



What's New in the IBM Notes and Domino Social Edition



November 14, 2012

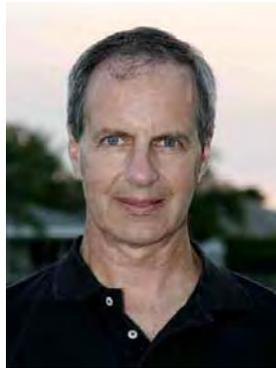
#XPages

@GBSKnows

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Your Hosts Today:



Howard Greenberg
TLCC
@TLCCLtd



Paul Della-Nebbia
TLCC
@paulDN

Upcoming Webinars

X Series	Date
<p>Q and A with the XPages Experts</p> <ul style="list-style-type: none"> ➤ Paul Calhoun - Using Apache FOP for creating PDF's ➤ Gary Forbis - Integrating existing LotusScript script libraries with XPages ➤ Chris Toohey - Responsive Layout Frameworks for XPages Application UI ➤ Keith Strickland 	<p>Dec. 12, 2012</p>

For more information and to register go to:

<http://www.tlcc.com/xpages-webinar>

TLCC XPages Offerings

■ Six XPages Courses!

- Introduction to XPages Development ... **FREE !!**
- JavaScript for XPages Development
- Developing XPages Using Domino Designer 8.5
- XPages Development 2 for Notes and Domino 8.5
- Mobile XPages for Domino 8.5
- Java 1 for XPages Developers

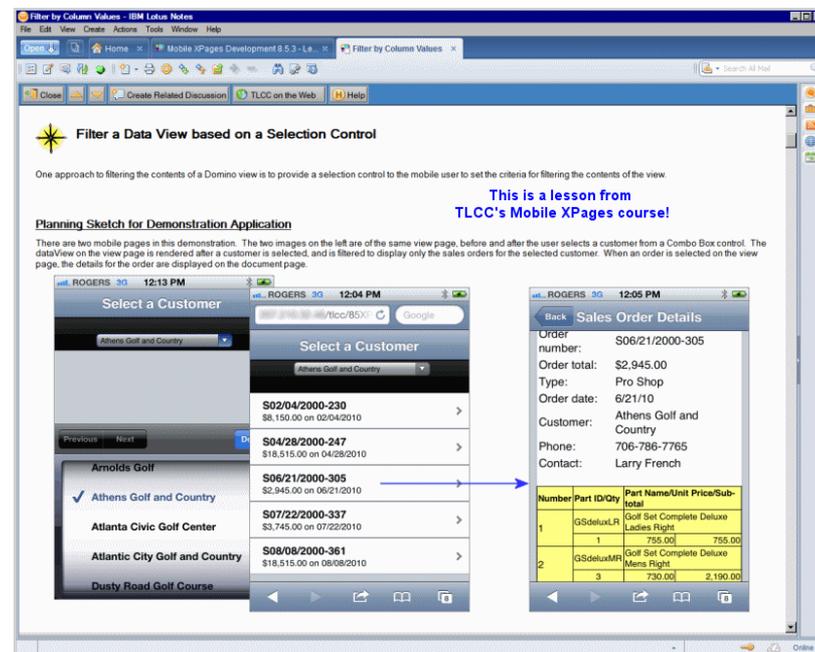
■ Self Paced Training

- Learn anywhere!
- An Instructor is a click away
- Instructor Office Hours

■ Instructor Led (Private)

- Online or at your site

■ TLCC Mentoring Services



Filter by Column Values - IBM Lotus Notes

Filter a Data View based on a Selection Control

One approach to filtering the contents of a Domino view is to provide a selection control to the mobile user to set the criteria for filtering the contents of the view.

This is a lesson from [TLCC's Mobile XPages course!](#)

Planning Sketch for Demonstration Application

There are two mobile pages in this demonstration. The two images on the left are of the same view page, before and after the user selects a customer from a Combo Box control. The dataView on the view page is rendered after a customer is selected, and is filtered to display only the sales orders for the selected customer. When an order is selected on the view page, the details for the order are displayed on the document page.

Number	Part ID/Qty	Part Name/Unit Price/Sub-total
1	GSDeluxLR 1	Golf Set Complete Deluxo Ladies Right 755.00 755.00
2	GSDeluxMR 3	Golf Set Complete Deluxo Mens Right 730.00 2,190.00

Webinar Agenda

Overview of IBM Notes and Domino Social Edition



Ed Brill
Director
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What's New in Domino Designer in Social Edition



Dan O'Connor
Team Lead
Domino Designer
@doconnor78

What's New in XPages for Social Edition



Martin Donnelly
Team Lead
XPages Runtime
@TweeterDonnelly

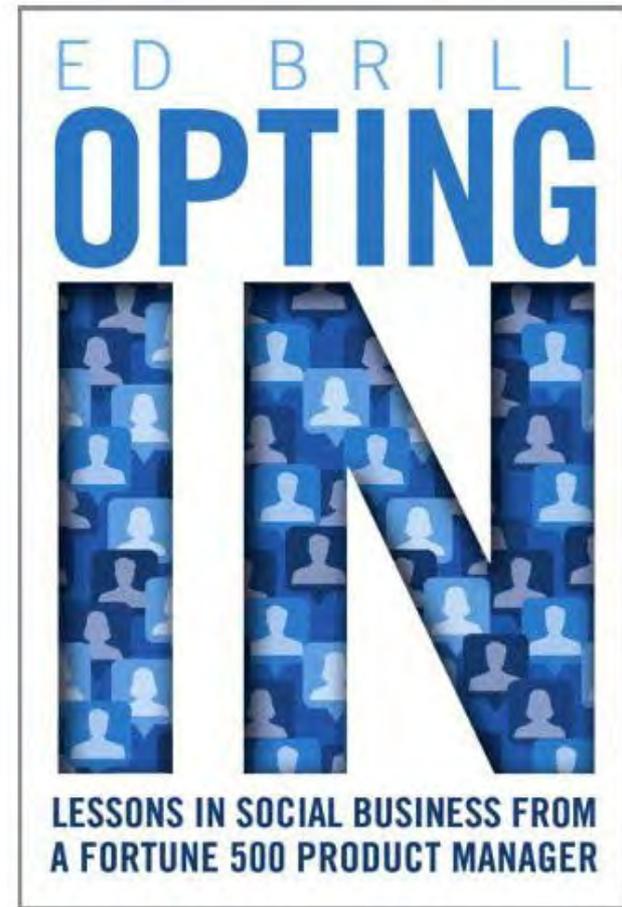


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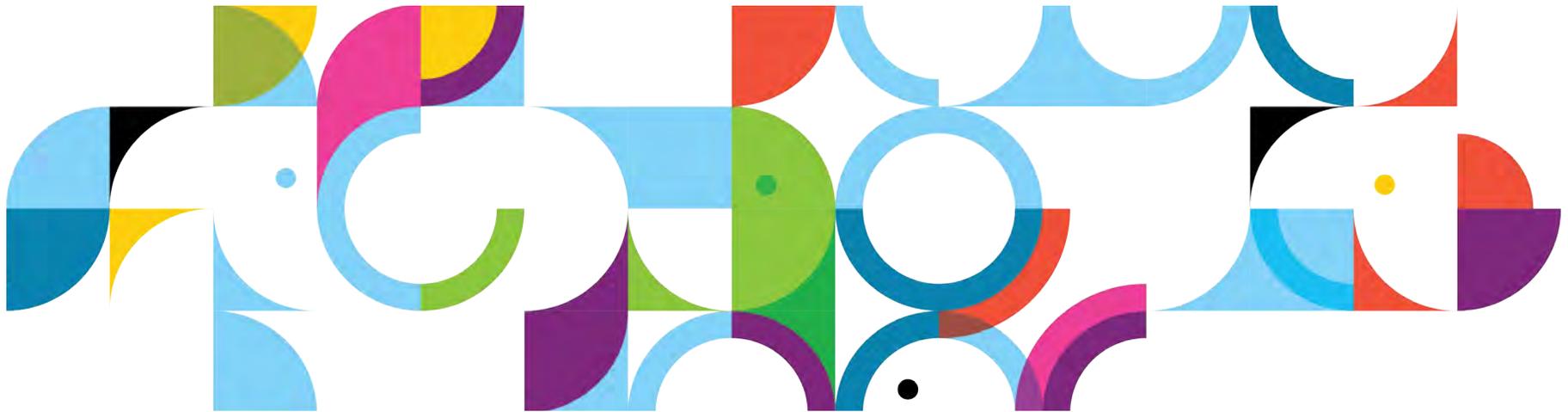


