
- Solve problems faster



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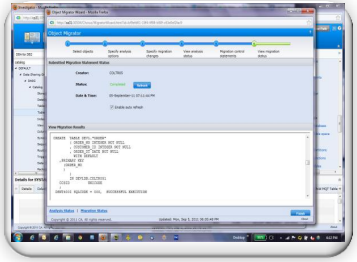

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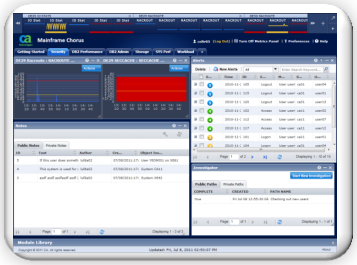
Process Automation

CA Mainframe Chorus for Storage Management with the underline technology of CA Vantage



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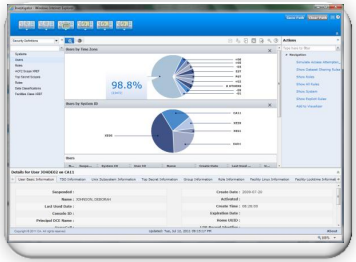

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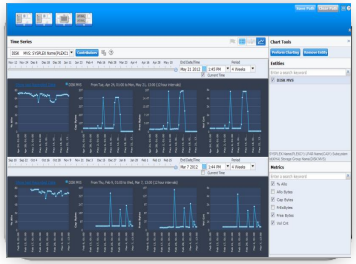

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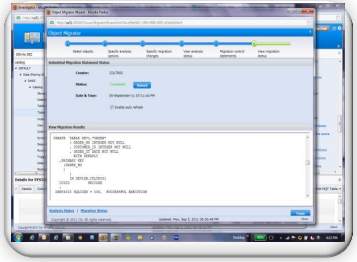

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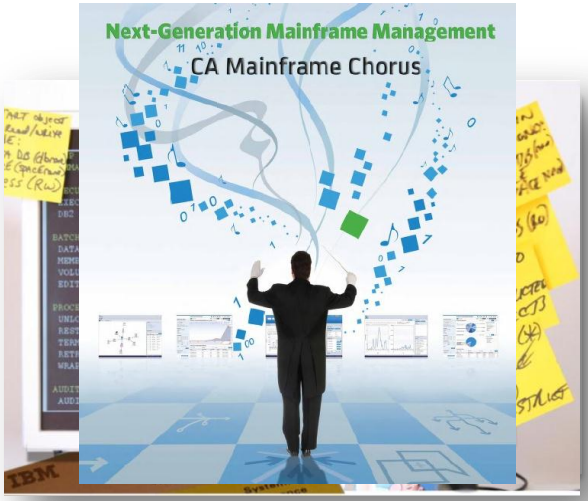
Next generation mainframe management

Integrated Workspace

Rich Visualization



Robust Reporting

Knowledge & Collaboration

Process Automation

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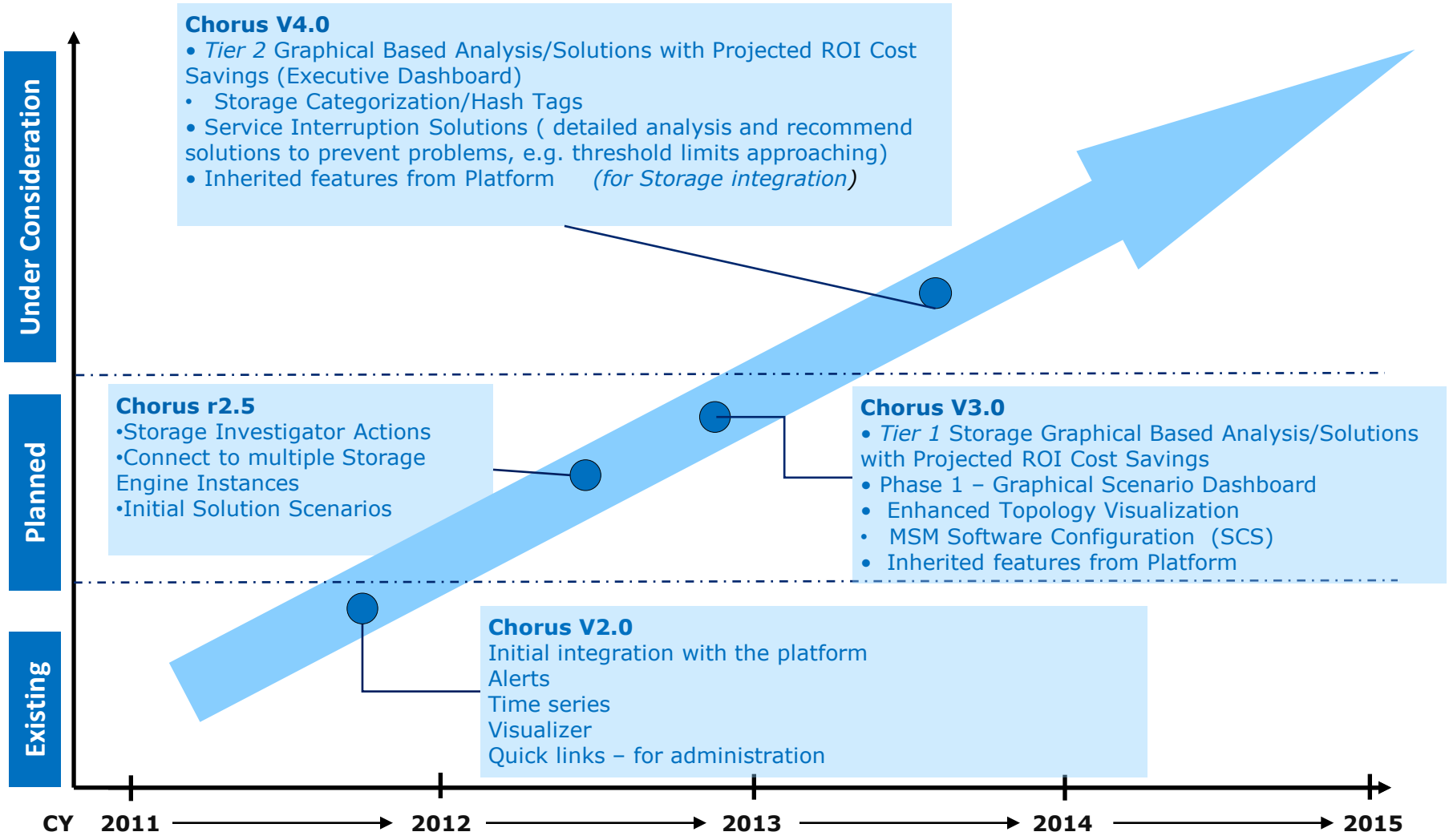
Storage Role roadmap as of *January 12, 2013*



Also see:

For more information on CA Mainframe Chorus please visit:

http://www.ca.com/us/products/detail/CA-Mainframe-Chorus.aspx

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Q & A

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Thank you for your time!

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