The slide features a white rectangular box on a grey background with diagonal lines. Inside the box, the title 'CA Gen Vision and Strategy Update' is written in a large, bold, sans-serif font. Below the title, 'EDGE EMEA Conference' and 'September 2007' are written in a smaller, regular sans-serif font. At the bottom of the slide, there are two logos: 'EDGE/ucate2007' on the left and the 'ca' logo with the tagline 'Transforming IT Management' on the right.

CA Gen Vision and Strategy Update

EDGE EMEA Conference
September 2007

EDGE/ucate2007

ca Transforming IT Management

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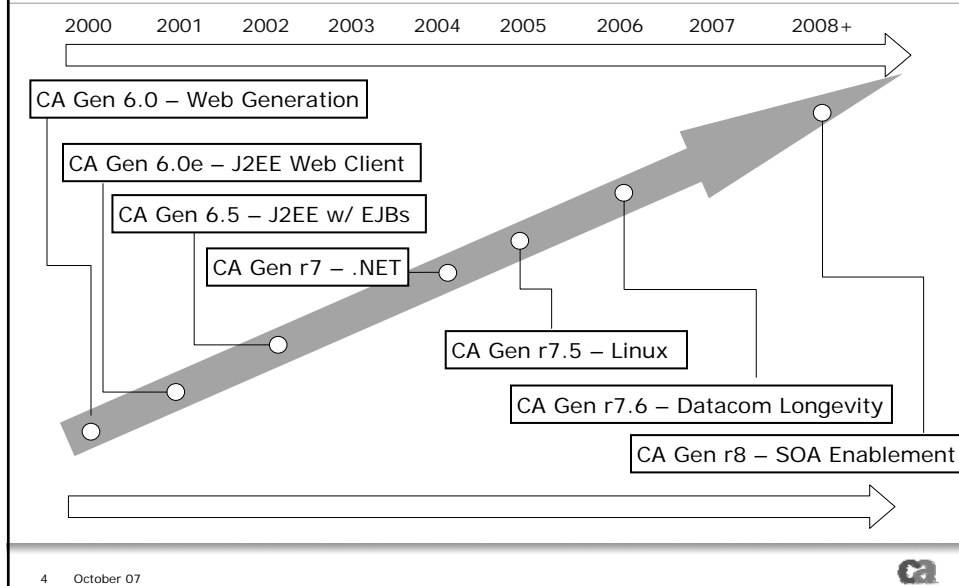
Agenda

- > Toolset Evolution to Eclipse Framework
- > New State of the Art Application Tools
- > Extended Web Services and SOA Enablement
- > CA Gen r8 Infrastructure Updates
- > Mainframe Updates
- > Other Updates
- > Q & A

