

# CA 2E Web Option



Co-branded Logo Footprint  
Aligned LEFT ON COVER ONLY  
Must Fit Within This Space

**ADC AUSTIN**

**MKS**

**WEBSYDIAN™**

**cm**FIRST

**desynit**

**ca**

---

# Terms of This Presentation

---

This presentation was based on current information and resource allocations as of September 23, 2009 and is subject to change or withdrawal by CA at any time without notice. Notwithstanding anything in this presentation to the contrary, this presentation shall not serve to (i) affect the rights and/or obligations of CA or its licensees under any existing or future written license agreement or services agreement relating to any CA software product; or (ii) amend any product documentation or specifications for any CA software product. 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 will make such release available (i) for sale to new licensees of such product; and (ii) to existing licensees of such product on a when and if-available basis as part of CA maintenance and support, and in the form of a regularly scheduled major product release. Such releases may be made available to current licensees of such product who are current subscribers to CA maintenance and support on a when and if-available basis. In the event of a conflict between the terms of this paragraph and any other information contained in this presentation, the terms of this paragraph shall govern.

---

# For Informational Purposes Only

---

Certain information in this presentation may outline CA's general product direction. All information in this presentation is for your informational purposes only and may not be incorporated into any contract. 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 or merchantability, fitness for a particular purpose, or non-infringement. In no event will CA be liable for any loss or damage, direct or indirect, from the use of this document, including, without limitation, lost profits, lost investment, business interruption, goodwill, or lost data, even if CA is expressly advised of the possibility of such damages.

---

# About the Speaker

---

> Rory Hewitt

> Software Architect, 2E Development Team

- First joined Synon in 1997
- Original designer of Web Option
- Lead designer of many 2E & 1E features
  - RPG IV Generator
  - Componentization/Wrappering
  - Duplicate Parameter Contexts
  - Physical File Batch Processing
  - Database Triggers
  - YCVTSPLF

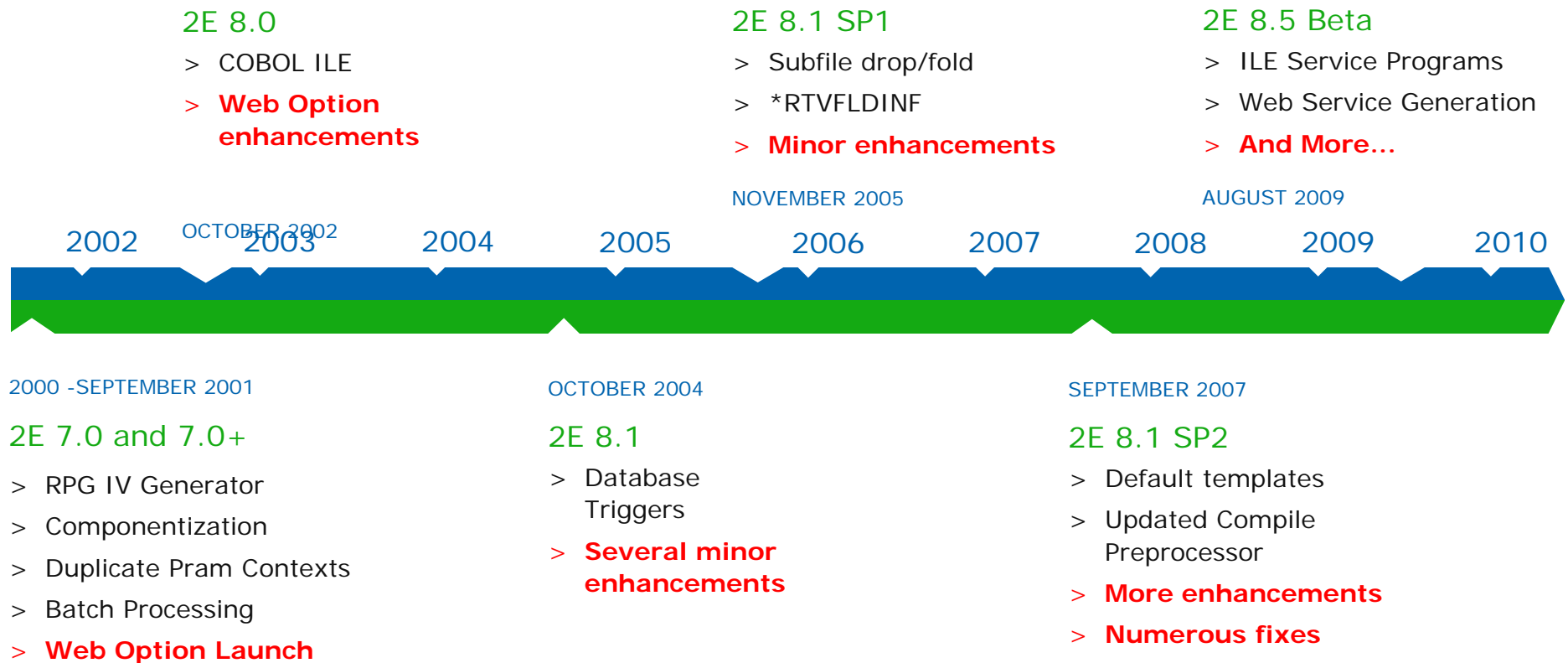
---

# Abstract

---

This session will take an in-depth look at the new features of CA 2E Web Option in Release 8.5

