What's New in CA 2E Web Option

Rory Hewitt – CA Technologies

Session 4B - June 2, 2011

Legal

This presentation was based on current information and resource allocations as of **June 2, 2011** 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.

 Copyright © 2011 CA Technologies

ca technologies

Legal

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 OF 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.

 Copyright © 2011 CA Technologies

About the Speaker

- Rory Hewitt
  - Software Architect for 2E team
  - Software developer for 17 years (14 with 2E development team)
  - Helped design some of the largest features in recent 2E history
    - RPGIV generator, function wrappering & duplicate parameters, triggers
    - ...and, of course, Web Option!
  - Competition-level snowboarder and karateka
  - British (hence the strange accent!)

 Copyright © 2011 CA Technologies

agenda

Web Option prior to r8.5

how things changed at r8.5

future enhancements

questions

 Copyright © 2011 CA Technologies

Web Option prior to r8.5

ca technologies

Web Option prior to r8.5

First release was Release 7.0+

- Initially made available in mid 2001
- Each new release has included more functionality
- Becoming a 'stable' product

 Copyright © 2011 CA Technologies

Web Option prior to r8.5

- Shipped as 2 libraries
  - Y2WEB –programs and non-LDO data
  - Y2WEBVENG – LDO data
- Lots of the stuff in Y2WEBVENG wasn't really LDO
  - Significant duplication when creating Y2WEBVxxx libraries
  - Unnecessary translation
- Problems with CCSID conversion
  - Hard-coded variant characters in skeletons
    - #000000 (color attributes)
    - <!– (HTML comments)

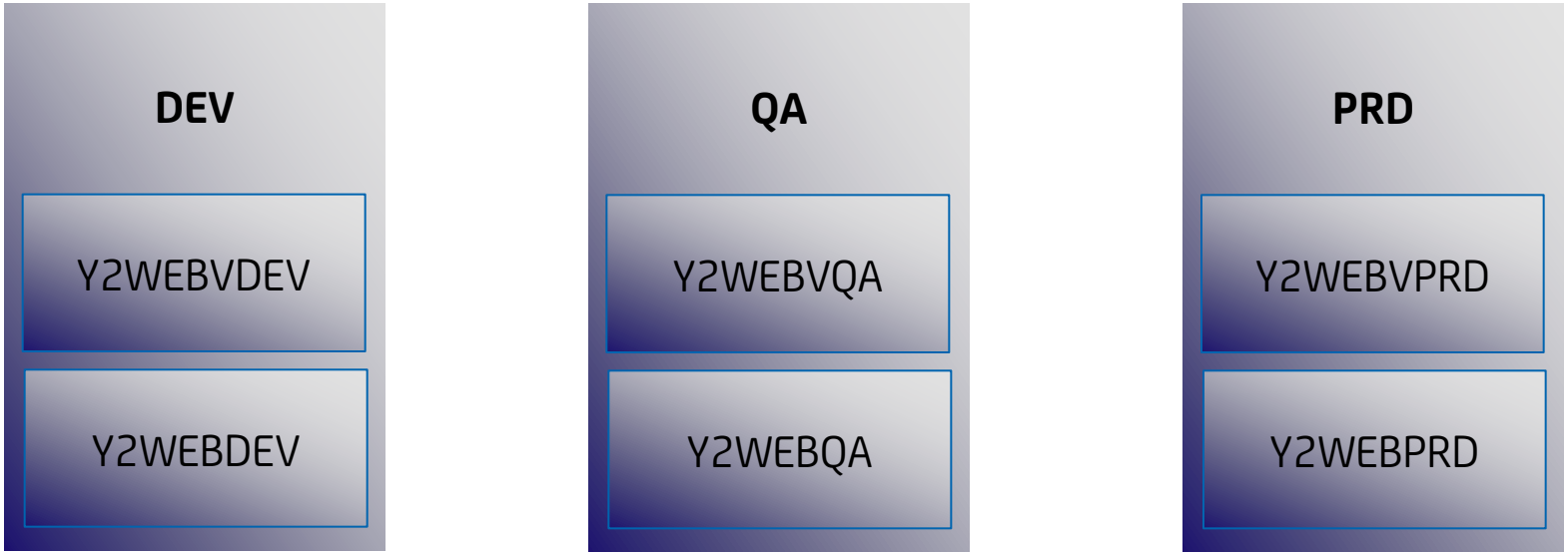
 Copyright © 2011 CA Technologies

Web Option prior to r8.5

- Each 'copy' of the Web Option server requires duplicates of both libraries
- Duplication of effort
  - Fixes have to be applied to all copies
  - Multiple copies of same program
  - Upgrade woes ☹
- Not always clear which 'copy' of Web Option is which
- Terminology problems
  - 'copy', 'instance', 'environment'...