Domino Application Development Social Edition Update

Ed Brill – Director Social Business & Collaboration – IBM

Dan O'Connor – Domino Designer Team Lead – IBM

Martin Donnelly – XPages Architect/Team Lead - IBM



Introductions

- **Ed Brill – Director for Social Business and Collaboration Solutions – IBM**

- Blog: <http://edbrill.com>



- **Dan O'Connor – Domino Designer Team Lead - IBM**

- Author of XPages Portable Command Guide
- OpenNTF Contributor



- **Martin Donnelly - Software Architect - IBM**

- IBM Lotus® Domino® Designer 8.5.x / IBM Lotus® Domino® XPages
- Author of Mastering XPages & XPages Portable Command Guide
- OpenNTF Contributor



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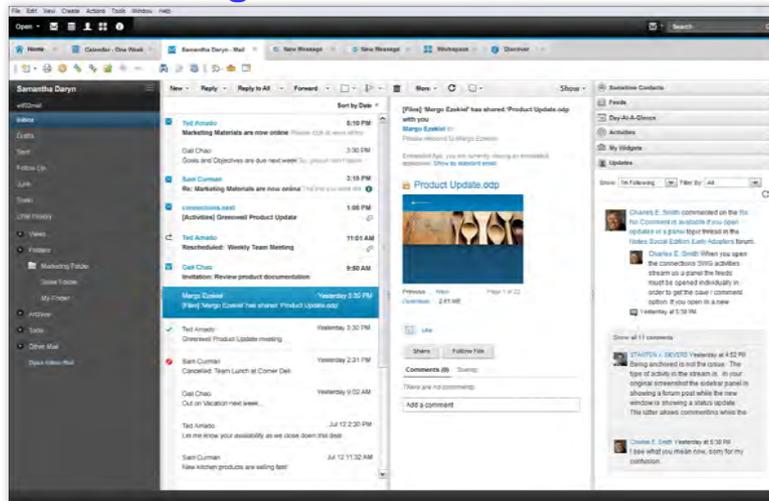
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Agenda

- **Social Edition Update**
- **Domino Designer Updates**
 - Integration of 8.5.3 Upgrade Pack 1
 - Usability improvements
 - New debugger
- **XPages Updates**
 - Dojo & CKEditor updates
 - Performance improvements
 - XPiNC performance improvements
 - Social features updates
 - Client side JS enhancements
- **Q&A – Your turn!!**

IBM Notes and Domino Social Edition – planned for Q1 2013

Build a smarter workforce by more deeply integrating social and business information to engage expertise, share and gather information, and make better decisions



- ✓ Provides modern, in-context social collaboration capabilities, based on OpenSocial standard:
 - Activity stream → View and take action quickly on content and events in context, without switching among applications
 - Embedded Experiences → Access business critical actions from a wide variety of applications, including 3rd party applications
- ✓ Upgraded, no cost entitlements for IBM Connections 4.0 Files & Profiles applications and Mobile access
- ✓ Application Development → Easier and faster than ever
- ✓ IBM Notes Browser plugin → Easy access to IBM Notes Social Edition applications from a browser
- ✓ Traveler → Support for To Do function on iOS & Android, Windows Phone 7.5/8, and IBM i server
- 5 ✓ Public beta coming in Q4 2012, managed beta available today!

Domino 9 Social Edition beta – objectives

Reduce TCO

- Database Management Tool
- NSD monitor for Unix
- Quality of Service probe
- Simplified Notes ID management via SAML support

Enhance Security

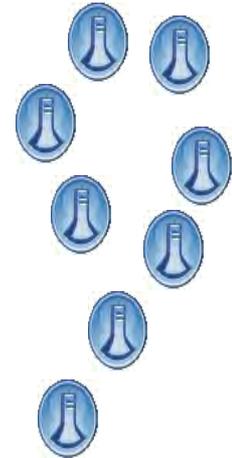
- SHA-2 support for encryption
- Transport Layer Security(TLS) delivered via IBM his
- OAUTH credential store to support Embedded Experiences

Platform expansion

- Continued focus on virtualization and 64bit platform support

Infrastructure for Social Business

- SSO via SAML support for both web and Notes access



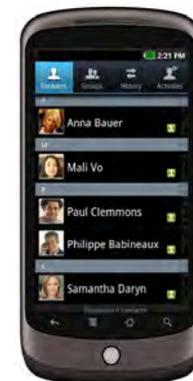
Notes Traveler upcoming key features

Notes Traveler 9.0 beta

- Support for Traveler running in IBM I
- Support for Windows Phone 7.5, Windows Phone 8 and Windows Surface Tablets
- Support for BlackBerry 10 Devices connecting to Traveler through BlackBerry Enterprise Service 10 (BES 10)

Future Traveler upgrade pack considerations

- Mobile device management API's for on Premise deployments
- Enhanced attachment security policies
- Sametime online meetings integration
- Sending and receiving encrypted mail with Internet users
- Enable Synching of Trash folder
- Smart Forward/Reply
- Certificate based authentication
- Integration with IBM Connections Mobile and Sametime Mobile



Notes 9 Social Edition beta: consumability enhancements

Click on URLs in edit mode

Categorize inbox by date (“Today,” “Yesterday,” “Last Week”)

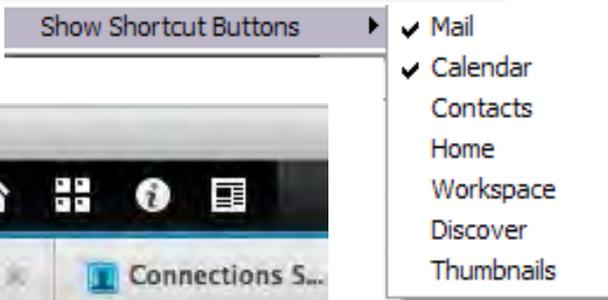
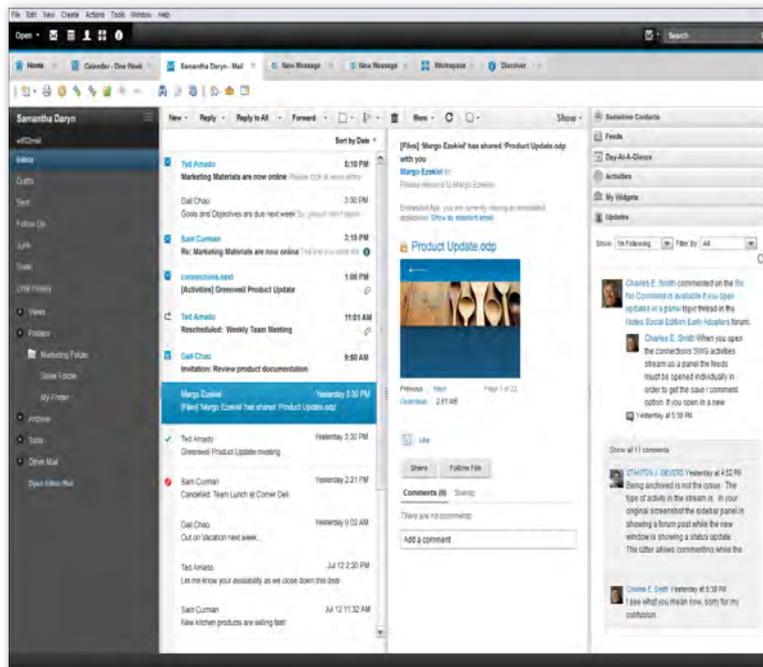
Single-click access to Mail, Calendar, Contacts and more

“Rolling Calendar” view (additive weeks)

