CA Gen
Product Update

Patti Bowman & Russ LeClaire

November 13, 2012

agility
made possible™

ca technologies

agenda

— CA Gen Overall Strategy

— CA Gen Roadmap

- Recent releases and new functionality

- Planned releases and new functionality

- Additional plans and considerations

— Beta Testing Participants Release 8.5

— Communications Mechanisms

— Closing

Your Priorities as the Buyer, User & Partner: CA Gen

Buyer

- modern technology & interfaces
- strategic product for vendor
- vendor core competency
- optimize TCO
- tools that are less dependent upon experts
- readily able to find expertise
- drives innovation within their organization
- vendor innovation velocity
- analyst recommendations
- mitigate business risks
- seamless upgrades
- open technology
- product stability

User

- features aligned with real life end user needs
- acknowledgement of feature requests
- vendor innovation velocity
- access to one toolset
- seamless upgrade process & backward compatibility
- implementation of features in the model
- active Gen community
- experience an innovative state of the art product
- exploit subsystem changes
- open technology
- product stability

Partner

- strategic product for vendor
- vendor core competency
- innovation velocity
- focused marketing and sales efforts
- strengthen Gen identity in ecosystem
- features aligned with real life end user experience
- collaborative partner environment and experience
- streamline upgrade process (for some partners only)
- analyst recommendations
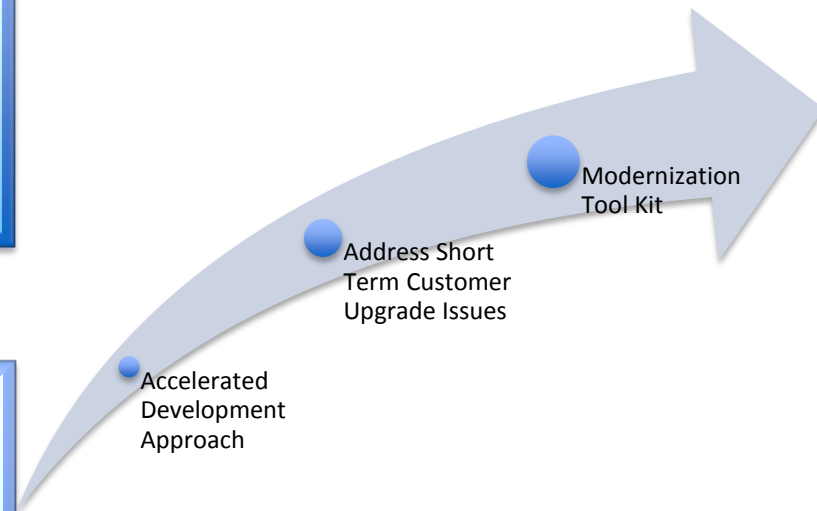- product stability

ca technologies

CA Gen
strategy plan

Protect

-mitigate upgrade issues

-upgrade customers

-invest in technical currency

-UI improvement to ensure adoption

-exploit new technologies

Expand Gen Identity

-tie CA Gen to overall CA modernization theme

-further modernization (COBOL/PL1 to CA Gen, Telon to CA Gen, Natural/Adabas to CA Gen)