 Copyright © 2011 CA Technologies

Web Option prior to r8.5



 Copyright © 2011 CA Technologies

Web Option prior to r8.5

- Nevertheless a great product!
- Lots of customers
  - Manufacturing
  - Logistics
  - Insurance
  - Local & state governments
- Fully backed by CA
  - Not just some fly-by-night web-enablement.. ☺
  - No requirement to change existing applications
  - Fully integrated with CA 2E model environment

 Copyright © 2011 CA Technologies

how things changed at r8.5

ca technologies

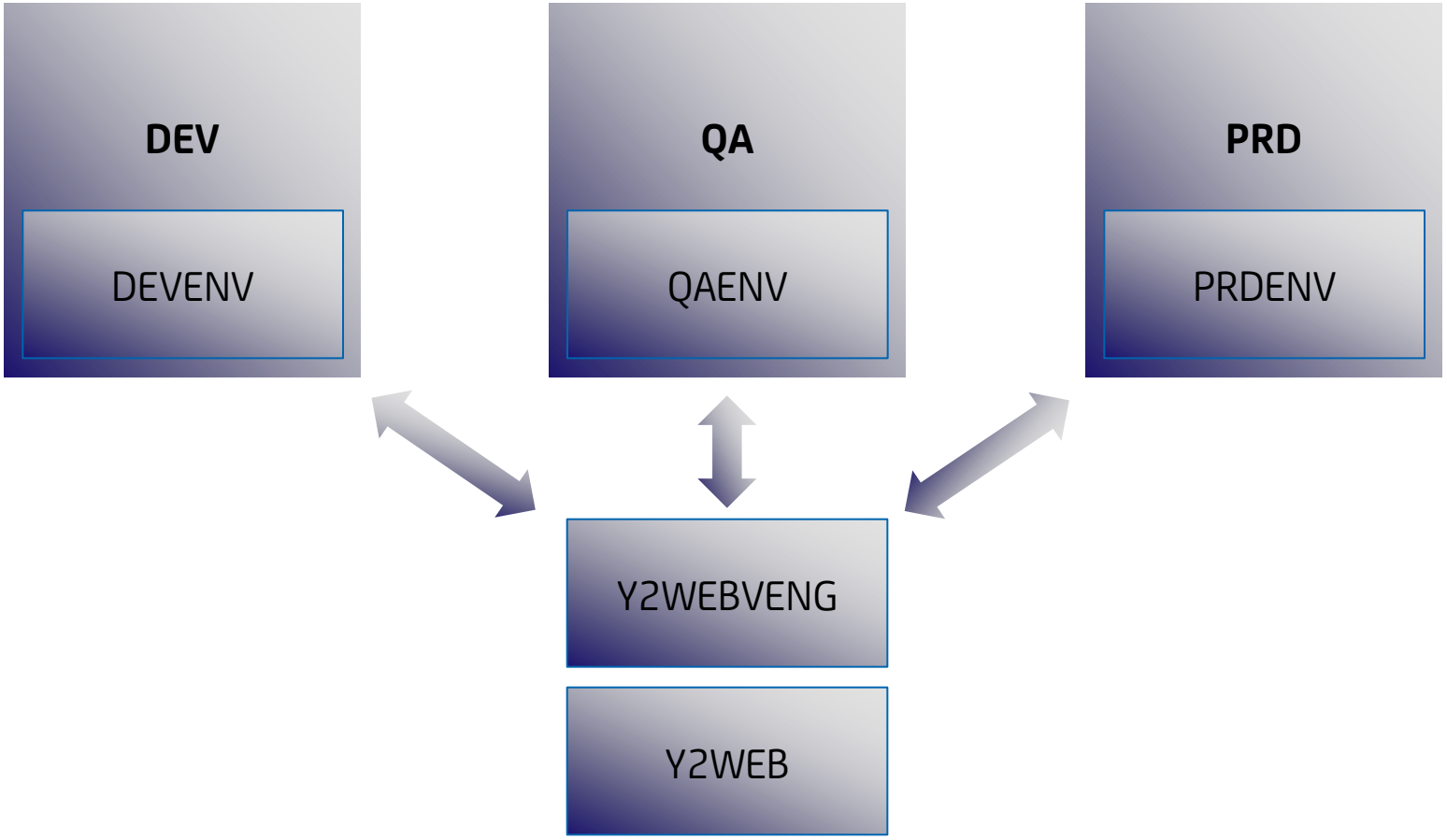
how things changed at r8.5

Release 8.5 came out in 2009

- Web Option environments
  - Similar to the concept of a 2E model
  - Uses an 'environment data library'
  - Separation of system data and user data
- Data override processing
  - Environment data overrides system data
  - only require changed records in environment
- Simpler upgrade processing
  - Upgrades from r8.5 onwards won't touch environment data
- Several PTF's since GA