3 October 07

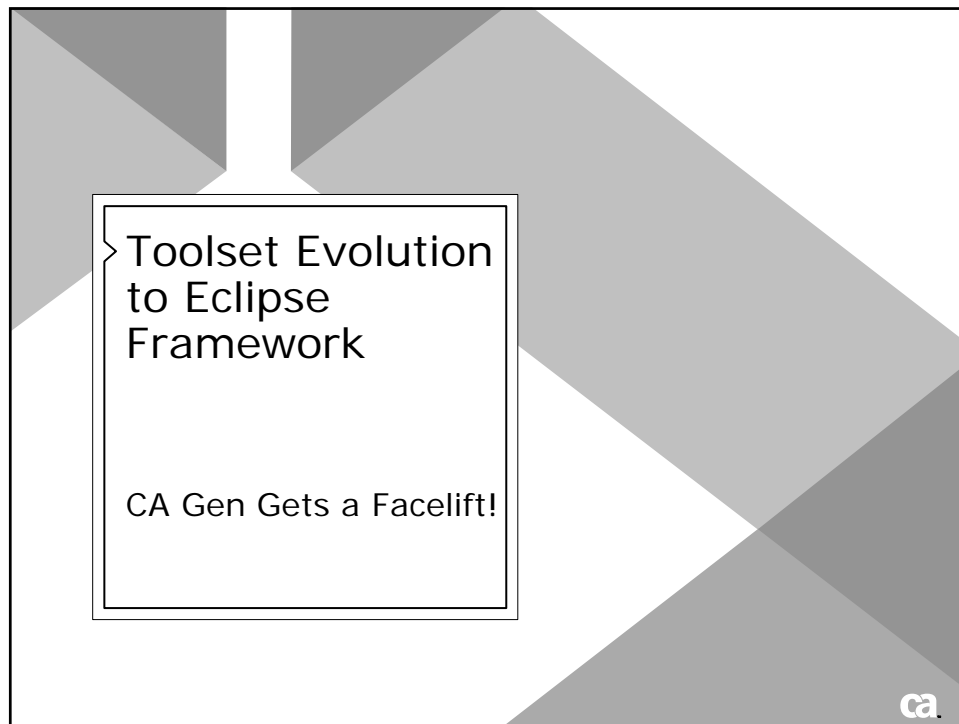


CA Gen – Past, Present, Future



4 October 07





CA Gen Gets a Facelift

Evolution of Toolset to Eclipse Framework

- > New Eclipsed-based Action Language Debugger (DTU) implemented in CA Gen r7.6
- > New Eclipsed-based ERD planned for CA Gen r8
- > Context sensitive, text-oriented Action Diagram Editor based on Eclipse planned for a later release
- > New diagrams to exist within 'CA Gen Studio'
- > Remaining diagrams will be phased in over subsequent releases (we started with the most difficult first)

CA Gen Studio is an internal project name

What is Eclipse and Why Do I Care?

- > Eclipse is an open-source software framework/platform for building integrated web and application development tools
- > Provides contemporary user interface style/standards for existing Workstation Toolset Diagrams
 - Built in controls for tree views, tab views, property sheets, etc. will dramatically reduce the use of dialog boxes
 - Controls will look and behave to industry standards
 - Dialog box reduction will improve developer performance and facilitate new developer effectiveness
 - Pre-packaged capabilities will simplify the delivery of art, drawing, printing and sorting type features

7 October 07



Why Is Move to Eclipse Important to You?

- > It has the potential to allow finer grained delivery of design tools
 - Relaxes some 'Big Bang' aspects of changes to existing toolset
 - New tools can be released out of phase of major releases
- > Facilitates rapid development and delivery of additional diagrams (UML for example)
- > Built in controls free our developers from a dated, proprietary user interface infrastructure – allowing them to focus more on delivering the new features you need

8 October 07



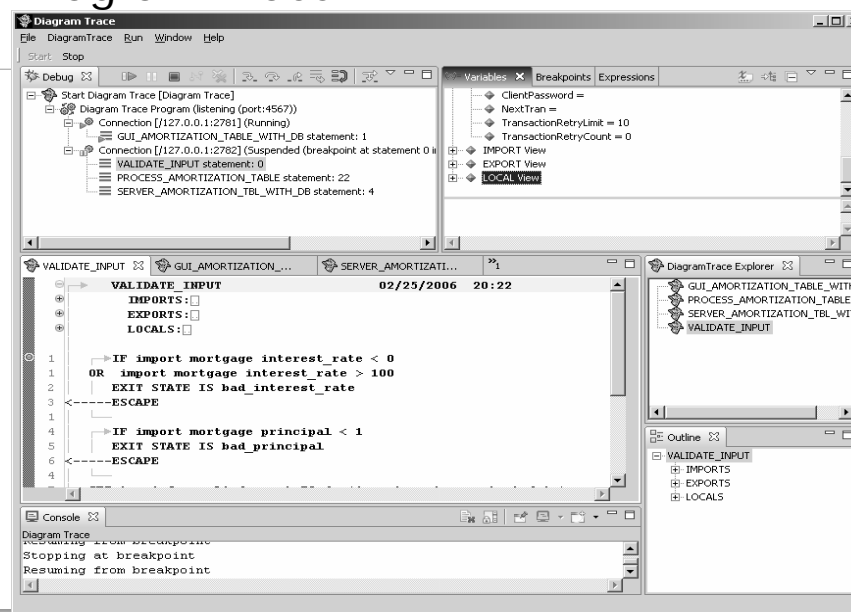
New Diagram Trace Utility in CA Gen r7.6

- > New Eclipse-based Diagram Trace Utility
 - Plug-in packaged as an Eclipse Rich Client Platform (RCP) application
- > GUI now consists of several views (windows) within a perspective:
 - Each view has specific purpose – Editor, Variables, Breakpoints, ...
 - Views can be repositioned, resized, hidden/shown, attached/detached, ...
 - Organization of views in perspective is persistent; may be reset
- > Remote debugging performance issues have been addressed and we continue to address issues.