“Weekly Planner” view

Mac Cocoa support

IBM Connections support with IBM Connections 4



iNotes 9 Social Edition beta enhancements

Tighter portfolio integration

Simplified calendar entry

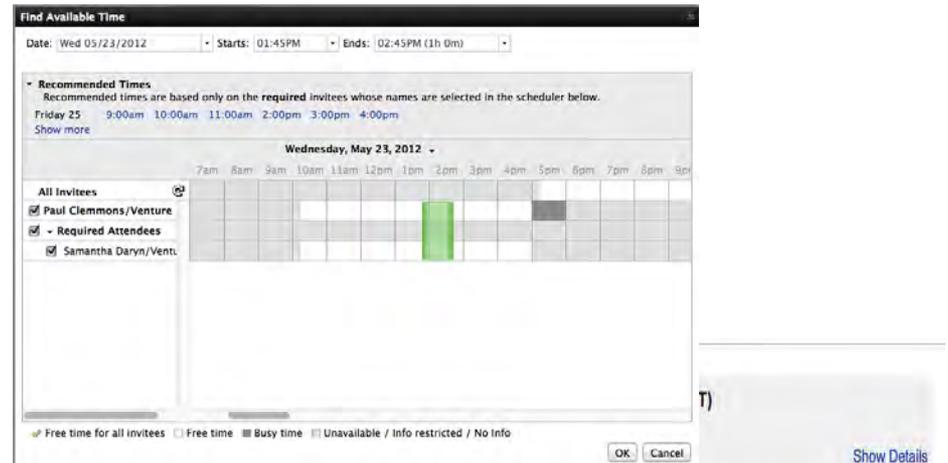
Improved scheduler

OpenSocial gadgets integration

Sidebar extensibility

Live Text

Relocate folders



IBM Lotus Notes Browser Plug-in Part of Notes 9 Social Edition beta

Designed to extend reach of applications previously available only to Notes users
Provides a powerful compliment to existing XPages capabilities

Allows applications to run in a browser with no modification!

Lightweight install, similar to other plug-ins in size, deployment, configuration

Minimal limitations:

- Windows only (for now, at least!)
- Not designed to support mail template, rather, to work in conjunction with iNotes
- Firefox and Internet Explorer along with Citrix, in first release

Application Development Themes for Social Edition

Developer productivity: Improve developer productivity by making common tasks easier for new and experienced developers

Web development: Deliver new and update existing capabilities for building web applications

Programmability: Deliver new APIs for working with Domino data and common services

Mobile: Enhance ability to build new and mobilize existing applications

Social: Integrate social services into your collaborative applications and extend the reach of those applications into social containers



1 Social Business Means Business

- Social Businesses can see up to 25% increase in productivity.*
- People-focused businesses generate 26% more revenue per employee.**

2 Take advantage of the discounts!

- Oct 27 to Dec 10 – \$2,095 USD
- Dec 11 to Jan 25 – \$2,295 USD

3 Lotusphere Technical Program.

Celebrate our 20th year!
Hundreds of technical sessions with deep-dive content attendees have come to expect.

4 Smarter Workforce Track

- Engage the right people **new** right time
- Foster better collaboration
- Motivate and empower employees to improve productivity
- Unleash innovation to transform your workforce.

5 Exceptional Customer Experience Tra **new**

Increase customer loyalty, advocacy and revenue by delighting customers, listening, analyzing and acting upon new insights

6 Get social!

- Follow @IBMConnect and @IBMSocialBiz on Twitter
- Like IBMSocialBiz on Facebook
- Tweet using #IBMConnect

*McKinsey Global Institute Report, July 2012

**Bersin & Associates Research Report, June 2011



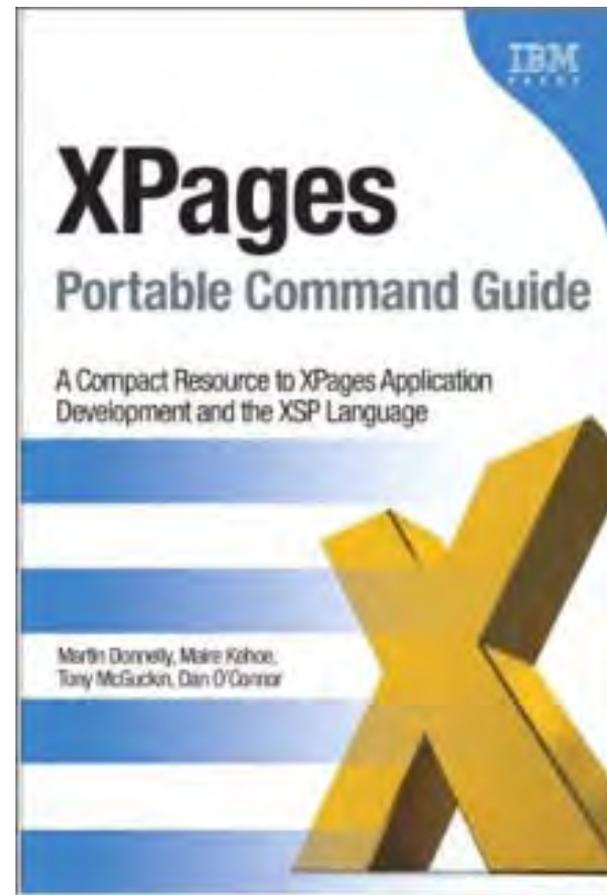


Dan O'Connor

Team Lead Domino Designer

IBM

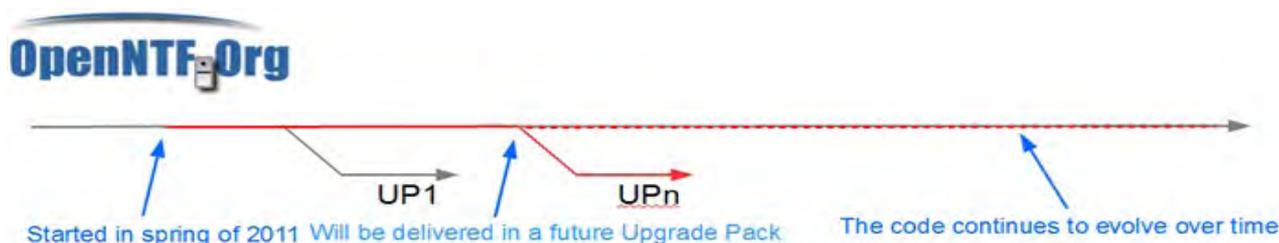
@doconnor78



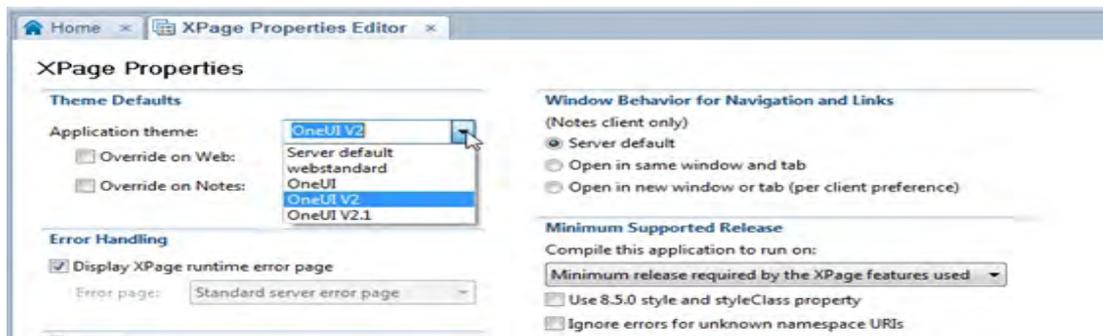
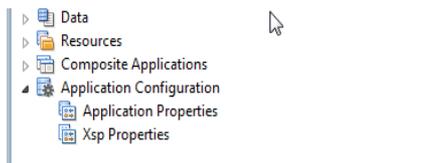
Domino Designer Social Edition Design Goals

- **Integrate Domino Designer Extension Library tooling into Designer “core”**
- **Improve Server Side JavaScript debugging experience!!**
- **Improve Domino Designer “Welcome” and “Home Page” experiences**
- **Improve XPages developer productivity**
- **New Jar design element**
- **Integrate and improve XSP Properties editor**
- **Bug fixes and quality improvements in key 'high traffic' areas (such as LS editor)**

Integration of Upgrade Pack One Controls into “Core”