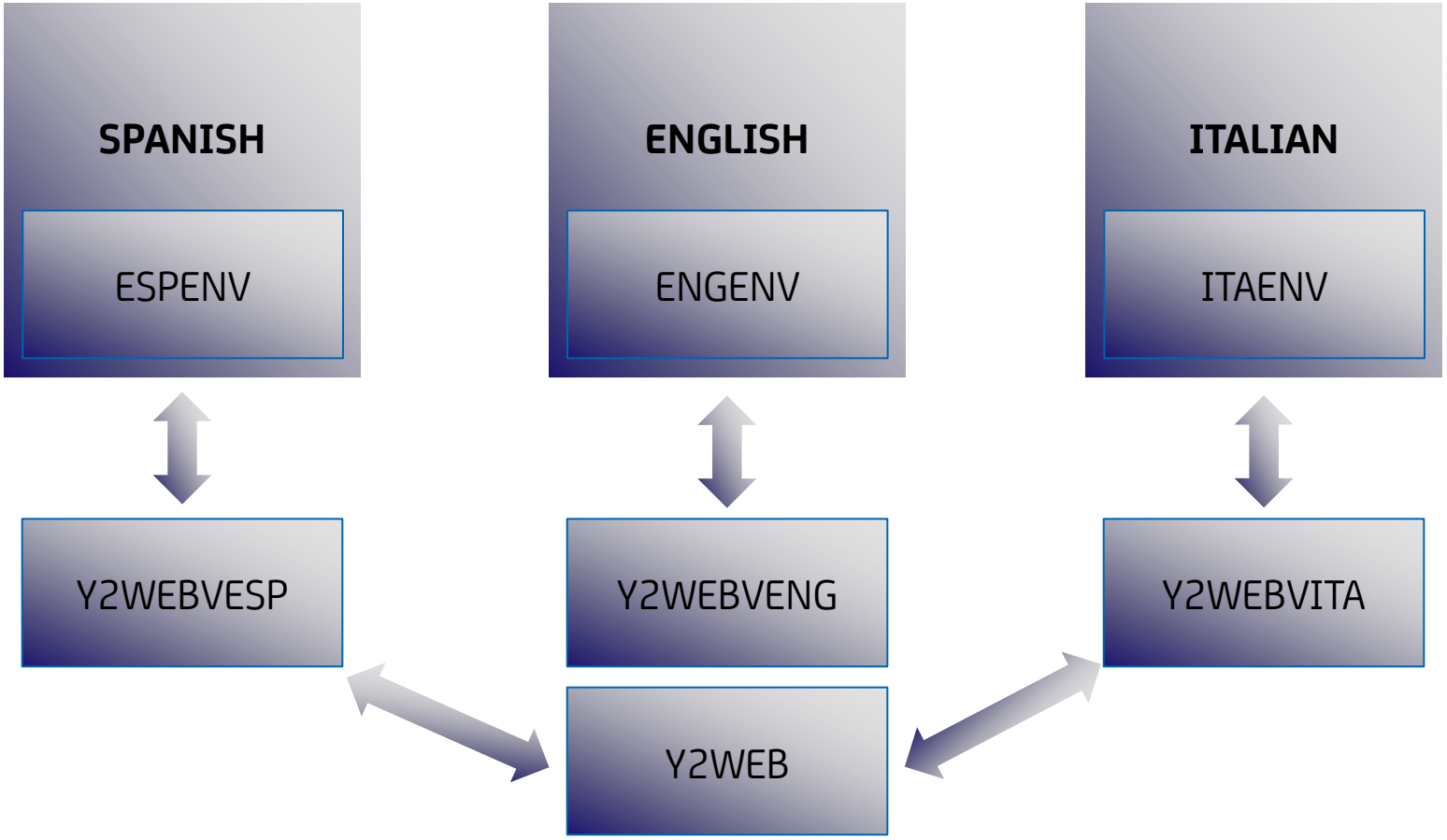
 Copyright © 2011 CA Technologies

how things changed at r8.5



 Copyright © 2011 CA Technologies

how things changed at r8.5



 Copyright © 2011 CA Technologies

how things changed at r8.5

- Pre-r8.5 used a single Web Option router in Y2WEB
  - Multiple HTTP server instances – one per Y2WEB* copy