9 October 07



Diagram Trace



10 October 07



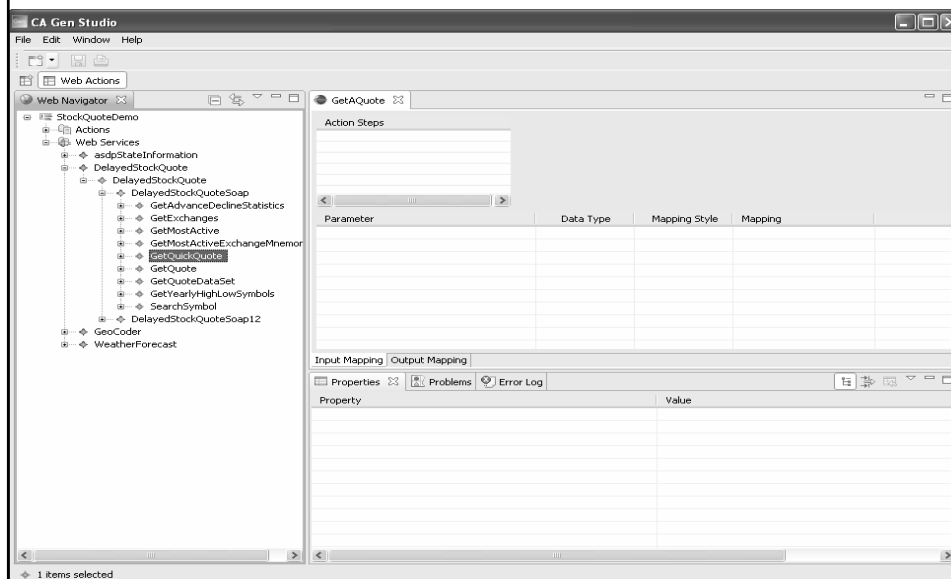
New CA Gen Studio Planned for CA Gen r8

- > Existing toolset will evolve over time to 'CA Gen Studio'
- > Essential infrastructure and common services elements of CA Gen Studio planned for delivery with CA Gen r8
- > Provides a plug-in 'shell' for specific tools (Data Modeler, WebView...) and 3rd party tools
- > Provides common services for contained tools
 - Model open, close, save, copy functions...
 - Encyclopedia functions, printing support...
- > Additional Tools (Action Diagram, Component Modeling, Technical Design, etc) transition in later releases

11 October 07



CA Gen Studio



12 October 07



Enhanced Data Modeling Diagram

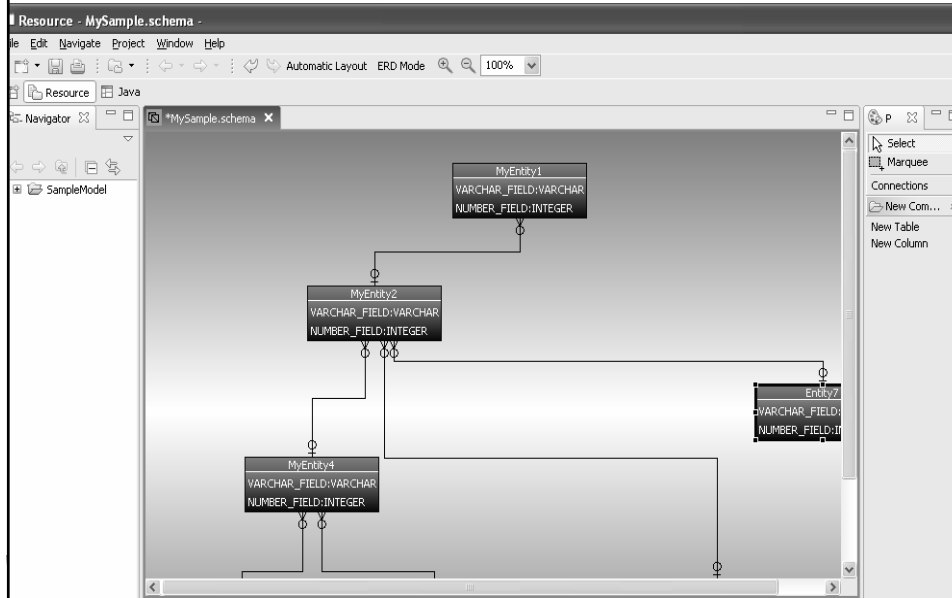
- > Brand new (except for the underlying meta model)
- > Extensive use of property sheets for efficient model development
- > Support for user preferences
- > Resolves existing printing and display issues
- > Multiple view windows
- > Overview window
- > More flexible use of Subject Areas
- > Save and restore routing diagrams.

