QA Kickoff

April 3, 2007



Outline

- Business Objectives
- Project Approach & Schedule
- Team
- Requirements



Business Objectives



Customer Pain

- Handling data in multiple screens
- Working with information in tables
- Copying, pasting & dragging and dropping
- Extracting data from Agile
- Adding, getting and versioning files
- Accessing help information from screens
- Accessing company/biz info from login screen



Market Problem

- User experience has been lost in web-based applications
- Industry spending R&D on RIA usability
- Web-based applications are evolving
- Agile's customers have been left behind



Product Problem

- Web Client lacks desktop application features
- We need rich components in the Web Client to address Power User productivity
- We cannot move to 100% RIA without first
 - cleaning up our UI code
 - making the UI consistent



Technology Problem

- Web Client technology is 5 years old
- Existing UI markup does not follow any standards
- Non-WAN friendly architecture
- UX team has shown the client can be repaired with dramatic success (922, POC)



Solution

Clean-Up

(Phase 1)



Power User Experience (Phase 2)



Casual User Experience (Phase 3)



RIA KonaBlue Experience (Phase 4) Design: Clean-up of visual presentation and create consistency
Technical: Clean-up of client facing code and mark-up (xHTML/CSS)
Benefit: Improved consistency, usability, accessibility & performance

Design: Key power user use cases (comparisons, table interactivity, etc...)

Technical: Support AJAX-based TreeGrid, windowing, copy/paste, etc...

Benefit: Ease-of-use & increased productivity, across the WAN

Design: Key casual user use cases (role-based, task-driven...)

Technical: Role-based presentation support, special client support

Benefit: Targeted end-user experience, PLM Your (customer's) Way

Design: Extend and apply above designs to RIA, SPA model

Technical: UI Framework to support Single-Page Rich Internet Application

Benefit: Highly productive, desktop application experience, best-in-class PLM

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Casual User Experience (Phase 3)



Design: Key casual user use cases (role-based, task-driven...)

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RIA KonaBlue Experience (Phase 4)

Design: Extend and apply above designs to RIA, SPA model

Technical: UI Framework to support Single-Page Rich Internet Application

Benefit: Highly productive, desktop application experience, best-in-class PLM



Value to Agile

- Protect non-A9 maintenance (~\$13.4M/yr)
- Unlock installed-base revenue (~\$41M oppy)
- Reduce R&D and enable rapid development
- Deliver WAN-ready power-user features
- Transitional step to becoming benchmark leader in Enterprise UI



Value to Customers

- Power-user productivity in thin-client
- WAN support
- Ease of Use
- Satisfaction and Delight



What it's not

- No new features for the casual user
- Not a departure from our object-tab paradigm
- Not the social networking aspects of Web2.0 [no blog, no wiki, no mashups, no RSS, no communitybased URLs]
- Not a wholesale behavior change to existing functionality
- Not a rich internet architecture (RIA) framework
- Not a role-based / task-based UI
- Not fully Section 508 Compliant
- Not applying icons Cimmetry, Prodika, Eigner



Project Approach & Schedule



Goals

- Reduce risk up front
- Quality at the source
- Make internal customers successful
- Continuous improvement