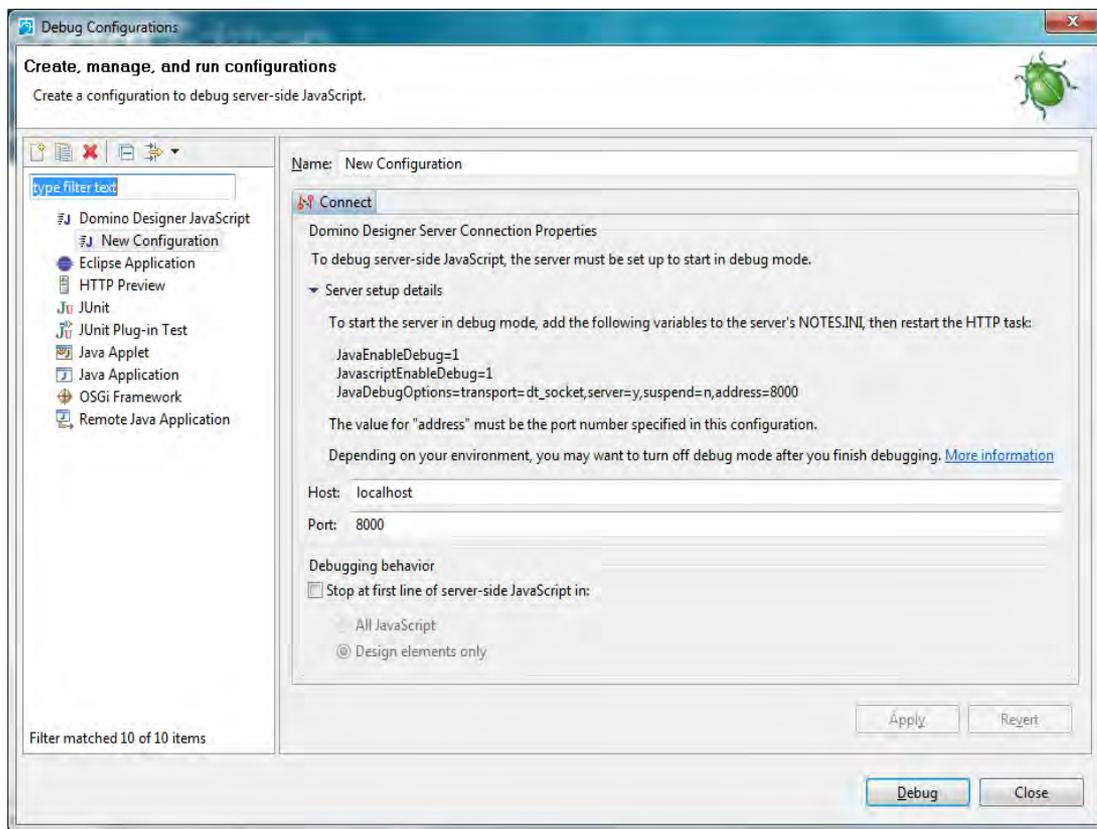


- Integration of 100+ extension library controls from 'UP1' into core
- Integration of XSP Properties editor from UP1 into Domino Designer



Domino Designer Server Side JavaScript Debugger

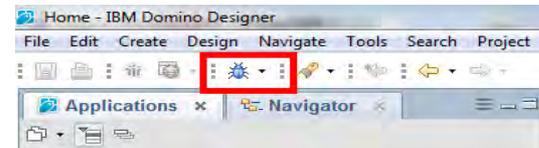
- **We heard you!!!!**
- **New “Domino Designer Server Side JavaScript” Debug Configuration**



- Debugging is only supported on Domino Social Edition servers and later
- Debugger is based on Eclipse “Remote Java Connection” protocol and uses JPDA/JDI

Domino Designer Server Side JavaScript Debugger

- **Debugger can be invoked from a new toolbar item**
- **Breakpoints can be set directly within XPages' SSJS or within SSJS Script Library**
- **New '*breakpoint*' keyword has been added to the SSJS syntax to allow for permanent breakpoints**
 - Breakpoints are only enabled when the server is running in debug mode
- **Sever must be configured to run in 'debug mode' in order for debugger to work**
 - Note this implies that a port must be opened on the server, so it is not recommended to debug servers that have unprotected access to the internet!
 - ✓ *JavaEnableDebug=1*
 - ✓ *JavascriptEnableDebug=1*
 - ✓ *JavaDebugOptions=transport=dt_socket,server=y,suspend=n,address=8000*



Debugging Server Side JavaScript!

Server Call Stack

- IBM Lotus Domino Designer JavaScript [Thread-6] (Suspended)
- /xp:view[1]/xp:this.data[1]/xe:objectData[1]/xe Line: 7
- ServerThread.stopHere(String) line: 129
- ServerThread.newContext(ExecutionContext) line: 85
- ServerThread(DebugInspector).setExecutionContext(ExecutionContext, ASTDebug) line: 82
- ServerThread(ASTDebug).interpret(ASTNode, IExecutionContext, InterpretResult) line: 136
- ServerThread(ASTProgram).interpret(ASTNode, IExecutionContext, InterpretResult) line: 119
- ServerThread(ASTProgram).interpretEx(IExecutionContext, InterpretResult) line: 139
- ServerThread(JSExpression).interpretExpression(ExecutionContext, InterpretResult) line: 435

Breakpoints in Server Side JS code withing the XPages editor

```
var svc = new sbt.LotusLiveProfilesService(ep);  
var params = {  
  "format": "json"  
};  
var result = svc.get(params, "json");  
return parseLotusLiveProfile(result);
```

Server side JS variables

Name	Value
result	[Object] (id=420223244)
entry	[Object] (id=425990500)
params	[Object] (id=727133015)
svc	(id=1332)
ep	(id=1062)
authenticationService	null
forceTrustSSLCertificate	false
label	null
oaProvider	OAProvider (id=1071)
proxyEnabled	false
requiresAuthentication	false
url	"https://apps.lotuslive.com" (id=1812)
lbl	undefined
s	XPages Social Enabler - LotusLive Profiles

Client-Side JavaScript/Dojo Debug Option

- **New debug options**

- Use case:

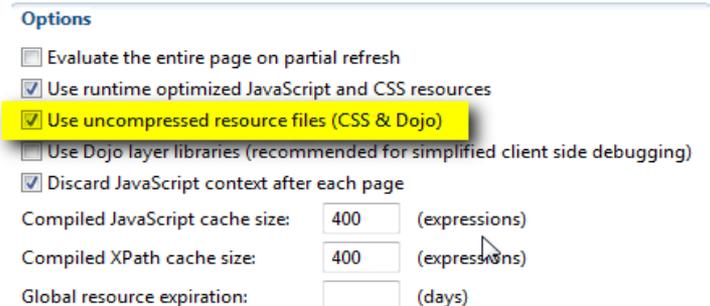
- Dojo Library deployed in an OSGi bundle on the server
 - Developer needs to debug uncompressed version of the source files
 - ✓ e.g. xspClientDojo.js vs xspClientDojo.js.uncompressed.js

- How:

- Set the “Use uncompressed resources” option in XSP Properties editor

- Result:

- The XPages runtime will server *.uncompressed.js & *.uncompressed.css if available (from within the OSGi bundle)



The screenshot shows the 'Options' section of the XSP Properties editor. The 'Use uncompressed resource files (CSS & Dojo)' checkbox is checked and highlighted in yellow. Other options include 'Evaluate the entire page on partial refresh', 'Use runtime optimized JavaScript and CSS resources', 'Use Dojo layer libraries (recommended for simplified client side debugging)', and 'Discard JavaScript context after each page'. Below these are input fields for 'Compiled JavaScript cache size', 'Compiled XPath cache size', and 'Global resource expiration', all set to 400.