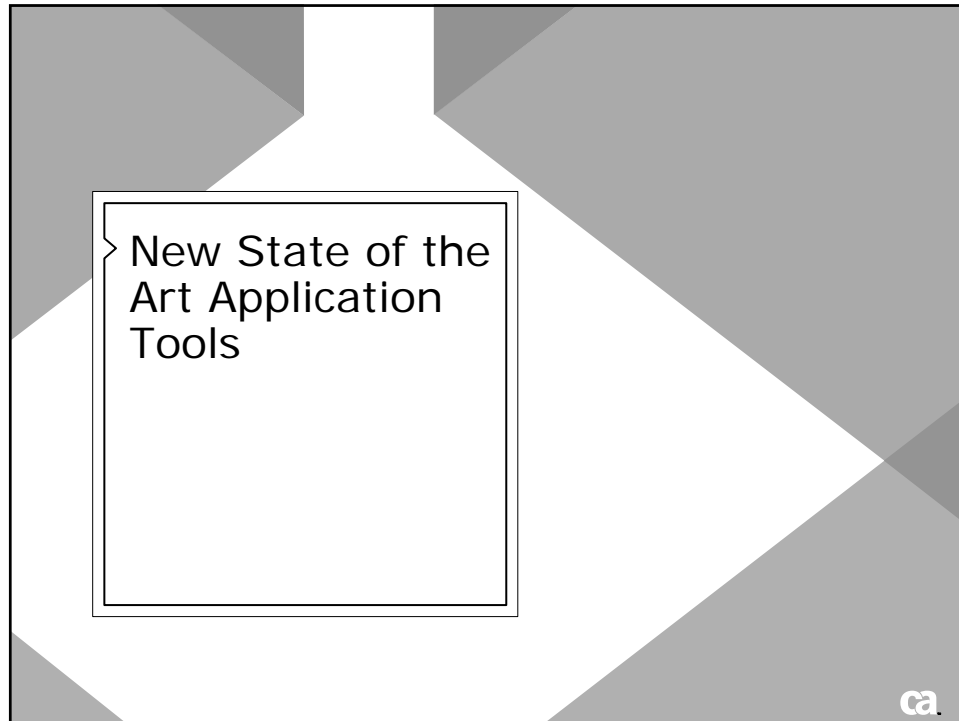
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Enhanced Data Modeling Diagram

Switch back & forth between IE and UML notation!