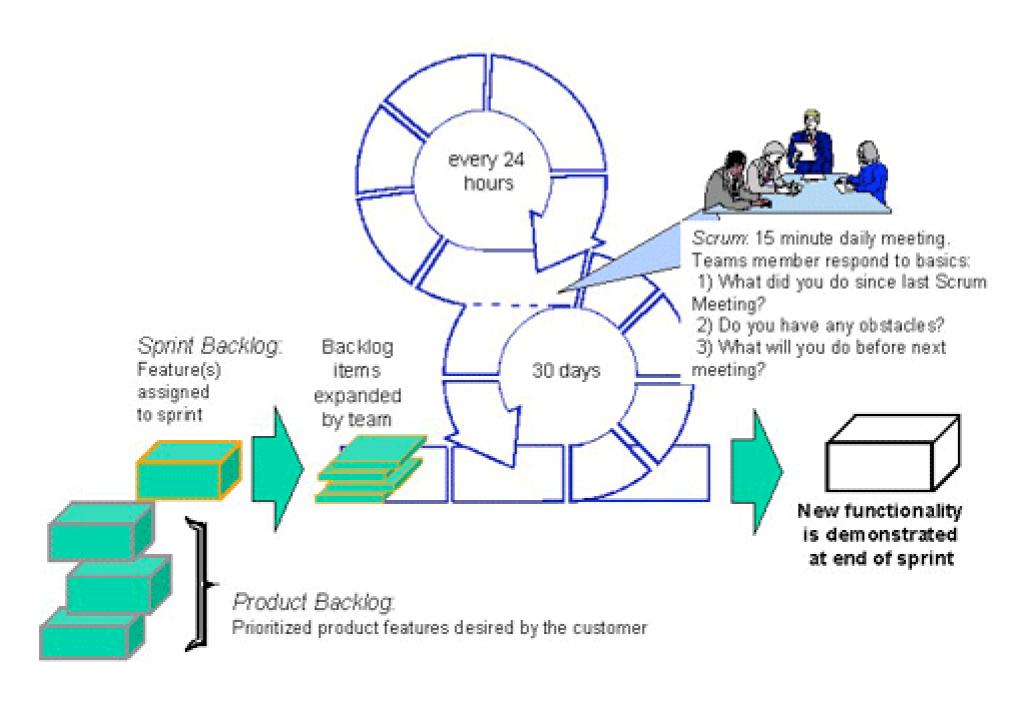
Feedback



- Customer Design Program
- Weekly feedback on designs and prototypes
- Spirent, Conexant, Coopervision, Ball Aerospace, Metaldyne, Hitachi OMD, Harris