Option	Value	Unit
Use uncompressed resource files (CSS & Dojo)	<input checked="" type="checkbox"/>	
Evaluate the entire page on partial refresh	<input type="checkbox"/>	
Use runtime optimized JavaScript and CSS resources	<input checked="" type="checkbox"/>	
Use Dojo layer libraries (recommended for simplified client side debugging)	<input type="checkbox"/>	
Discard JavaScript context after each page	<input checked="" type="checkbox"/>	
Compiled JavaScript cache size:	400	(expressions)
Compiled XPath cache size:	400	(expressions)
Global resource expiration:		(days)

Server-Side Debug Options

- **Java Source code is included for all plug-ins in Social edition that originate in 8.5.3 UP1**
- **Development Environment setup:**
 - VERY SIMILAR TO SSJS DEBUG SETUP!! :-)
 - Server must be started in debug mode (again be aware of open server port!)
 - ✓ JavaEnableDebug=1
 - ✓ JavaDebugOptions=transport=dt_socket,server=y,suspend=n,address=8000
 - Install Domino Debug Plugin into Domino Designer
 - <http://tinyurl.com/XPagesDominoDebugPlugin>
 - Import Java source plug-ins into Domino Designer
 - <http://tinyurl.com/XPagesDesignerInstallSource> (refer to step #11)
 - Set up Domino server and OSGI debug configurations

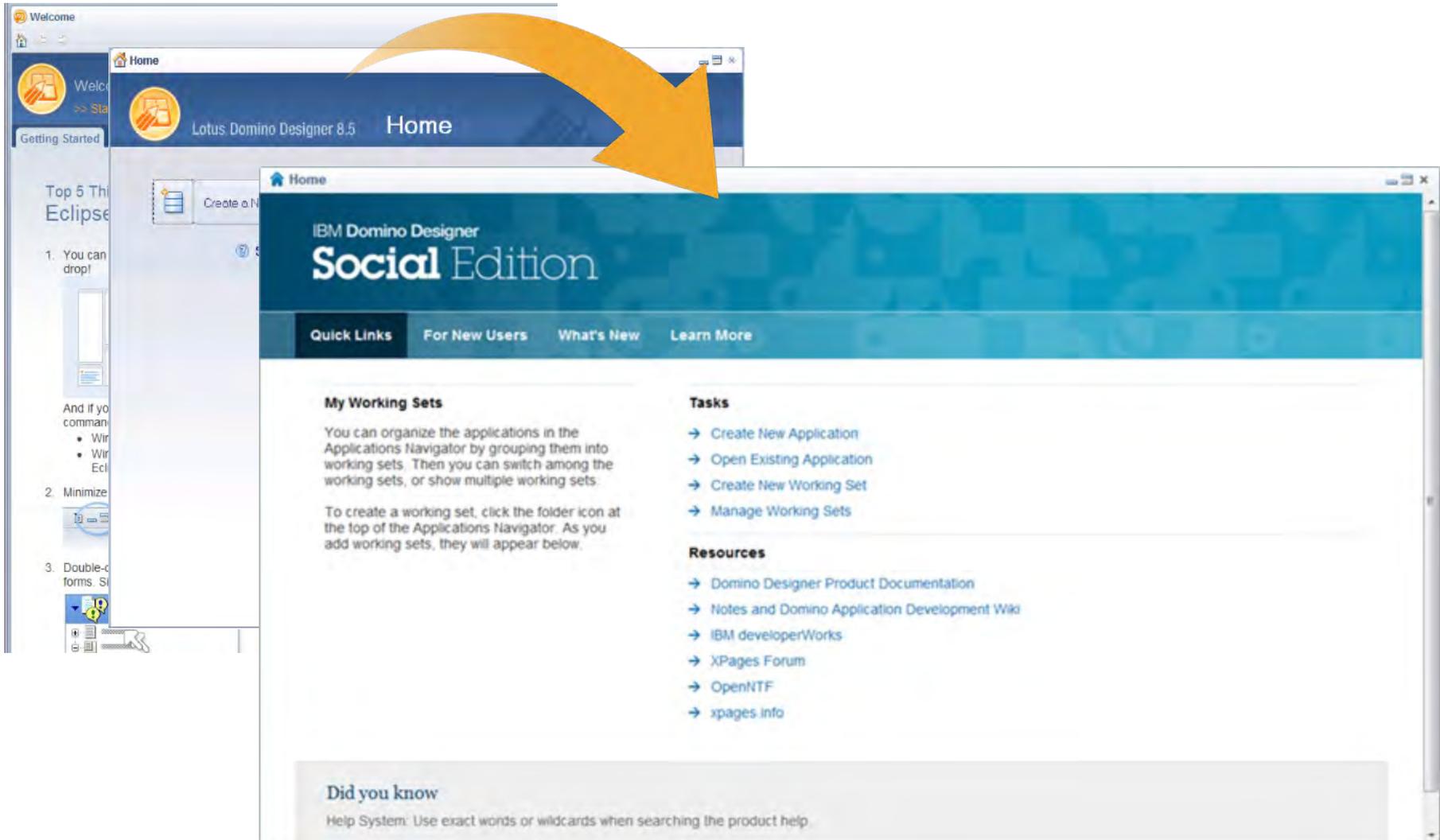


The screenshot shows the OpenNTF.Org website interface. At the top right, there are links for "Anonymous", "Login", and "Register". The main header features the OpenNTF.Org logo on the left, a navigation menu with "Home", "Projects", "XSnippets", "Blog", "Follow", "Get Involved", "People", and "About" in the center, and a promotional banner on the right that says "Turbo charge your email signature" with a "compatible with: Lotus Traveler" logo.

The main content area displays the project page for the "Tool Project (No Sources): IBM Lotus Domino Debug Plugin". On the left, there is a sidebar with links for "Overview", "Downloads / Releases", "News", "Screenshots", and "Documentation". The main content area contains the following information:

Owners	David Taiib, Niklas Heidloff	Platform	R 8.5.2
Contributors	-	Last Release	Nov 3, 2010
Downloads	477		

Improve Domino Designer “Welcome” and “Home Page” experience

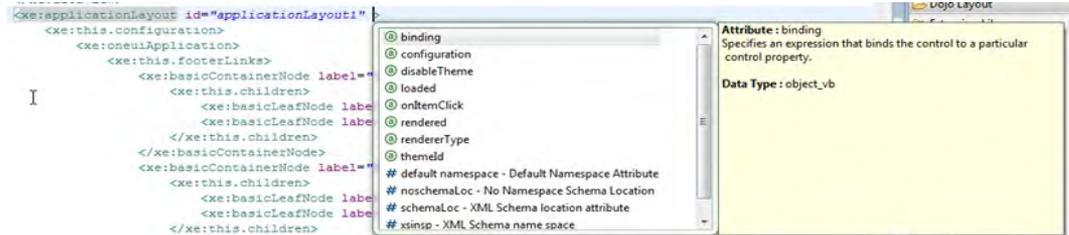


Home Page and Welcome Experience

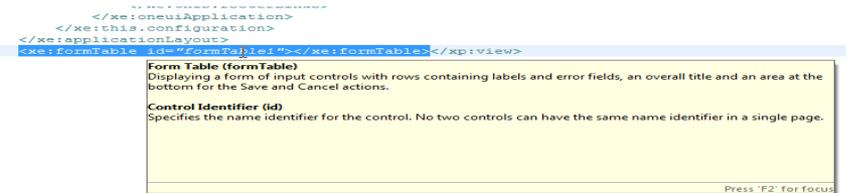
- Updated look and feel to align with the new “Discover” page
- Simplified by removing the Welcome page altogether and consolidating content onto Home page
- Updated content with intros and help links to help topics for major functional areas
- *Quick Links* tab provides a list of working sets (shows more than 5 working sets at a time!), task links, links to resources, and tips
- Home remains closed on restart if manually closed before shutdown

Improve XPages Developer Productivity

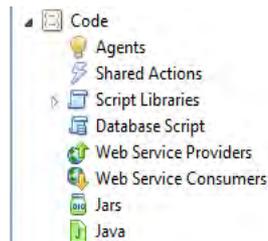
- **Content assist in xsp source editor editor!!**
(also works with SSJS in xsp source editor)



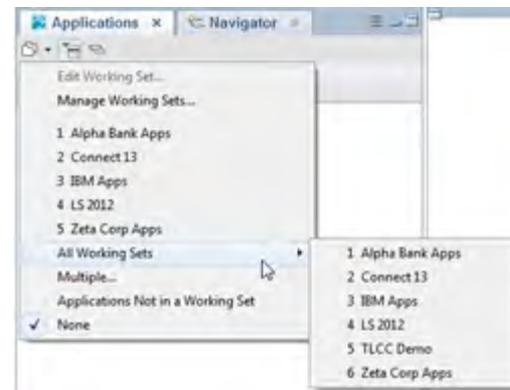
- **Hyperlink navigation within the xsp source editor**
- **Hover help within the xsp source editor**