WebView w/AJAX

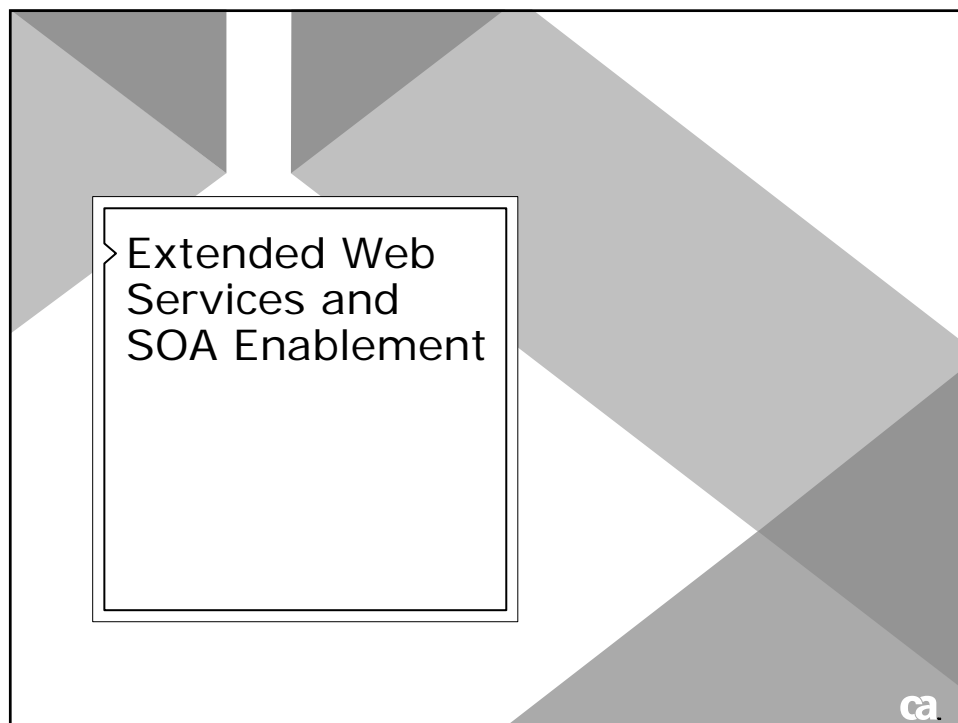
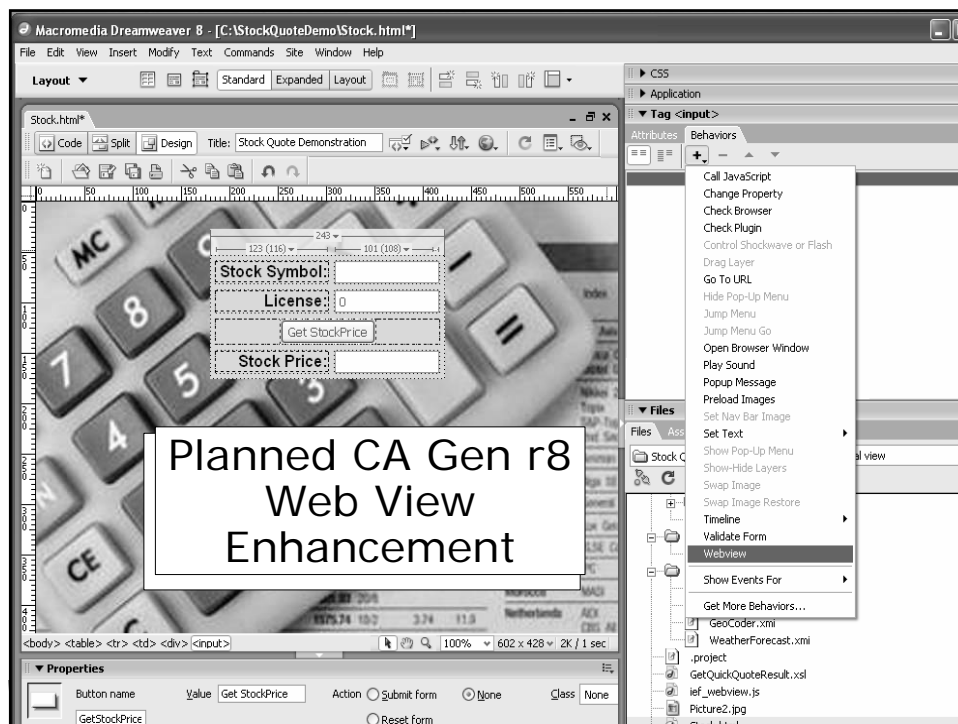


Create/customize your Web Interface using tools such as Adobe's Dreamweaver

- > Utilize AJAX to retrieve data asynchronously and seamlessly
- > Deliver state of the art web applications
 - Generate application logic with CA Gen
 - Or use third-party Web Services
- > Exploit Eclipse-based web application creation tools
- > Define WSDL using Gen model-based utility
 - Used by WebView and CICS Web Services

WebView is an internal project name





SOA and Web Services Plans

- > Update CA Gen to track evolving Web Services standards
- > Allow CA Gen generated servers to be easily consumed by external applications without use of a proxy
- > Existing CA Gen component-based applications are prime candidates for SOA & Web services
- > Generate J2EE, .NET and CICS targeted procedure steps as WS-I conformant Web Service Providers
- > New features are additions to the current Web Services Wizard capabilities provided by the Java Proxy



19 October 07



Web Service Consumption

New "WebView" facility will enable consumption of web services into CA Gen applications



20 October 07



CICS Web Services in CA Gen r8 Series

- > Allows the reuse of existing CICS server steps as Web Service Provider applications
- > Uses IBM CICS Web Services through its CICS Channel facility to front end Gen's CICS server manager
- > Uses the same WSDL utility as Web View to define and generate WSDL from the model.
- > Data streams will no longer be restricted to 32K
 - Uses SOAP instead of CFB as its data exchange protocol
- > Will release out of phase - after CA Gen r8

21 October 07



> CA Gen r8
Infrastructure
Updates
and
Enhancements to
Existing Features



CA Gen r8 Infrastructure Projects

- > 64K total object limit expanded to ~1 million objects of any type
 - Allows much larger subsets to be downloaded to workstation
 - Fast machines and a lot of RAM recommended
- > Provide IPv6 Support
 - Allows customers to begin transition to IPv6 as networks evolve over time to this standard
 - Avoid the need for a 'big bang' changeover