-deploy CA Gen load modules to CA AppLogic

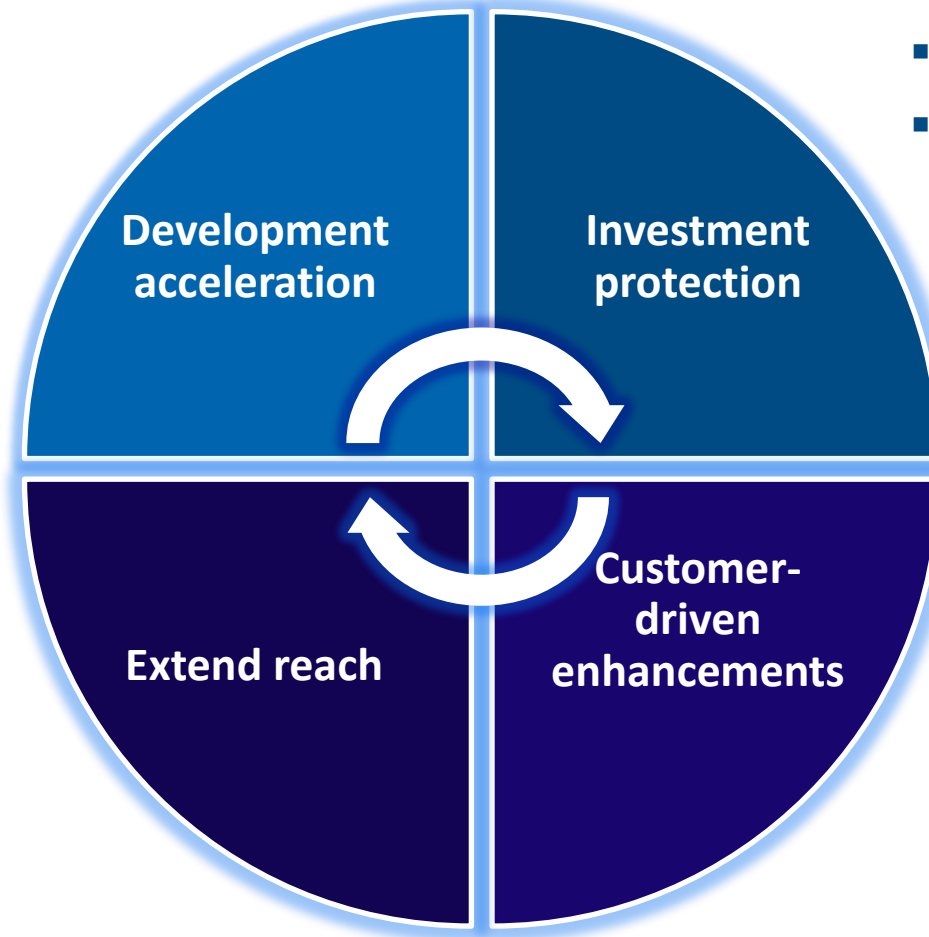-exploit CA Gen in CA Lisa & CA APM view for service assurance

Accelerated Development Approach

Address Short Term Customer Upgrade Issues

Modernization Tool Kit

our four goals
CA Gen

- Customer collaboration during development cycle
- Shorter release cycles

- Reliability & stability
- Predictability
- Backward compatibility

Development acceleration

Investment protection

Extend reach

Customer-driven enhancements

- Web Services
- Gen Studio

- Interact with customers & partners to determine new features and enhancements

ca
technologies

CA Gen roadmap

recent releases
CA Gen

Release 8.0
May 2010

- Productivity & Performance
  - Support Dynamic Triggers
  - Multi-row fetches & thread safe support
  - Multi-socket listener
  - Larger modules and subsets
  - Support for In and Between
  - DB2 package bind enhancements
  - Identify columns
  - Compatible release runtimes
- Gen Studio
- Web Enhancements
  - Web View
  - Web Service Access

Interim Enhancements
April 2011

- System Currency Support Web View
  - Visual Studio 2010
  - Mozilla Firefox
  - JBoss
- Web View Customization (UI)
- Batch Library for Dynamic RI & z/OS Batch Processing

January 2012

- 64-bit Windows Support
- Gen Studio Generation
- Custom Proxies
- Remove 32K CFB Limit (excludes MF)

future releases
CA Gen

2013
Release 8.5

- Remove CFB 32K Limit – all platforms
- BLOBs - read/write/transfer
- CA Gen Studio Web View - full generation
- DB2 Table and Table Space partitioning
- 64 bit server support
- Transaction Enabler (TE) Web Services
- 3rd party certifications
- Customer enhancement requests