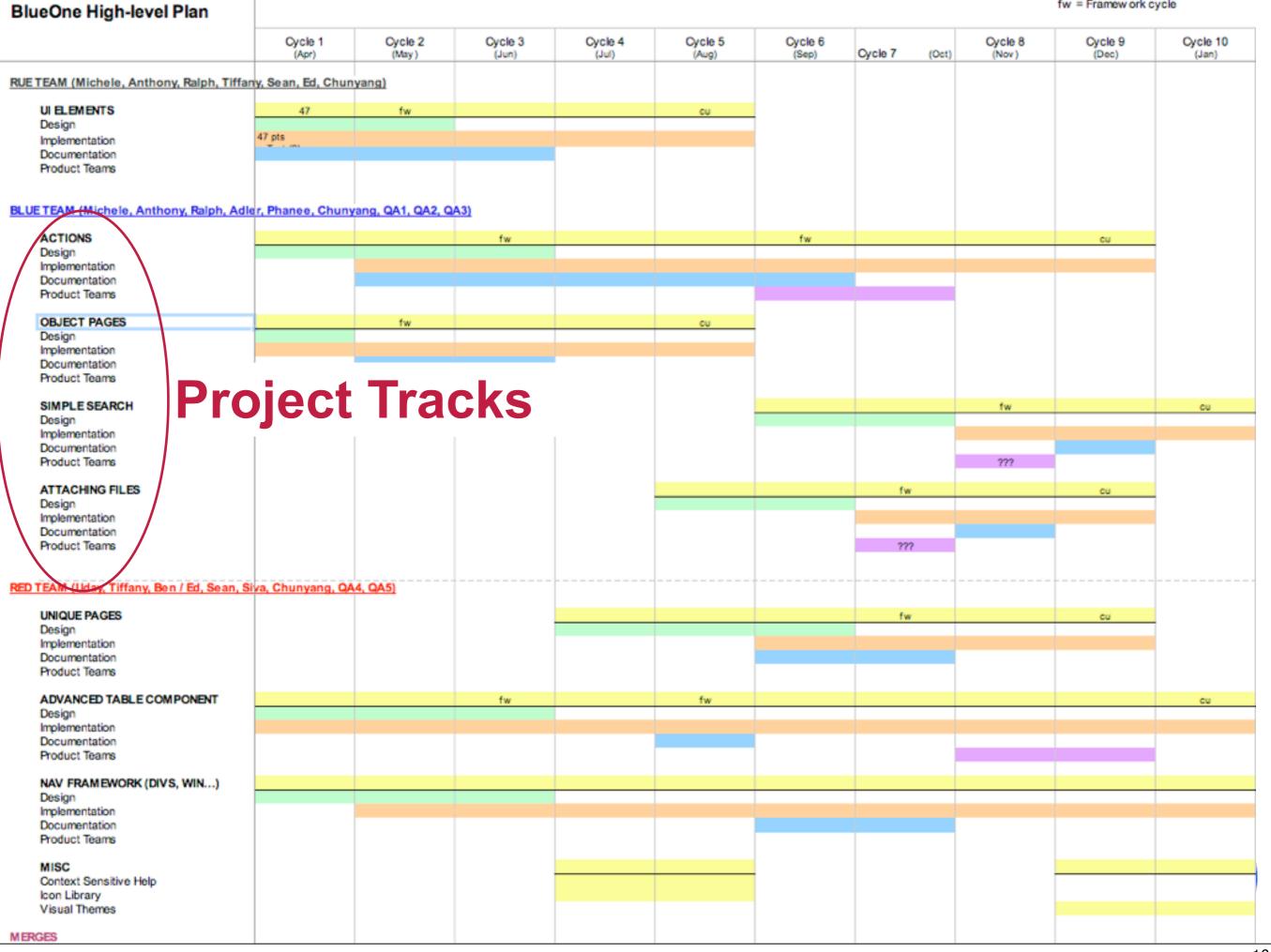


Scrum





fw = Framework cycle BlueOne High-level Plan Cycle 2 Cycle 3 Cycle 4 Cycle 5 Cycle 6 Cycle 8 Cycle 9 Cycle 10 Cycle 1 (Apr) (May) (Jun) (Jul) (Aug) (Sep) Cycle 7 (Oct) (Nov) (Dec) (Jan) RUE TEAM (Michele, Anthony, Ralph, Tiffany, Sean, Ed, Chunyang) UI ELEMENTS Design 47 pts Implementation Documentation Product Teams BLUE TEAM (Michele, Anthony, Ralph, Adler, Phanee, Chunyang, QA1, QA2, QA3) ACTIONS Design Implementation Documentation Product Teams **OBJECT PAGES** Design Implementation Documentation Product Teams SIMPLE SEARCH cu Design Implementation Documentation Product Teams ??? ATTACHING FILES Design Implementation Documentation Product Teams ??? RED TEAM (Uday, Tiffany, Ben / Ed, Sean, Siva, Chunyang, QA4, QA5) UNIQUE PAGES Design Implementation Documentation Product Teams ADVANCED TABLE COMPONENT Design Implementation Documentation Product Teams NAV FRAMEWORK (DIVS, WIN...) Design Implementation Documentation Product Teams MISC Context Sensitive Help Icon Library Visual Themes MERGES



Team



BlueOne Team

Joel Nave - Project Lead

Brian Cipresse - Product Mgmt

Andrei Herasimchuk - Consultant

- Joel Nave (Design)
 - Michele Yoshikawa
 - Uday Gajendar (invo)
 - Anthony Moquette
 - Ben Listwon (invo)
 - Ralph Garcia
 - Tiffany Altieri (invo)

- Sivaram Dandibhotla (Dev)
 - Adler Camacho
 - Chunyang Meng
 - Phanee Mandala
 - Sean Wells
- Kanda Setheraman (QA)
 - Azita Kamangar
 - Rukmani KK
 - Shanti Tipparam
 - Sreenivas Singana
- Technical Writer
 - Vern McGeorge



Requirements



Requirements

General Product Requirements

Cleanup Requirements Redesign Requirements Technical Requirements

Functional Requirements

Performance Requirements Whole Product Requirements



WHY CLEANUP?