 Copyright © 2011 CA Technologies

Pre-r8.5 HTTP configuration

```
 Browse : /www/y2web86/conf/httpd.conf
 Record : ____28   of      41 by  14            Column : ___1     59 by  79
 Control : ____________________________________________________________________

....+....1....+....2....+....3....+....4....+....5....+....6....+....7....+....
</Directory>

<Directory /webopt/>
Allow From all
</Directory>

<Directory /QSYS.LIB/Y2WEB.LIB/>
Options +ExecCGI
CGIConvMode %%EBCDIC/MIXED%%
Allow From all
</Directory>

AliasMatch ^/web2edoc/(.*) /webopt/$1
ScriptAliasMatch ^/web2e$ /qsys.lib/y2web.lib/yrouter.lib
 ************End of Data*******************

 F3=Exit   F10=Display Hex   F12=Exit  F15=Services  F16=Repeat find
 F19=Left   F20=Right
```

 Copyright © 2011 CA Technologies

how things changed at r8.5

- Pre-r8.5 used a single Web Option router in Y2WEB
  - Multiple HTTP server instances – one per Y2WEB* copy

- At r8.5, we use a copy of Web Option router
  - Specified in the environment library
  - Updated with latest shipped version on upgrade
  - One HTTP server instance can be used for many environments

 Copyright © 2011 CA Technologies

r8.5 HTTP configuration

```
 Browse : /www/y2web86/conf/httpd.conf
 Record : ____31   of      44 by  14            Column : ___1     61 by  79
 Control : ____________________________________________________________________

....+....1....+....2....+....3....+....4....+....5....+....6....+....7....+....
Allow From all
</Directory>

<Directory /QSYS.LIB/ITAENV.LIB/>
Options +ExecCGI
CGIConvMode %%EBCDIC/MIXED%%
Allow From all
</Directory>

AliasMatch ^/web2edoc/(.*) /webopt/$1
ScriptAliasMatch ^/web2e$    /qsys.lib/engenv.lib/yrouter.lib
ScriptAliasMatch ^/web2e-en$ /qsys.lib/engenv.lib/yrouter.lib
ScriptAliasMatch ^/web2e-es$ /qsys.lib/espenv.lib/yrouter.lib
ScriptAliasMatch ^/web2e-it$ /qsys.lib/itaenv.lib/yrouter.lib
 ************End of Data*******************

 F3=Exit   F10=Display Hex   F12=Exit  F15=Services  F16=Repeat find
 F19=Left   F20=Right
```

 Copyright © 2011 CA Technologies

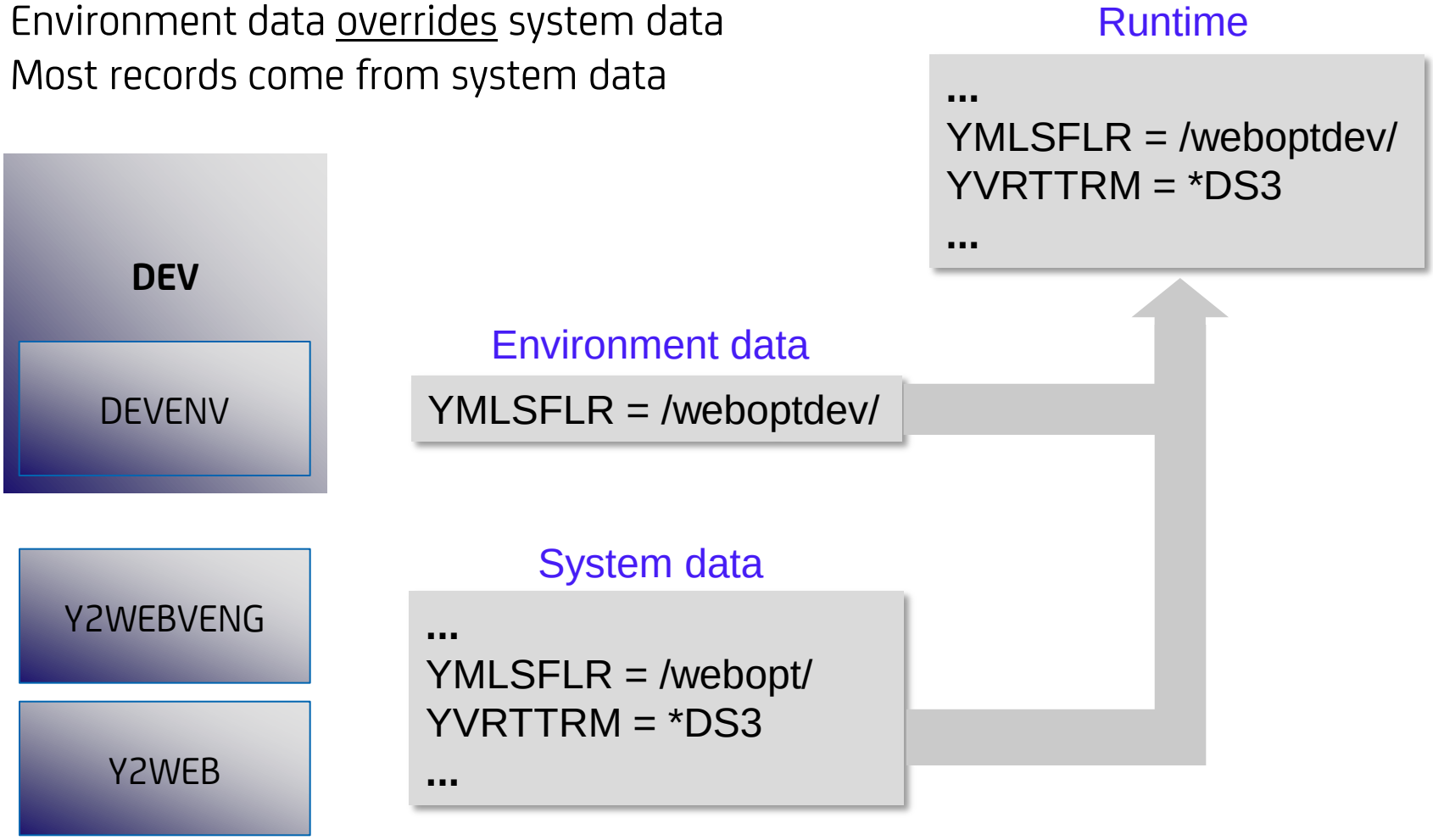
r8.5 HTTP configuration

```
Browse : /www/y2web86/conf/httpd.conf
Record :      31   of      44 by  14          Column :    1     61 by  79
Control : ____________________________________________________________

....+....1....+....2....+....3....+....4....+....5....+....6....+....7....+....
Allow From all
</Directory>

<Directory /QSYS.LIB/ITAENV.LIB/>
Options +ExecCGI
CGIConvMode %%EBCDIC/MIXED%%
Allow From all

AliasMatch ^/web2edoc/(.*) /webopt/$1
ScriptAliasMatch ^/web2e$    /qsys.lib/engenv.lib/yrouter.lib
ScriptAliasMatch ^/web2e-en$ /qsys.lib/engenv.lib/yrouter.lib
ScriptAliasMatch ^/web2e-es$ /qsys.lib/espenv.lib/yrouter.lib
ScriptAliasMatch ^/web2e-it$ /qsys.lib/itaenv.lib/yrouter.lib

F3=Exit   F10=Display Hex   F12=Exit  F15=Services  F16=Repeat find
F19=Left   F20=Right
```

