CA Mainframe Chorus for Storage Management

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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
Mainframe Today

- 17 M
- 8 M 2005
- 40 new customers
- 1500 Servers
- 99.999 %
- Scalability
- Reliability
- New Normal

Mainframe Tomorrow

- 85 %
- 80%
- Mainframe
- Distributed

CA Mainframe Modernization and Optimization
MSAC Identified Key Challenges

Reduce Cost  Sustain Skills  Hybrid I/T Management

Maximize  Simplify I/T Management  E2E Visibility & Mgmt.
Rationalize  MSM / CA RS / Chorus  E2E APM
Consolidate  EDUC -MF Academy  Workload Automation
CVP  MSRP  z/LINUX

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

Reports

Process Automation
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
Next generation mainframe management

- Integrated Workspace
- Rich Visualization
- Robust Reporting
- Knowledge & Collaboration
- Process Automation
The next generation of mainframe management
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
— 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
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
CA Mainframe Chorus for Storage Management prerequisites
Who needs to be involved

Systems Programmer for z/OS
Storage Administrator
Security Administrator
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
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
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.
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
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
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
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
CA Mainframe Chorus for Storage Management overview
Storage role architecture
CA Mainframe Chorus for Storage Management

an overview...

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

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

- Historical performance graphing and comparison
- Solve problems faster

- Matches Job Functions
- Leverage people across platforms and disciplines

- Singular interaction model
- Fast Learning Curve

- Integrated Workspace
- Role-Based Navigation
- Graphical Diagnostics
- Knowledge Management
- Process Automation
Integrated Workspace
CA Mainframe Chorus for Storage Management

an overview...

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

- Simplifies human interaction model
- Improves fast learning curve

- Matches Job Functions
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CA Mainframe Chorus for Storage Management
an overview...

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<th>Graphical Diagnostics</th>
<th>Knowledge Management</th>
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Process Automation
- Wizard-like process for Object migration
- Reduces possibility of errors
Process Automation
CA Mainframe Chorus for Storage Management with the underline technology of CA Vantage

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Next generation mainframe management

Integrated Workspace

Rich Visualization

Robust Reporting

Knowledge & Collaboration

Process Automation
**Storage Role roadmap as of January 12, 2013**

### Chorus V4.0
- **Tier 2** Graphical Based Analysis/Solutions with Projected ROI Cost Savings (Executive Dashboard)
- Storage Categorization/Hash Tags
- Service Interruption Solutions (detailed analysis and recommend solutions to prevent problems, e.g. threshold limits approaching)
- Inherited features from Platform *(for Storage integration)*

### Chorus V3.0
- **Tier 1** Storage Graphical Based Analysis/Solutions with Projected ROI Cost Savings
- **Phase 1** – Graphical Scenario Dashboard
- Enhanced Topology Visualization
- MSM Software Configuration (SCS)
- Inherited features from Platform

### Chorus r2.5
- Storage Investigator Actions
- Connect to multiple Storage Engine Instances
- Initial Solution Scenarios

### Chorus V2.0
- Initial integration with the platform
- Alerts
- Time series Visualizer
- Quick links – for administration

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**Existing**

**Planned**

**Under Consideration**

**CY 2011** ➔ **2012** ➔ **2013** ➔ **2014** ➔ **2015**
Also see:

For more information on CA Mainframe Chorus please visit:

Q & A
Thank you for your time!