- **Palette State Saving**
- **Jar design element**



- **Navigator now shows all working sets!! :-)**



Bug Fixes to Critical Issues

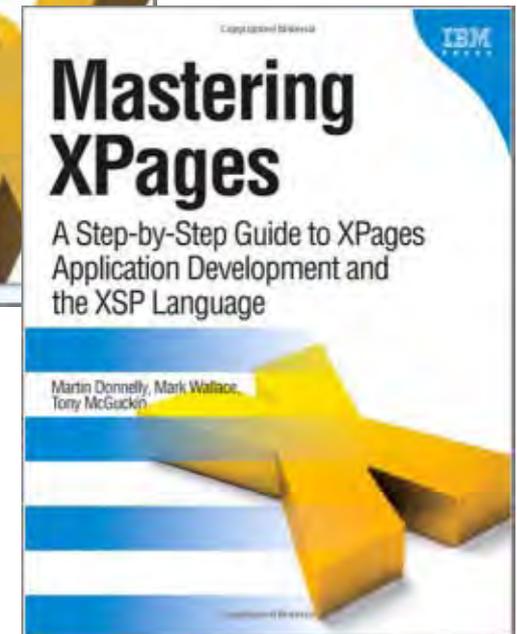
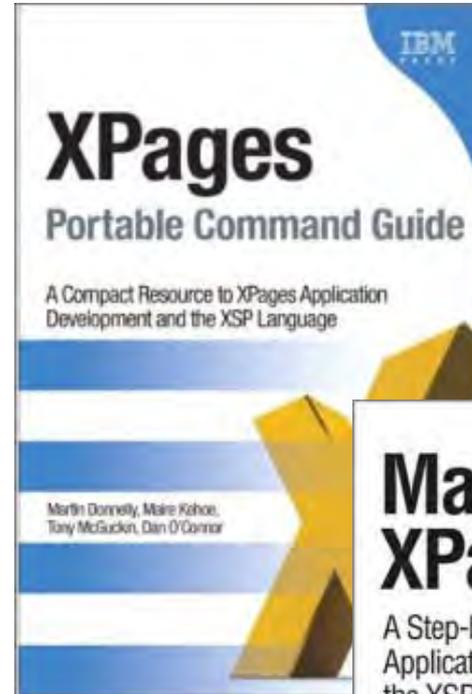
- **Bug fixes for:**
 - Error 500 when using Java Design Element (also fixed in 853 FP1)
 - Source control issues encountered when importing databases with many script libraries (also fixed in 853 FP2)
 - Fixes to tooling issues reported against Upgrade Pack 1
- **Performance/memory improvements in the XPages editor**
- **Fixes to the LotusScript Editor and builder**
 - Problems view reports correct line numbers for LotusScript errors!



Martin Donnelly

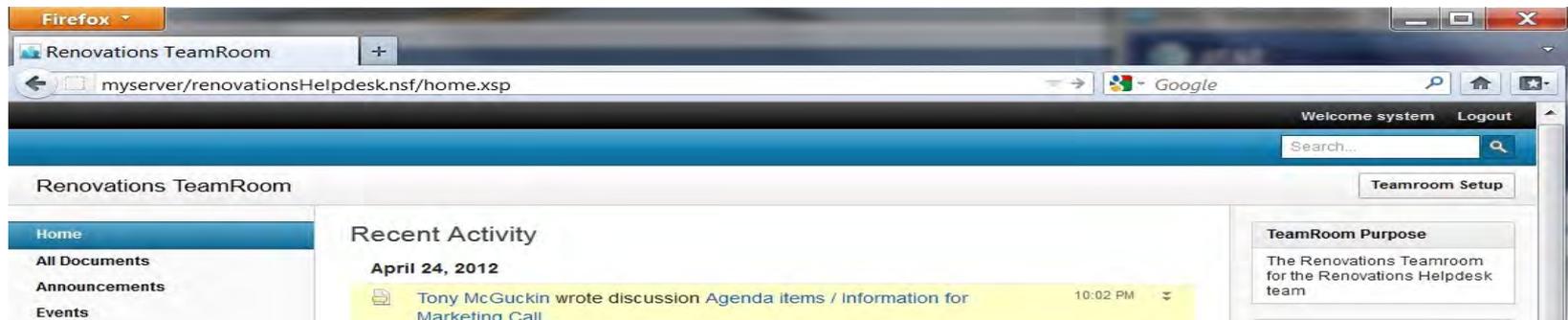
XPages Architect
Team Lead XPages Runtime
IBM Ireland

@TweeterDonnelly



Upgrade of XPages Upgrade Pack 1

- **All UP1 Features/Plugins installed with Domino server, Designer, Notes client**
 - Actually UP1+ as fixes and enhancements are included
- **Available on all platforms**
 - Windows | Linux | Mac
- **TeamroomXL and DiscussionXL will be included in Social Edition GA**
 - Old XPages Discussion template will be replaced



Integration of Key XPages Components

- **Dojo 1.8**

- Offers enhanced mobile support and bug fixes
- Xpages runtime does not leverage async mode
 - Reworked Date Time Picker
 - Reworking TypeAhead control
- Issues Fixed in 1.8

<http://bugs.dojotoolkit.org/query?group=status&milestone=1.8>

- **CKEditor 3.6.3**

- Upgraded to 3.6.3 in CD5
 - Possible further upgrade to 3.6.5
- Many issues fixed regarding
 - Multiple instances per XPage
 - Text and other HTML artifacts surrounding inline images
 - Attachment handling
 - Image resizing
- Added support for Spell Checker 
- Better iOS behavior

- **Active Content Filter**

- Upgraded to 2.5.0.11

Redirect Control



Demo

- **Use cases:**

- Traveller or iNotes rewrites the Notes doclink to a web link
- Custom redirect handling required within an application

- **How:**

- Set form display property to a target XPage that includes a Redirect control instance

- **Result:**

- The Redirect control instance will transform the request URL accordingly based on the set of redirect rules

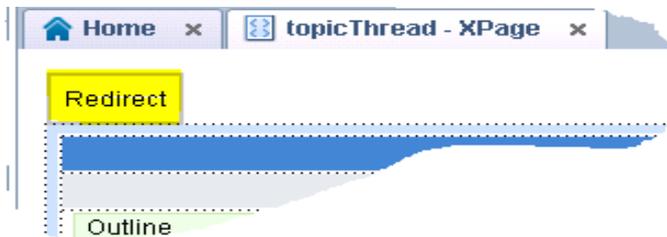
- **Example:**

For a mobile redirect rule:

<http://foo/bar.nsf/0e5e7/04aae/?OpenDocument>

becomes...

<http://foo/bar.nsf/mobile.xsp?documentId=04AAE&action=openDocument#document>



```
<xe:redirect>
  <xe:this.rules>
    <xe:redirectPhoneRule url="mobile.xsp"
      disableRequestParams="false" urlHash="document">
    </xe:redirectPhoneRule>
    <xe:redirectTabletRule url="mobile.xsp"
      disableRequestParams="false" urlHash="document">
    </xe:redirectTabletRule>
  </xe:this.rules>
</xe:redirect>
```

XPages Social Edition Integration Points



Demo

• New XPages SendMail Action:

- Drag & Drop action to facilitate sending simple e-mail
- Advanced features support Embedded Experience
 - Encapsulates required JSON or XML payload

Getting started with IBM Connections

Do not show this screen at start

Reply Forward Mark as Unread Move to... Delete

☆ Teamroom was shared with you!

Amy Jones102
To: Amy Jones102 Oct 18 2:19 PM

Format: This message is displaying an embedded experience. [Show Original Message](#)

Home
All Documents
Announcements
Events
Status Reports
Calendar
Members and Subteams

All Documents

Show: All All by date All by author All by team Filter by: [dropdown]

New Document

Collapse All | Expand All

Title
from connections mail ee

Enter values for simple action arguments

Category: Basic

Action: Send Mail

Arguments for this Action

Basics Deliver Options Embedded Experience

Format: JSON

HTML URL:

Gadget URL:

Gadget context properties:

Name	Value
------	-------

Add Remove

OK Cancel

A Fresh Look at XPiNC in Social Edition beta

XPiNC Challenges ...