 Copyright © 2011 CA Technologies

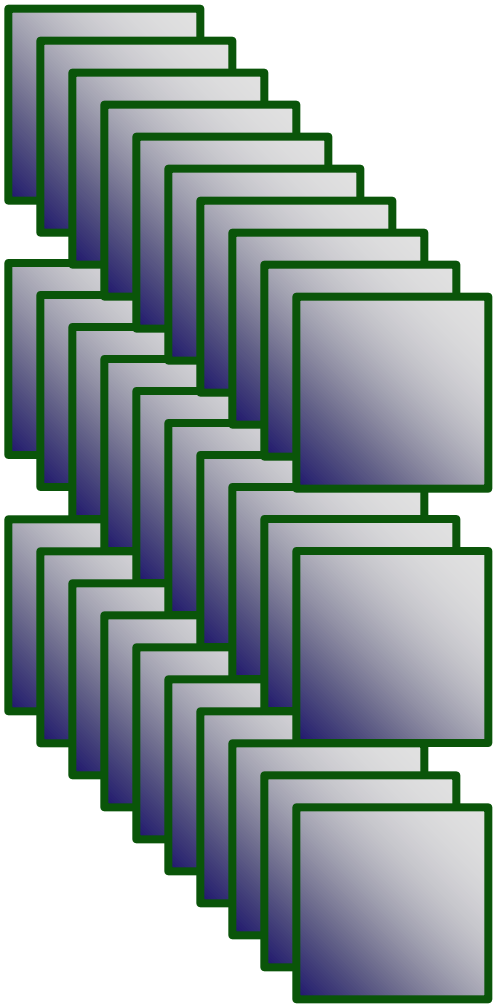
r8.5 data override processing

Environment data overrides system data
Most records come from system data



 Copyright © 2011 CA Technologies

r8.5 server job increase



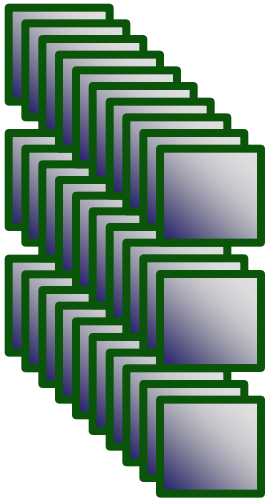
Prior to r8.5, Web Option allowed a maximum of **30** server jobs...

...which sounds like a lot...

...but isn't enough if you have a BIG Web Option installation...