23 October 07

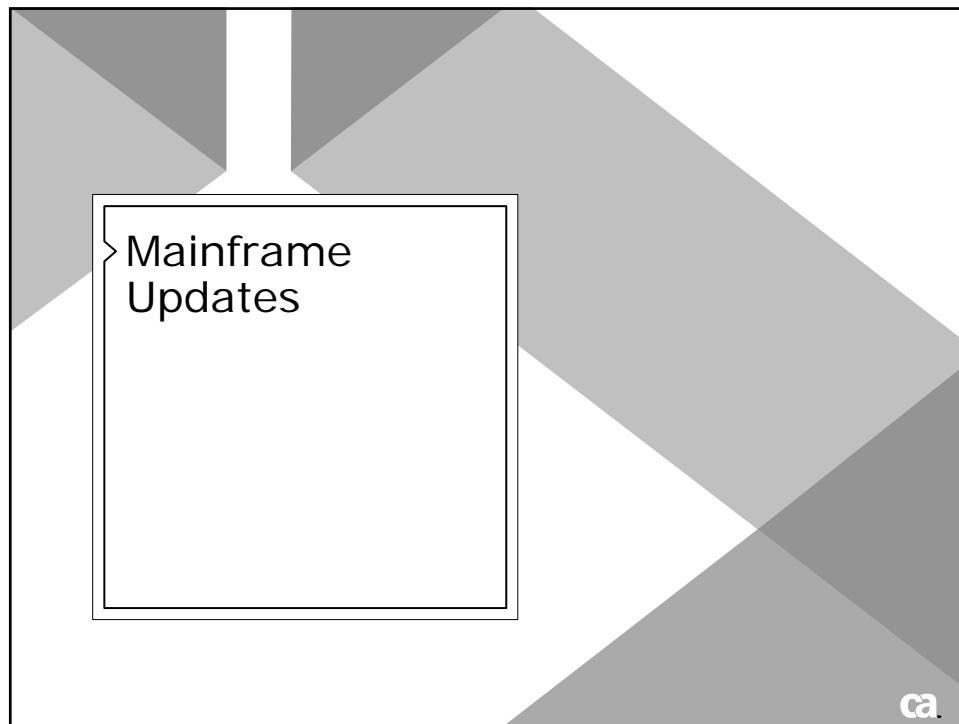


CA Gen r8 Infrastructure Projects

- > Workstation Password Encryption
 - Current encryption replaced with FIPS compliant encryption
 - Existing Encrypted passwords migrated to FIPS encryption
 - Separate from encryption opportunities offered in existing User Exits
- > Unicode enable the CSE
 - Starting the infrastructure work to provide Unicode support in CA Gen
 - Next the generators
 - Lastly the design tools

24 October 07





CA Gen r7.6 New Compatibility Enhancement

- > Facilitates incremental transition to mainframe DLLs for those customers who use dynamic linking to invoke external CA Gen modules
- > Allows procedure steps, action blocks and screens marked for Compatibility to be generated and built
 - Supported with CA Gen r7.6 runtimes
 - Items marked for Compatibility will be built as non-DLL's
 - Can specify Compatibility as the default dynamic link option for procedure steps, screens and action blocks at Business System level
 - Compatibility Enhancement must be installed on base CA Gen r7.6 software
- > Reference the "CA Gen r7.6 z/OS Statement of Direction" paper on SupportConnect for additional information

CA Gen r7.6 CA Datacom® Support

- > Provide data modelling support, generating DDL and applications
 - Online block mode applications running under CICS
 - CICS distributed process servers
- > Schema Import plug-in for CA Datacom to accelerate the use of an existing database in a new CA Gen application



27 October 07



z/OS Build Tool Plans for CA Gen r8

- > ISPF CUA application
 - Replaces the existing build tool in the MVS IT
 - Some migration aids planned
- > Not tied to any underlying database
 - Supports Datacom and DB2 target databases equally well.
- > Uses standard JCL procedures and parameter files.
- > Users can customize resulting JCL for their own needs
- > Batch oriented; allows multiple IPs (install packages) to be processed simultaneously
- > Goal is an eventual unified MVS build process

28 October 07



Mainframe Efficiency Improvements for Gen r8

- > z/OS Dynamic Link of RI Triggers in CA Gen r8
- > CICS Socket Listener in CA Gen r8
 - Designed to reduce the use of mainframe CPU resources
 - Minimizes client-side retry processing of TCPIP coop flows that target CICS socket server listener (TISL)
 - Will eventually retire the TIconManager
- > Runtime performance enhancements also included
 - Gen r7.x LE Storage Management improvements
 - Some string functions were improved in Gen r7.6 e.g., substring, concat, textnum