- Robust user experience (consistent, solid and professional)
- * Improved performance and stability
- Sustainable and flexible code (increase our pace)
- # Greater compatibility and accessibility
- Pride

Joel Nave

Walk-through: Cleanup Plan

Requirements

General Product Requirements

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Functional Requirements

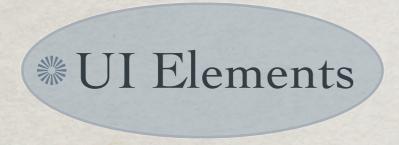
Performance Requirements Whole Product Requirements



WHY REDESIGN?

- customer feedback, known issues & inconsistencies
- ** cleanup "lowers the water" showing new obstacles
- mew UI paradigms need new designs (MDI, table, drag/drop, copy/paste, multiselect, single-select, address book, etc)

REDESIGN REQUIREMENTS



- ** Adding Rows to Tables
- Wisual Themes
- Wisual Look/Feel
- **# Icons**

UI ELEMENTS: TEXT

- # text
- # multi-text

UI ELEMENTS: LISTS

- **端 lists**
- single item search
 control
- ** multiple item search control

- search pallet [flat list,
 cascade list, table]
- address book search
 control [single, double,
 table]
- # dual select

UI ELEMENTS: OTHER

- *****auto number
- **checkbox
- # date form
- # date table

REDESIGN REQUIREMENTS

- **#UI** Elements
- **Adding Rows to Tables
- Wisual Themes
- Wisual Look/Feel
- **# Icons**

ADDING ROWS TO TABLES

- ** tables may or may not have explicit EDIT mode depends on object / use case (eg:BOM)
- implicit EDIT mode shall allow users to modify a cell directly
- waser shall be able to create new row, search for exist data, type/paste known numbers or create a placeholder rows/temp parts without having to first pick a menu item!

REDESIGN REQUIREMENTS

- **#UI** Elements
- ** Adding Rows to Tables
- * Visual Themes
- ** Visual Look/Feel
- **# Icons**

VISUAL THEMES

Cleanup of end-user visual theme selection tool

REDESIGN REQUIREMENTS

- **#UI** Elements
- ** Adding Rows to Tables
- Wisual Themes
- ** Visual Look/Feel
- **%** Icons

VISUAL LOOK/FEEL

- **Standardization of visual look and feel across all Agile solution, productivity components and redesigned elements.
- The new Agile PLM CSS shall be made available to customers, partners and SDO in order for custom UI presentations to be created in the same look/feel as Agile.

REDESIGN REQUIREMENTS

- **#UI** Elements
- ** Adding Rows to Tables
- Wisual Themes
- ** Visual Look/Feel



ICONS

- creating corporate standard for all BUs
 (A9, e6)
- departure from cartoon-looking icons
- adaption of MS Vista icon design

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TECHNICAL REQUIREMENTS

- Markup cleanup
- * Yahoo! Interface Library
- CoqSoft Tree grid
- ** Platform: servers and clients

MARKUP CLEANUP

- **※XHTML 1.0**
- **Object oriented web design
- **Code** refactor

TECHNICAL REQUIREMENTS

- Markup cleanup
- * Yahoo! Interface Library
- CoqSoft Tree grid
- ** Platform: servers and clients

YAHOO! INTERFACE LIBRARY

- JavaScript utilities & controls
- wuse to build rich interactive web applications
- ** based on DOM scripting, DHTML, AJAX
- # contains core CSS resources
- open source and free to all under BSD license

TECHNICAL REQUIREMENTS

- Markup cleanup
- * Yahoo! Interface Library
- CoqSoft Tree grid
- ** Platform: servers and clients

COQSOFT EJS TREE GRID

- ** DHTML component written in JavaScript
- ## displays & edits millions of table rows/tree in HTML pages using AJAX
- compatible with all browsers
- Excel-like filters, fixed columns/rows, dragging, column moving/sorting, formatting

COQSOFT EJS TREE GRID

- configurable appearance via CSS styling
- extended JavaScript event/method API
- * advanced key and mouse navigation
- # printing & export to Excel capabilities

TECHNICAL REQUIREMENTS

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BROWSER SUPPORT

	Windows Vista Professiona 32/64bit	Windows XP SP2 Professional 32/64bit	Solaris 10, 11	OS X 10.5	Redhat Linux
Internet Explorer 7.0	\	\			
Firefox 2.0	\	\	\	\	\
Safari 3.0				\	