- Programmatic access to the client desktop
- Initial application load time
- Performance issues with remote applications

... XPiNC Remedies

- New XPiNC Extensible JavaScript/Java Bridge
- Application Preloading
 - XPagesPreload=1
 - Bootstraps just the core XPages runtime
 - XPagesPreloadDB=db.nsf/myPage.xsp, other.nsf/myPage.xsp
 - Loads specific application(s)
- The Single-Copy-XPages-Design + Preload Pattern
- New XPiNC RunOnServer facility
- XULRunner Upgrade – work ongoing but not guaranteed for Social Edition

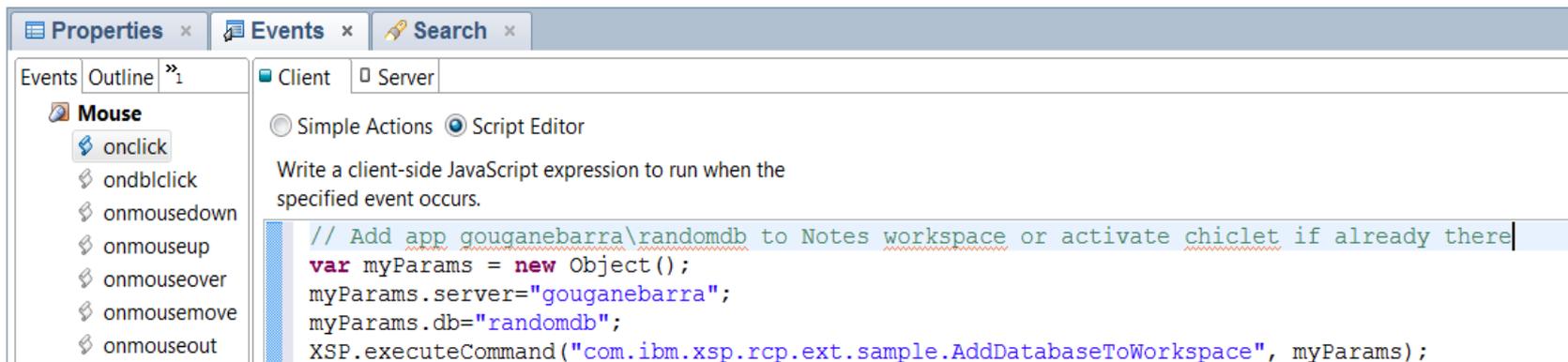
XPiNC Client Side JavaScript Enhancements



Demo

• XSP.executeCommand() - How it works:

- XSP.executeCommand() uses same runtime path as other XPiNC XSP JS commands
 - e.g. XSP.alert(), XSP.confirm(), XSP.publishEvent(), etc.
- When an XSP.executeCommand() is called XPages looks through the list of registered command providers
 - If a contributor is found who handles the command it is called
 - commandIds are name-spaced
 - Command is executed and result, if required, returned
- Sample JS code might look this in Designer



XPiNC Client Side JavaScript Enhancements

- **XPiNC now has an extensible client side JavaScript model**
 - Since 8.5.1 XPiNC client side XSP programming model has been limited
 - Developers were limited to a small number of predefined commands e.g. XSP.alert(.) XSP.confirm(..) ec
 - New XSP command in Social Edition
 - XSP.executeCommand(commandId, commandParams)
 - commandId identifies the requested function
 - commandParams is an object containing arbitrary arg values
 - ... or can simply be null, not present or an arbitrary list etc
 - The referenced commands can be implemented via a Java plug-in
 - Ext point name = “**com.ibm.xsp.rcp.ExtendedCommands**”
 - Uses simple **IExtendedCommands** Java interface
 - Provides secure access to:
 - Notes front-end functionality via
 - NotesUIWorkspace classes
 - Eclipse framework
 - Custom Java code

XPiNC Preloading

Application Initial Load Times

- What happens when you load your 1st XPages application in a Notes session ?
 - XPages runtime must bootstrap
 - A lot of Java class loading... 
 - The application launch page plus any other dependent custom controls, libraries must run
 - Potentially a lot of Java class loading... 
-  • 1st application can be slow to open (cold start)
- 2nd and subsequent applications are considerably faster (warm start) - why?
 - XPages has been bootstrapped
 - Web container has been started
 - XULRunner has been loaded

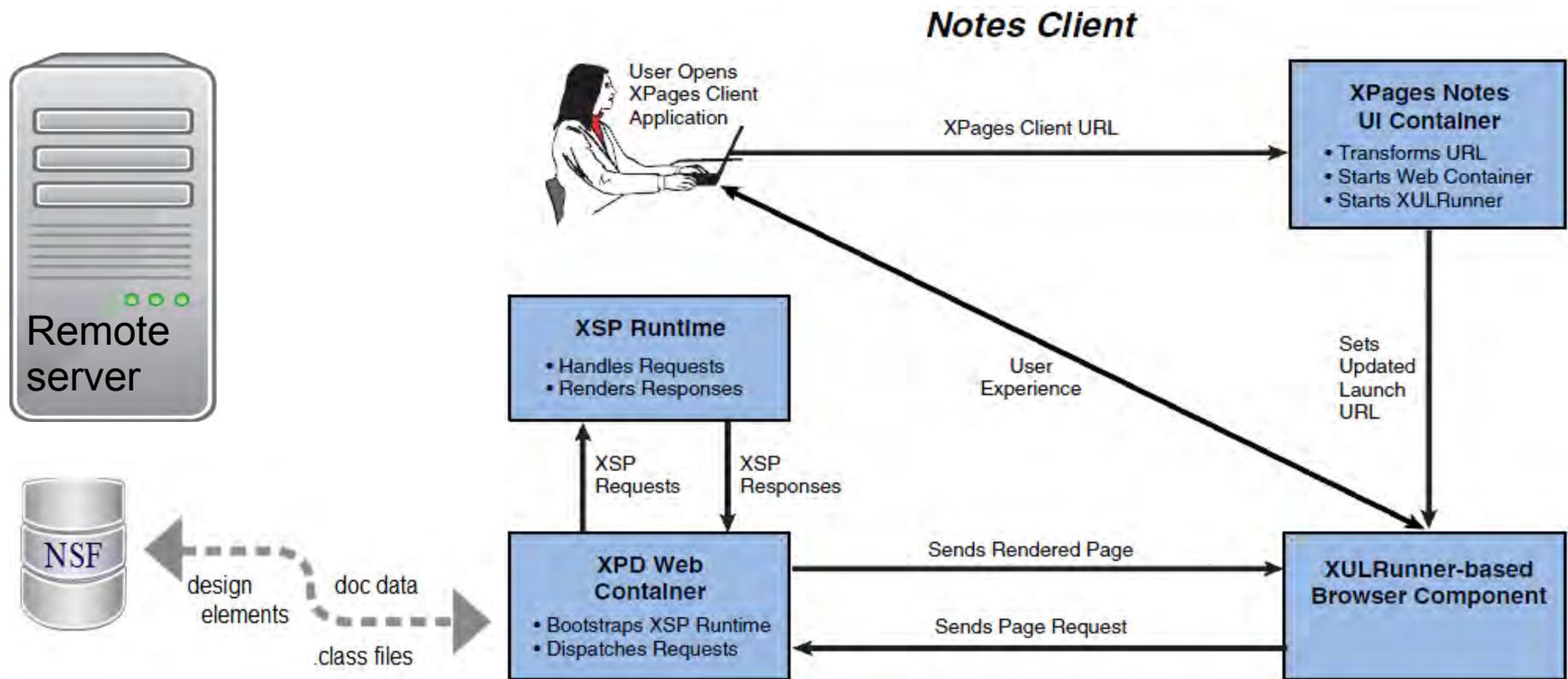
Application Preloading

- 
- Simulate warm start performance through early application loading
 - Preload required app(s) as soon as Notes has starts up
 - Bootstrapping is complete by the time user launches app for 1st time

XPiNC in Remote Execution Mode

Although NSF resides on a remote server, the app always runs in the Notes client

- Incurs network overhead as everything must execute in the *local* XPD Web Container



Other Use Cases To Handle...

Reducing Network Traffic



- Network traffic can be grossly inflated by sub-optimal app design practices, e.g.
 - **computeWithForm** on a Domino doc data source will pull the Form across the net
 - A Form element is arbitrarily large, e.g. includes all subforms and any other children
 - Large Computed Forms + High Latency Networks = Poor XPiNC performance 
 - Inefficient data access operations, e.g.
 - Opening documents on-the-fly within a data iterator
 - » Custom columns in a viewPanel control that calls `rowData.getDocument().getItemXxx()`;
 - Performing dynamic remote NSF lookups when computing “rendered” property values

Preloading Many Apps...