29 October 07



> Other Updates in
CA Gen r7.6 and
CA Gen r8



CA Gen r7.6 Cross-Context Flows Improvements

- > Provides more efficient deployment of applications to app servers
 - Large deployments may be broken into smaller deployments
 - A single model can be separated into multiple web applications and deployed in separate contexts
- > Used when Web Generation procedure steps are deployed in separate web applications
- > Facilitates models developed using CBD modeling techniques

31 October 07



CA Gen r7.x Performance Improvements

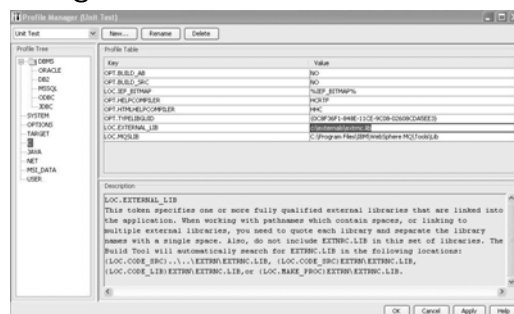
- > Web Generation applications have been:
 - Streamlined to use less memory, improved performance
 - Allow selection of static or dynamic compression to reduce the amount of data being sent between the browser and the application server
- > Change the decimal precision technology
 - Applications will use less CPU resources
 - Amount of improvement is application dependant
 - Applications with long complex expressions or extensive database access should show the most improvement.

32 October 07



CA Gen r7.6 Build Tool Usability Features

- > Added buttons to add/remove modules in viewing modes
- > Can now specify session timeout for assembly operations.
- > Support for right mouse button activated pop-up menus



33 October 07



CA Gen r8 Cross-Platform Efficiency Improvements



- > Identity Columns
 - Provide support for the identity column feature of DBMSs
 - Applies to mainframe and distributed DBMSs
- > Multi-Row Fetch/Block Fetch
 - Support for DB2 Multi-Row Fetch/Block Fetch features
 - Support for similar operations in other DBMSs planned
 - Stretch item – Support for block update.

34 October 07



Support for Vista

- > CA Gen r7.6 works on Vista with a few PTF's and workarounds
 - Binary compatible however issue with protected directories
 - Requires the user have administrator privileges
- > We anticipate that prior versions of Microsoft operating systems will soon no longer be shipped on new hardware
 - CA Gen r7.6 PTF's address an exposure that potentially impacts the entire customer base
- > In CA Gen r8, those PTF's will be part of the base product
 - Will eliminate need for workarounds and allow CA Gen to be used in 'User' mode
 - Other restrictions will be addressed

35 October 07



3rd Party Technical Currency Integration Plans for CA Gen r8

- > Java
 - Targets utilizing new features introduced with Java SE 6
 - Use the EJB 3 specification
- > Web Tabs
 - Generated Web Clients support for tabbed browsing environments on supported browsers for shared or different Web contexts
- > Planned use of Visual Studio 2008
- > Certification of operating systems, databases, compilers etc. that are GA before r8 goes to beta test
 - Each release of CA Gen requires certification with more than 50 third party products

36 October 07



3rd Party Technical Currency Integration

> ASP.NET Web Clients

- Utilizes new features introduced in .NET Framework 2.0 and 3.0
- Uses AJAX to enhance application performance
- Themes and Skins
- JavaScript Libraries
- Session management enhancements
- DataSource changes
- New Compilation and Deployment Option including pre-compiling prior to deployment
- NGEN
- Data Compression
- Rendering 3rd party ASP.NET Web Controls in the Toolset
- Tabbed Browsing
- Wix

37 October 07

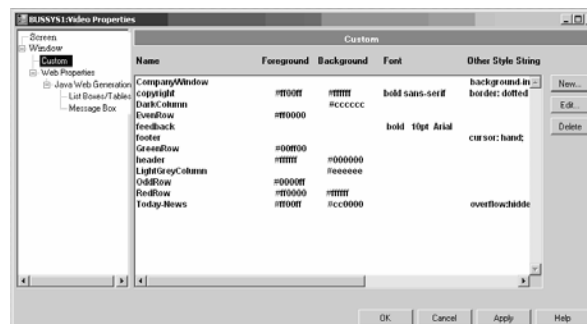


Custom Cascading Style Sheets

- > Define custom cascading style sheets on the level of the Business System Defaults