2013

- BLOB on z/OS
- DB2 Features
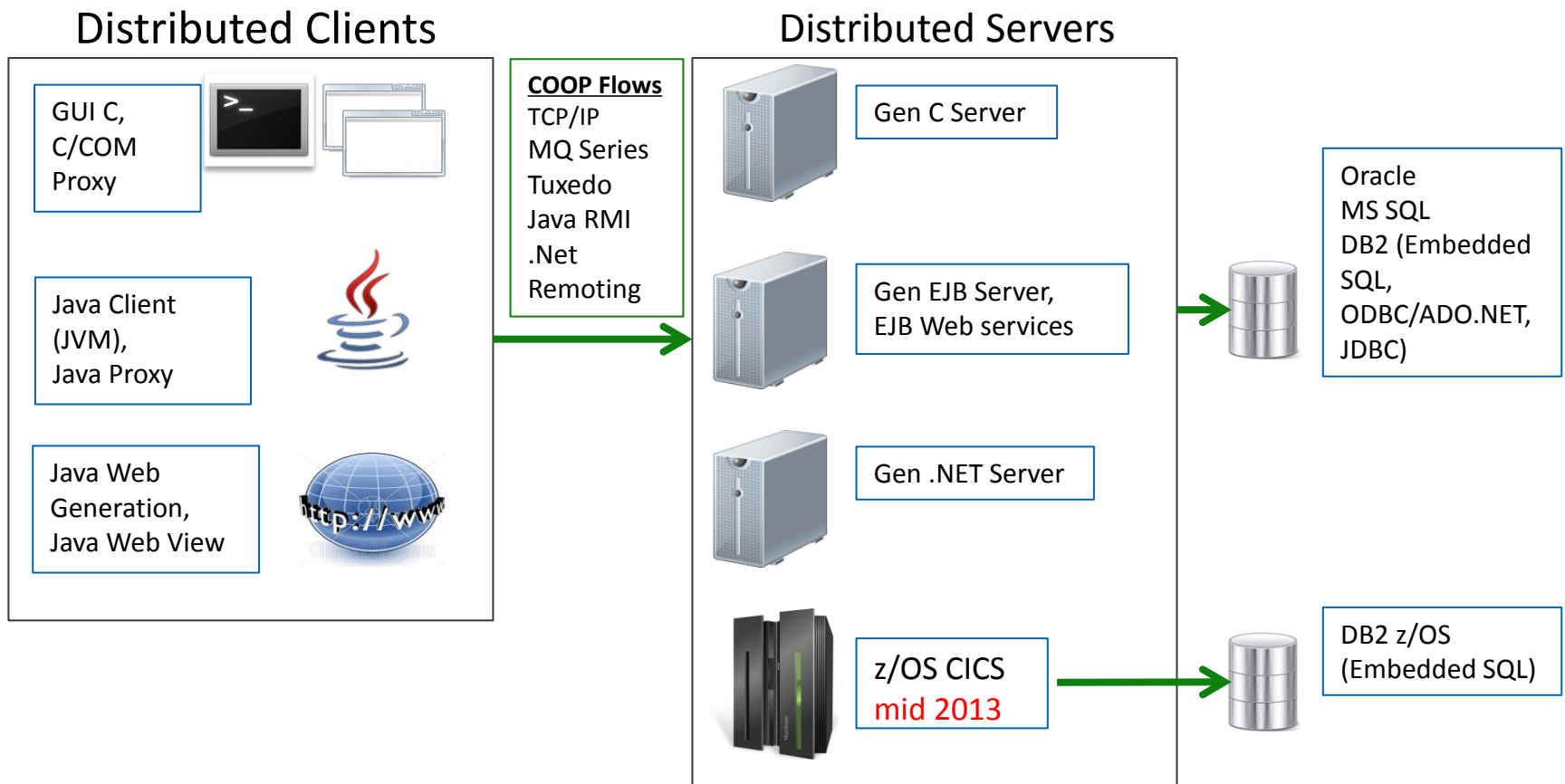- Analysis of Web Client Strategies

ca
technologies

— Increased the amount of customer data that can be sent between CA Gen clients and Servers using Common Format Buffer (CFB) from 32K to 16MB

– Windows*

– Unix & Linux (TCP/IP & MQ)*

– Unix & Linux (Tuxedo)

– z/OS

* Included in CA Gen 8 IE 2

BLOB support for COOP applications release 8.5

—Support for binary large objects for generated applications
  —create, read, update, and delete records containing BLOB attributes
  — create and consume records with BLOB attributes in EABs

Distributed Clients

| GUI C, C/COM Proxy |
| Java Client (JVM), Java Proxy |
| Java Web Generation, Java Web View |

COOP Flows
TCP/IP
MQ Series
Tuxedo
Java RMI
.Net
Remoting

Distributed Servers

Gen C Server

Gen EJB Server, EJB Web services

Gen .NET Server

z/OS CICS
mid 2013

Oracle
MS SQL
DB2 (Embedded SQL,
ODBC/ADO.NET,
JDBC)