 Copyright © 2011 CA Technologies

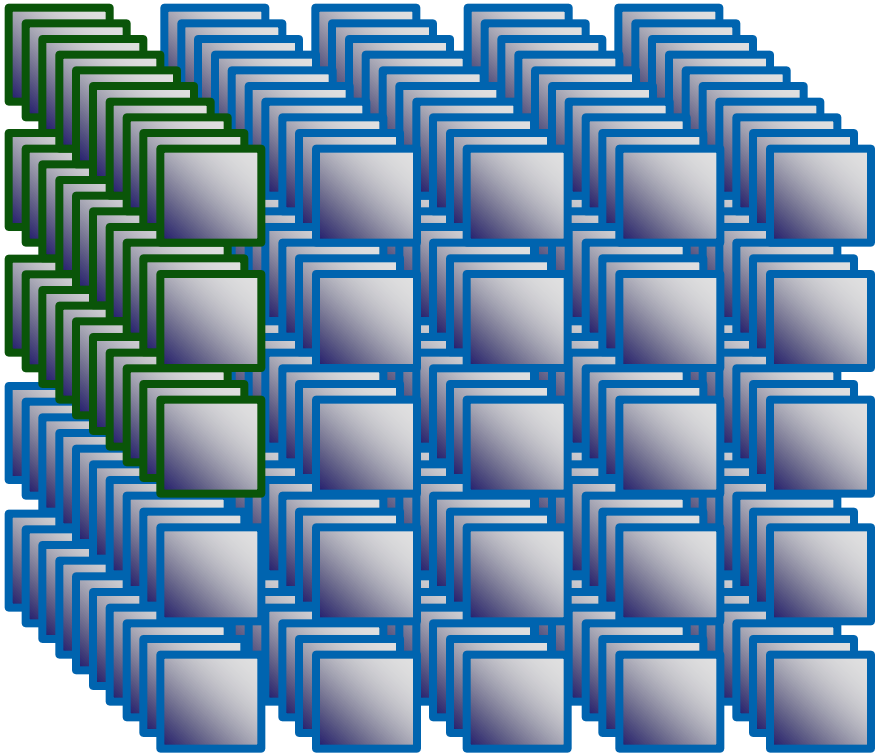
r8.5 server job increase



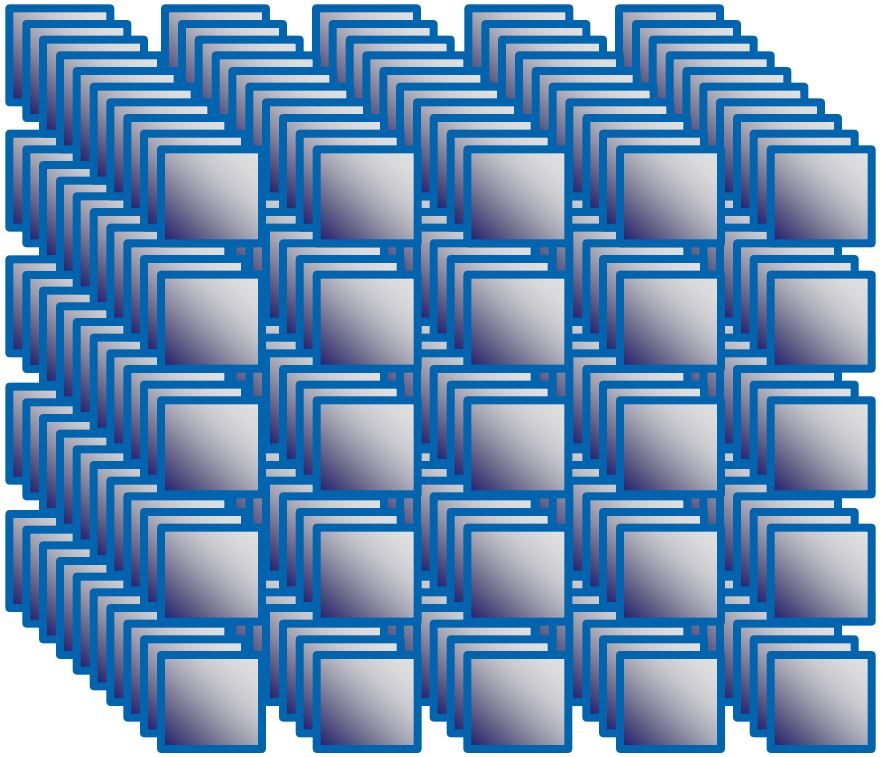
...so we increased it...

 Copyright © 2011 CA Technologies

r8.5 server job increase



...so we increased it...