- > Assign custom classes

- Statically (through the Navigation Diagram)
- Dynamically (through the Action Diagram)



38 October 07



Itanium Support Plans

- > Currently, support for HP-UX 32 bit applications on Itanium is a post CA Gen r8 port: circa 2009
- > In 2006 we surveyed the entire base using HP-UX
 - Survey questionnaire was also posted on support connect for four months
 - Worked with HP to validate leads they provided
 - Less than 5% of the base expressed any interest in Itanium
 - Less than 2% planned to move to Itanium before PA-RISC end of life
 - Most reported a need for Itanium support in 2009 to allow time for transition
 - Itanium Support Ranked ~ 224th by EDGE

39 October 07



IBM POWER6™

- > IBM stated in writing that POWER6 is 100% backward compatible with POWER5 based machines
- > The IBM POWER5 -> POWER6 Transition is identical to any Intel x86 architecture advancement
- > We certify to an architecture and operating system rather than to specific models of processors
- > Given IBM's statement, we consider our certification performed on POWER5 to cover POWER6 based machines
- > Summary: CA Gen r7.6 is certified on IBM Power6

40 October 07



Additional Items

Under Evaluation for CA Gen r8.x series (in no particular order)

- > CICS Web Services
- > BLOBs
- > Store Files in Model
- > Action Diagram Editor
- > Conditional Action Blocks
- > Web Services Security
- > Joins, Unions and other SQL improvements
- > Stored Procedures
- > UML
- > User Added Functions
- > Encyclopedia Renovation
- > Comm Bridge Remote Admin
- > Common Edit Modification
- > CA Gen Studio – *rest of diagrams plus...*
 - Sorting, Undo/Redo, ..
 - Primary Key, Foreign Key display, Unnecessary timestamp update elimination

41 October 07



Additional Items

Under Evaluation for CA Gen r8.x series (in no particular order)

- CSE "When Changed" and "Intelligent Regen" Reports
- > Custom Property Support
- > Unicode phase n++
- > .Net and WebSphere MQ
- > Message Box and OCX Web Thread replacement
- > New user interface designer based on Visual Studio.
- > High Ranked DARs from user community
- > Optional Absolute Positioning in Web Page Design
 - Provide developer with option to specify relative rather than absolute positioning when designing Web pages

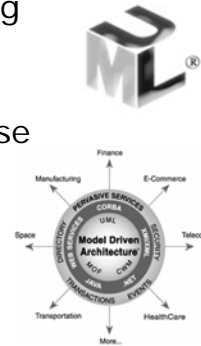
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CA Participation on OMG



- > CA is a member of the OMG participating in the standards-setting process
- > We provide leadership and significant experience related to delivering enterprise systems from modeling diagrams
- > Participation also provides useful insight into our development plans
- > Providing input to standards in work
 - Knowledge Discovery Metamodel (KDM)
 - Abstract Syntax Tree Metamodel (ASTM)



43 October 07



CA Commitment to our CA Gen Customers

- > CA is committed to on-going investment in CA Gen
 - Customers can rely on this proven solution to deliver mission critical applications for the long term
- > Product development team has collective experience untouched in industry
 - Proven performance, scalability and reliability
 - Enables customers to implement new technologies in response to business needs
 - Leverage existing skill sets and technology investments
- > Listen to John Swainson podcast regarding commitment to CA Gen on ca.com/podcasts



44 October 07



Final thoughts on Past, Present, Future

- > CA Gen has more than a two decade heritage of
 - Providing robust, scalable solutions
 - Evolving with technology
 - Delivering fantastic ROI
- > CA Gen r8 series plans to extend that tradition
- > CA looks forward to understanding and to meeting your needs for many years to come

45 October 07



CA Gen Web Seminar Series

- > Upgrading CA Gen (web seminar series available on-demand at ca.com/events)
 - Upgrading CA Gen 101: Where do I Start?
 - Upgrading CA Gen 102: z/OS Runtime Environment
 - Upgrading CA Gen 103: Best Practices
- > CA Gen and SOA
 - Series of web seminars discussing how customers are using CA Gen to help them successfully transition to an SOA environment
- > Increasing CA Gen Developer Productivity
 - Series of web seminars covering best practices related to use of patterns, wizards and other tools to optimize your use of CA Gen

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Questions & Answers

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*CA Gen Vision and
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