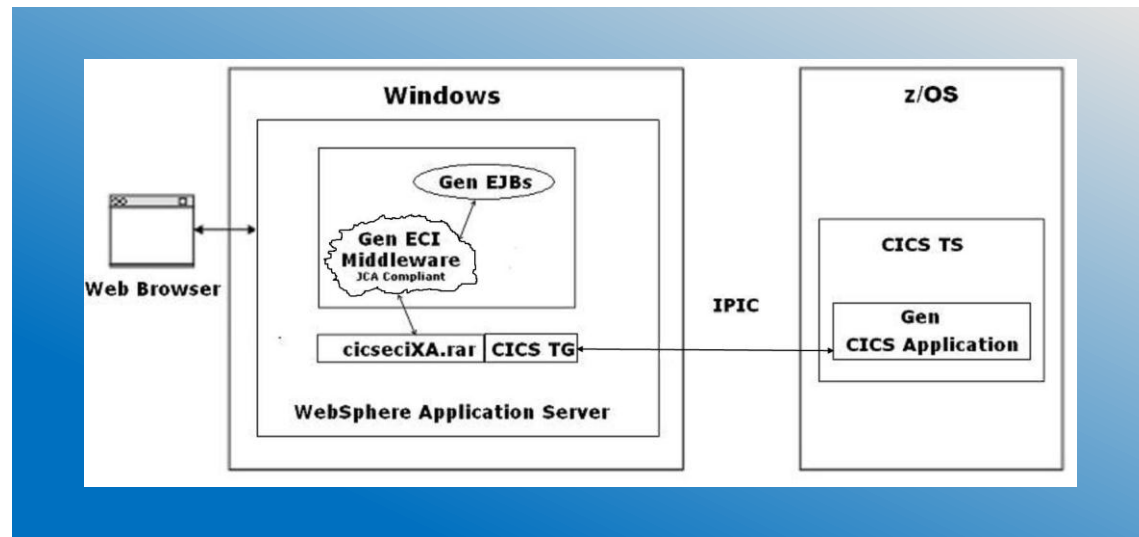DB2 z/OS
(Embedded SQL)

ca technologies

64 bit support
release 8.5

- Transaction Enabler and User Funnel upgraded to 64 bit

- For CA Gen 8.5, support 64 bit generated applications only
  - Recompile with correct flags
  - Regenerate required only when blockmode Profile Compression on

- Available for Solaris, AIX and Linux
  - Support for HP-UX Itanium already exists
  - Windows 64 bit was released with IE2

- 64 Bit Tuxedo available for Linux

- Keeps up with 3rd party 64 bit only API support

- Note: Support for Itanium based processor only

ca
technologies

Two Phase Commit release 8.5

— extends the transaction scope of a CA Gen EJB application to encompass CA Gen CICS transactions

  — Supports calls to a CICS program on a CICS server through the ECI interface.

  — Provides Distributed Program Link (DPL) access to CICS applications over TCP/IP

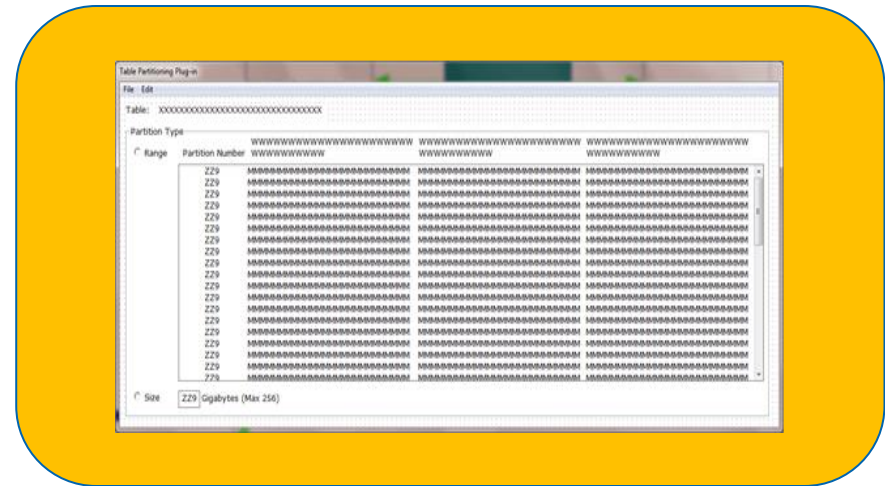We need a beta test customer to include this feature, any volunteers?