...to **500**

 Copyright © 2011 CA Technologies

how things changed at r8.5

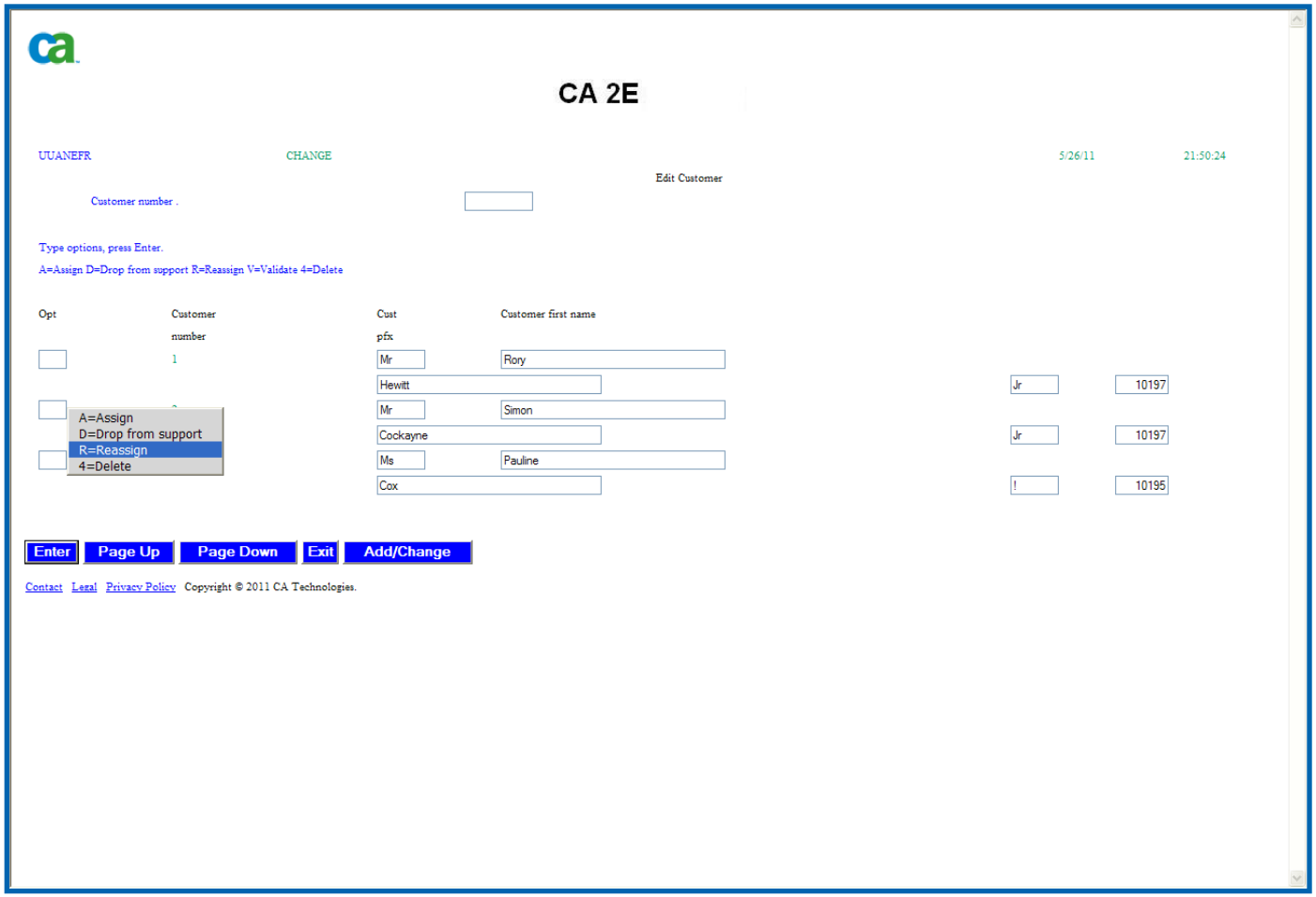
- Better DBCS support
  - Support for all variables being DBCS-mixed
- New YSKLCHK control value (in PTF)
  - Specifies how often to check if skeletons have been changed
  - **Big** improvement to runtime performance
- Improved confirm prompt processing
  - Fully handled in client-side JavaScript
- Improved data caching
- YGENMLS changed to flush memory
  - Always uses latest control values from file