APPLICATION SERVER SUPPORT

	Windows Vista Server	Windows 2003 R2 32bit, 64bit all editions	Solaris 9, 10, SPARC	Solaris x86	AIX 5L versions 5.3, 6.0	Redhat Linux 4.0
Ora App Server 10g, Java Edition v/ 10.1.3.0.0	\	\	\	\		
IBM Websphere Server 6.0 Extended Deployment w/Tibco JMS for Cisco	\	\	\	\		
BEA Web Logic Server 9.2	\	\	\	\		

Requirements

General Product Requirements

Cleanup Requirements Redesign Requirements Technical Requirements

Functional Requirements

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- * Table Interaction
- **₩ MDI**
- * File Productivity fix
- **Export to Excel**

- Copy/paste
- Drag/drop
- ****** Timeout fix
- Keyboard shortcuts

- Perform table-level Adds, Changes, Deletes without popping up edit window
- ** Add to table by drag and drop
- ** Add to table by pasting from another table
- ** Allow copying and pasting
- Drag and drop to any structure level (eg:BOM / Sourcing Project / BOS)

- Drag and drop files from desktop to attachments, contents or files tab
- ** Present search results in table with <u>all</u> table functionality enabled for results set
- Filtering with one or more user-assigned conditions on one or more columns
- W User-defined custom filtering

- **Sort columns**
- Resize columns
- # Hide columns
- ** Freeze columns or rows
- Re-order columns
- Fill-up and Fill-down on columns

- ** Add personalized data views (ie: Content tab)
- Persist user's view of table across sessions and computers (including hidden/frozen columns, sorts, filters, sizing changes)
- WUSers shall not have to navigate pages of data
- Default sort column and order per table

****** Table Interaction

Copy/paste

₩ MDI

Drag/drop

File Productivity fix

****** Timeout fix

Export to Excel

Keyboard shortcuts

MDI

- Open & visually compare information in separate windows
- * Drag windows to different monitors
- M Interactivity between windows
- Copy and paste between windows
- ** See Use Cases in MRD for more information

****** Table Interaction

Copy/paste

₩ MDI

Drag/drop

* File Productivity fix

****** Timeout fix

Export to Excel

Keyboard shortcuts

FILE PRODUCTIVITY

- Eliminate pop-up when downloading files
- Replace drag/drop window with table
- Cache productivity component in browser

****** Table Interaction

Copy/paste

Drag/drop

File Productivity fix

****** Timeout fix

Export to Excel

* Keyboard shortcuts

EXPORT TO EXCEL

- Export any table to excel
- Includes objects, search results, history, reports
- Table hierarchy shall be maintained using either indents or levels (CMII-style)

****** Table Interaction

Copy/paste

₩ MDI

Drag/drop

* File Productivity fix

****** Timeout fix

Export to Excel

Keyboard shortcuts

COPY/PASTE

- Copy & paste between windows
- Copy & paste across divs on a window
- Copy from PDF, Excel, Word, Mail; paste to Agile
- Copy from Agile; paste to PDF, Excel, Word, Mail

****** Table Interaction

Copy/paste

₩ MDI

Drag/drop

File Productivity fix

****** Timeout fix

Export to Excel

Keyboard shortcuts

DRAG AND DROP

* Drag and drop across divs on a window

****** Table Interaction

Copy/paste

Drag/drop

File Productivity fix

** Session Timeout

Export to Excel

Keyboard shortcuts

SESSION TIMEOUT

- Fix timeout behavior to to match
 ConnectTimeoutSecs parameter in iisproxi.ini
- * Warn user before timing out
- ** Stretch: users-specific timeout intervals

****** Table Interaction

Copy/paste

Drag/drop

File Productivity fix

****** Timeout fix

Export to Excel

* Keyboard shortcuts

KEYBOARD SHORTCUTS

- Ability to interact with every screen by keyboard
- ** Includes saving or canceling any dialog
- * Shortcuts shall be display on screen
- Shall follow language rules (eg: P = print in English but D = Drücken in German)