DB2 Table Partitions and Table Space Partitioning Plug-ins

– Table Partitions

- partition database tables based on the values of any column in the table to partition the table whenever the size of the partition exceeds a certain value

– Tablespace Partitioning

- manage Tablespaces by allowing them to be partitioned based on growth or by pre-defining a number of partition ranges
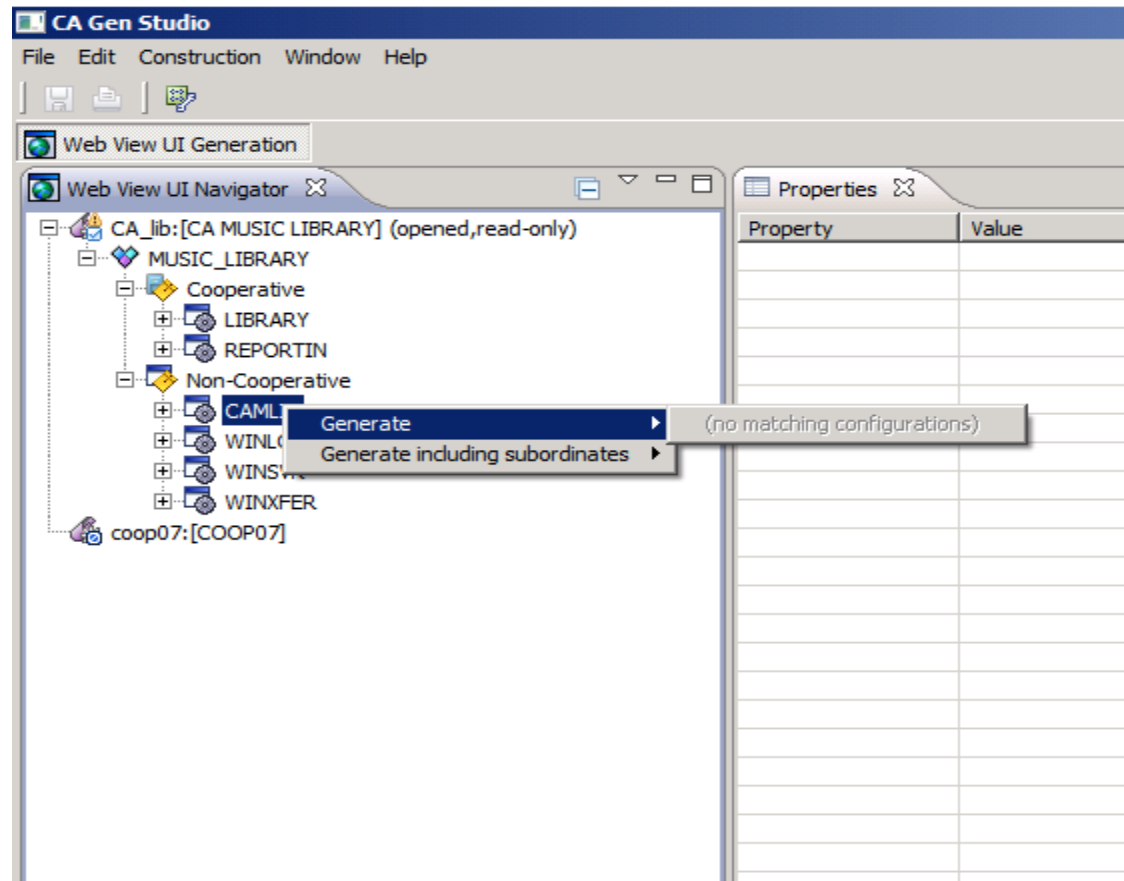

Available with DB2 version 9

Data is stored in the model and used by the DDL generator when generating CREATE TABLE and CREATE TABLESPACE statements.

Web View generation release 8.5

- Full generation for Web View clients from CA Gen Studio

- Maintain multiple generation configurations for each model

- Configurations may be added, modified, and deleted using the Generation Configuration dialog from within CA Gen Studio

future
CA Gen

2013

- Planning Development Acceleration to provide:
  - CICS Web Services
  - In-Line Code
  - Web Services Consumption
  - z/Linux
  - Deploy CA Gen Modules in Cloud
  - Generate Proxies from UNIX CSE

2014

- Gen Studio Enhancement
  - Action Diagram
  - Dialog Flows
  - Navigation Diagram
- Java Generation on Mainframe
- Miscellaneous Customer Enhancements (DARs)
- Support different release variants for GUI

ca
technologies

your feedback on the proposed features:

How important are these to your organization?