 Copyright © 2011 CA Technologies

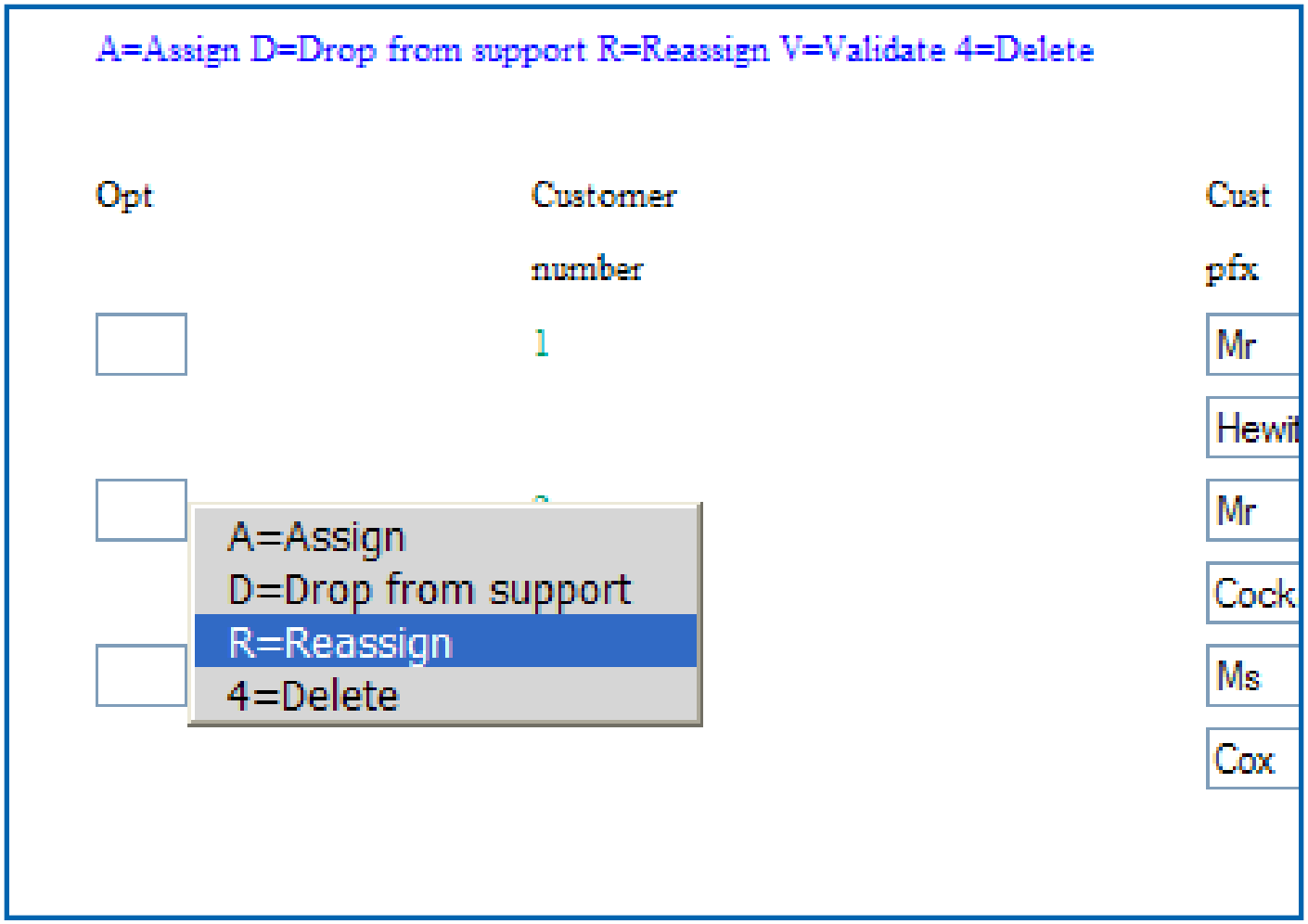
how things changed at r8.5

- Service Program Diagnostic Load Utility (SPDLU)
  - Allows user or CA support to quickly diagnose *SRVPGM errors
- IPv6 compatibility
- Runtime test fix library installation
  - Allows quick and easy testing of supplied PTF's and test fixes
- Field-level right-click (context) menu
  - Allows right-click options at field- or record-level
  - Supplied as single JavaScript file yctxmnu.js
  - Minor element customization changes to implement

 Copyright © 2011 CA Technologies



 Copyright © 2011 CA Technologies



 Copyright © 2011 CA Technologies

future enhancements

ca technologies

future enhancements (not confirmed)

- Single instance of data loaded into memory
  - Significantly reduced CPU usage & overall 'footprint'
  - Reduced start-up time
- Improved MLS data generator/editor
  - Easier to separate user/system data
- Further element customization improvements
- Improved client-side processing
  - HTML 4.0-compliancy
  - Extended use of CSS and JavaScript
  - Allow dynamic JavaScript libraries

 Copyright © 2011 CA Technologies

Finally...

- You'll all be glad to hear that we have a new Development machine
  - Bigger – all our stuff takes up about 10% of entire disk space!
  - Faster – CPU-tastic!!
  - Better – we're not sharing with other teams!!!
- Release 8.6 will be available for V5R4 onwards

 Copyright © 2011 CA Technologies

thank you

ca technologies