- What happens when I have **many instances** of the same application?
 - `XPagesPreloadDB=AppA.nsf/home.xsp, AppB.nsf/home.xsp, ... AppN.nsf/home.xsp`
- Not practical to constantly add and maintain NOTES.INI with new app names
- All app instances share a common design ...
 - and it is the Design elements that we need to preload !
- Can the Single Copy XPages Design feature help?
 - Yes, from 8.5.3 FP3 onwards



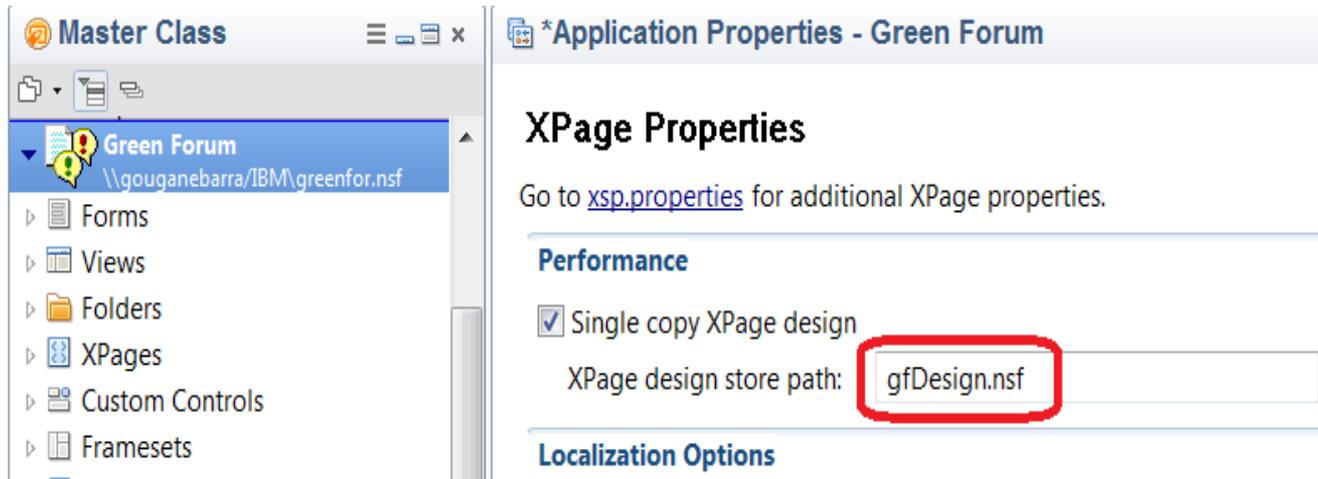
XPiNC SCXD + Preload Pattern

- **Single-Copy-XPPage-Design feature supported in Social Edition Client**

- A 'design-only' copy of your XPiNC app can be locally deployed and preloaded
- This implies **both** Java classes (*.class) and resources (*.css, *.js etc) are cached
- When SXCD is in force, computeWithForm will load the Form locally
 - This is analogous to what the native Notes client does with Cache.NDK
- VERY efficient for many instances of a single application on XPiNC



Demo



Master Class

*Application Properties - Green Forum

Green Forum
\\gouganebarra\IBM\greenfor.nsf

- Forms
- Views
- Folders
- XPages
- Custom Controls
- Framesets

XPPage Properties

Go to [xsp.properties](#) for additional XPPage properties.

Performance

Single copy XPPage design

XPPage design store path:

Localization Options

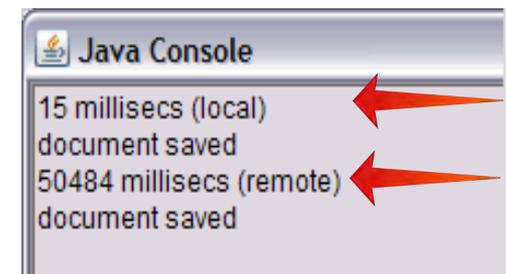
computeWithForm – Standalone Example

- **computeWithForm Java agent**

- Run Java agent in local db, then swap first line to run against a remote replica

```
Database app = session.getCurrentDatabase();  
  
// Database app = session.getDatabase("myServer", "remoteReplica");  
  
Document doc = app.createDocument();  
  
doc.replaceItemValue("Form", "frmTask");  
  
doc.replaceItemValue("Subject", "computeWithForm operation");  
  
doc.replaceItemValue("Body", "Text ... ..");  
  
long startTs = System.currentTimeMillis(); // log time before computeWithForm operation  
if (doc.computeWithForm(false, false)) {  
    long endTs = System.currentTimeMillis(); // log time after computeWithForm operation  
    System.out.println(Long.toString(endTs-startTs) + " millisecs (local)");  
    doc.save(true, true);  
    System.out.println("document saved");  
}
```

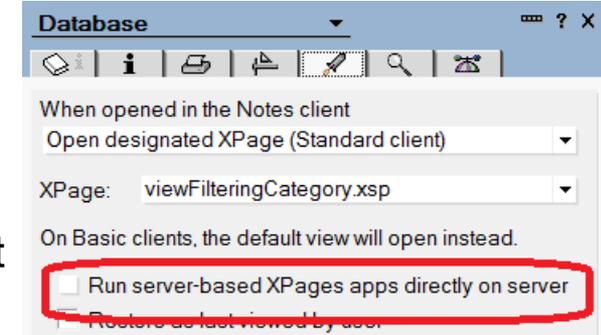
 **Sample Results**



XPiNC Run On Server Option

Helps address performance issues where

- XPages web application is not optimized for Notes client
- Offline access is not a requirement
- Maintains XPages client look and feel
- Supports XPiNC custom behaviours
 - Notes bookmarking
 - Notes client context menus, e.g. Open In Designer
 - EnableModifiedFlag/DisableModifiedFlag
- XPiNC apps can be coded conditionally according to execution mode
 - Works with Notes account framework so re-authentication can be avoided
 - Avoids dialogs requesting web credentials within Notes
 - Enables fallback to conventional XPiNC execution



```
<xp:this.rendered><![CDATA[#{javascript:!context.isRunningContext("Notes")}]]></xp:this.rendered>
```

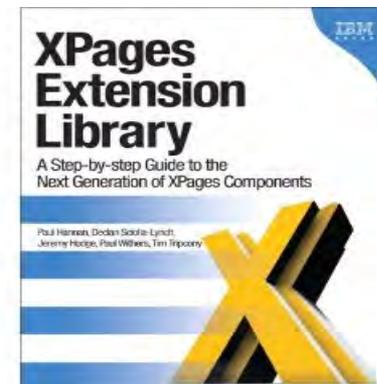
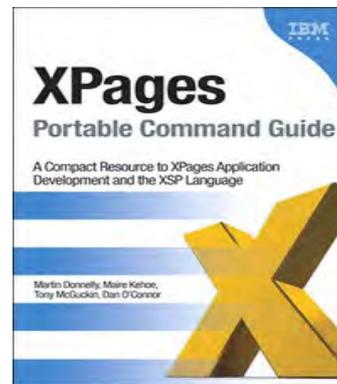
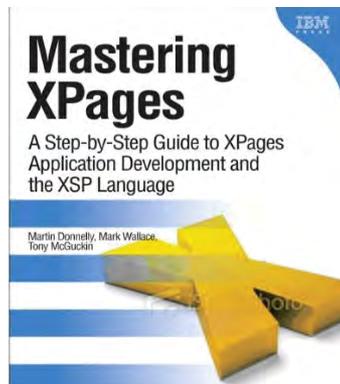
```
<xp:label.rcp rendered="false"></xp:label.rcp>
```



Summary

Apart from all that ...

- Lots of work done on XPages stability
 - SPRs, PMRs
 - Fix Pack and Hot Fixes
- Customer Collaboration – Unleash the Lab Initiative !
- Performance Master Class in Dublin
 - Oversubscribed 2-day deep dive session
 - Reference materials to follow on OpenNTF.org
- Two New XPages Books in 2012
- 2nd Edition of Mastering XPages due in 2013



Question and Answer Time!



Ed Brill



Dan O'Connor



Martin Donnelly

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