# 2E at CA



---

# CA 2E Current Release

---

## > Release 8.1 Service Pack 2

- a.k.a. r8.1 SP2 / 8.1.2
- Released in 2008
- Currently the most widely-used release

## > Release 8.5

- Released in August 2009

---

# Web Option Overview

---

## What is Web Option?

### > Web environment for System i applications

- Allows 5250 green screens to be displayed in a web browser
- Uses current functionality and navigation
- No client components to download – just use your browser

### > Uses HTTP server for communication

- Resides completely on the iSeries
- No other software or tools needed

---

# Web Option Overview

---

- > Primarily designed for CA 2E applications
  - Generate HTML from DDS and model information
  - Just in time pages created on the fly at runtime
  - HTML can be generated from hand-crafted \*DSPF DDS as well
- > Two primary components
  - Markup Language Generator
  - Run-time Environment

---

# Release 8.5 Highlights

---

- > Web Option Environments
- > Enhanced JavaScript Functionality
- > Improved Performance
- > Skeleton Control Enhancements

---

---

# Web Option Environments

---

# Web Option Environments

---

## > Similar to CA 2E Model Library concept

- Separate library to hold user data
  - HTML Skeletons
  - Screen cross-reference data
  - Element customization
  - Control values

---

# Web Option Environments

---

- > Environment consists of three separate libraries
  - Environment data library
  - Web Option LDO library (e.g. Y2WEBVENG)
  - Web Option product library (Y2WEB)
  
- > Each environment has its own library list & \*JOBID
  
- > Define multiple environments
  - All use same underlying programs in product library
  - Can use same LDO library (or not)
  - Can use same control data (or not)

---

# Web Option Environments

---

## > Copy from one environment to another

- Y2WEBRH (Rory's English Web Option Environment)
  - Y2WEBRH
  - Y2WEBVENG
  - Y2WEB
- Y2WEBRHESP (Rory's Spanish Web Option Environment)
  - Y2WEBRH
  - Y2WEBVESP
  - Y2WEB

---

# Web Option Environments

---

- > General upgrade process much simpler
  - Simply use new product & LDO libraries
  - New features automatically installed
  - Existing user changes not overwritten
- > r8.5 upgrade forces creation of at least one environment
  - Can use YCRTW2EENV command post-upgrade
- > Minor change to existing HTTP server configuration
  - Explained in r8.5 Release Notes

---

# Web Option Environments

---

## > Can use separate HTTP server instances...

- Each one uses its own port (4100, 4101, 4102...)
- Start/end servers separately
- Better control of authority/security/logging

## > ...or not

- Same port, different URLs
  - `http://www.example.com:4100/test_main`
  - `http://www.example.com:4100/test_ory`
  - `http://www.example.com:4100/test_john`
  - `http://www.example.com:4100/test_qa_1`
- Simpler to manage

---

---

# Enhanced JavaScript Functionality

---

# Enhanced JavaScript functionality

---

## > Addition of built-in 'context' menu

- Typically applied to input fields (e.g. \*SFLSEL)
- Can be applied to any screen element
- Limits user choices (beyond green-screen limitations)
- Allows 'removal' of explicit input field



UUGCDFR

DISPLAY

9/12/07

16:23:06

## Display Products

Item

Type options, press Enter.

2=Edit 4=Delete 5=Display

Opt	Item	Name	Qty on Hand
<input type="checkbox"/>	BOAT	Express 27 sailboat	0
<input type="checkbox"/>	JEEP	Jeep Grand Cherokee 95	0
<input type="checkbox"/>	4	Mazda RX7	0
<input type="checkbox"/>	444	Bicycle	0
<input type="checkbox"/>	555	Desk	0
<input type="checkbox"/>	6	Sunset	0

- Edit
- Delete
- Display

**Enter** **Page Up** **Page Down** **Exit** **Reset** **Prompt**

[Contact](#) [Legal](#) [Privacy Policy](#)

Copyright © © 2000-2007 CA. All rights reserved.

---

# Enhanced JavaScript functionality

---

- > Repeated page submits no longer allowed
  - Minimizes problems due to data queue clogging
  - Seamless - no changes to generated skeletons
  - No change in look-and-feel (e.g. grayed-out buttons)

---

---

# Improved Performance

---

# Improved performance

---

- > Communication data queue change from 16MB to 2GB
  - Reduces risk of clogging due to bottlenecks
- > Cleanup processing delayed
  - Runs in background between calls
- > Queue management processing improved
  - Single API call 'farmed out' to multiple processes

---

# Improved performance

---

- > Varying strings used throughout
  - HUGE improvement in performance
  - String sizes reduced
- > Memory management processing improved
- > Less reliance on generic parsing routines
  - Many rewritten specifically for Web Option

---

---

# Skeleton Control Enhancements

---

# Skeleton Control Enhancements

---

- > Skeleton caching enhancement
  - Skeleton update checking frequency 'variablized'
  - New YSKLCHK control value
  - Provides a 10%-12% performance 'boost' (YMMV)
- > Use different values in Dev/Prod environments
- > Minimizes use of 'costly' API calls