| CICS Web Services | Web Services Consumption | z/Linux | Deploy CA Gen Modules in Cloud | Generate Proxies from UNIX CSE | Gen Studio Tool

• Action Diagram
• Dialog Flows
• Navigation Diagram | In-Line Code | Java Gen. on MF |

VOTE

miscellaneous enhancements:

- Other enhancement requests voted by EDGE members
  - Support for Common SQL Functionality
    - In-Line feature would cover this
  - Undo/Redo Feature in Toolset
    - With focus on Gen Studio this is not applicable
  - Batch Exit States
  - 2 Phase Commit: J2EE/CICS
  - Function Point Report on CSE
  - User exits in CA Gen
  - CFB Server enhancement
    - Very few users
  - Database Option SQL1
  - Modify primary index

ca
technologies

miscellaneous enhancements:
DARs

Item	Description
BATCH EXIT STATES	The batch processing facility of CA Gen does not allow the user sufficient control over the return codes for job execution (e.g. if the Procedure step runs to completion the return code is 1000).
DYNAMIC LINK FOR BATCH PSTEPS	Currently CA Gen supports z/OS dynamic linking for Online & Cooperative PSteps, but not for Batch PSteps. We would like the Dynamic Link property to be made available for Batch Psteps.
2 PHASE COMMIT: J2EE/CICS	Provide a mechanism to include a CICS transaction within J2EE transaction context. The current Gen architecture causes us issues around commit points and rollback capability when writing applications that may be a combination of handcrafted Java or CA Gen generated Java and consuming TRAILS Services.
CSE FUNCTION POINT REPORT	Provide a Function Point Calculation report available on the CSE Product with the same functionally as on the Mainframe Z/OS Host Encyclopedia.
USER EXIT	Add User Exits to the CA Gen batch and distributed runtimes to enable users to produce logs for SOX, HIPAA, PCI and other regulatory requirements. Must have the ability to capture the essence of the message and must be performed asynchronously so logging does not slow done runtime processing.
DATABASE OPTION SQLJ	Provide an option to Generate SQLJ as well as JDBC for EJB's due to a much better performance in SQLJ.
MODIFY PRIMARY INDEX	Provide the ability to modify/update an existing table's primary index by applying the change or retransformation without first having to delete the table that contains the primary unique index and then re-implementing the entire table.

ca technologies

CA Gen r8.5 beta

beta

- r8.5 Beta

- Time Frames

- Registration

- Who in this room will be participating?

CA Gen next steps

communications mechanisms

- Collaboration with Customers/Partners during development
  - Heavy customer interaction <u>and validation</u>
  - Prototype approach where possible

- Obtain feedback from Customers/Partners on priorities

- Quarterly Partner Virtual Communications Meetings

- Executive Advisory Board

YOUR THOUGHTS?

questions

thank you

ca technologies

legal notice

Certain information in this presentation may outline CA's general product direction. This presentation shall not serve to (i) affect the rights and/or obligations of CA or its licensees under any existing or future license agreement or services agreement relating to any CA software product; or (ii) amend any product documentation or specifications for any CA software product. This presentation is based on current information and resource allocations as of November 1, 2012, and is subject to change or withdrawal by CA at any time without notice. The development, release and timing of any features or functionality described in this presentation remain at CA's sole discretion.

Notwithstanding anything in this presentation to the contrary, upon the general availability of any future CA product release referenced in this presentation, CA may make such release available to new licensees in the form of a regularly scheduled major product release. Such release may be made available to licensees of the product who are active subscribers to CA maintenance and support, on a when and if-available basis. The information in this presentation is not deemed to be incorporated into any contract.

Copyright © 2012 CA. All rights reserved. IBM and IBM i are trademarks of International Business Machines Corporation in the United States, other countries, or both . All trademarks, trade names, service marks and logos referenced herein belong to their respective companies.

THIS PRESENTATION IS FOR YOUR INFORMATIONAL PURPOSES ONLY. CA assumes no responsibility for the accuracy or completeness of the information. TO THE EXTENT PERMITTED BY APPLICABLE LAW, CA PROVIDES THIS DOCUMENT "AS IS" WITHOUT WARRANTY OF ANY KIND, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. In no event will CA be liable for any loss or damage, direct or indirect, in connection with this presentation, including, without limitation, lost profits, lost investment, business interruption, goodwill, or lost data, even if CA is expressly advised in advance of the possibility of such damages.