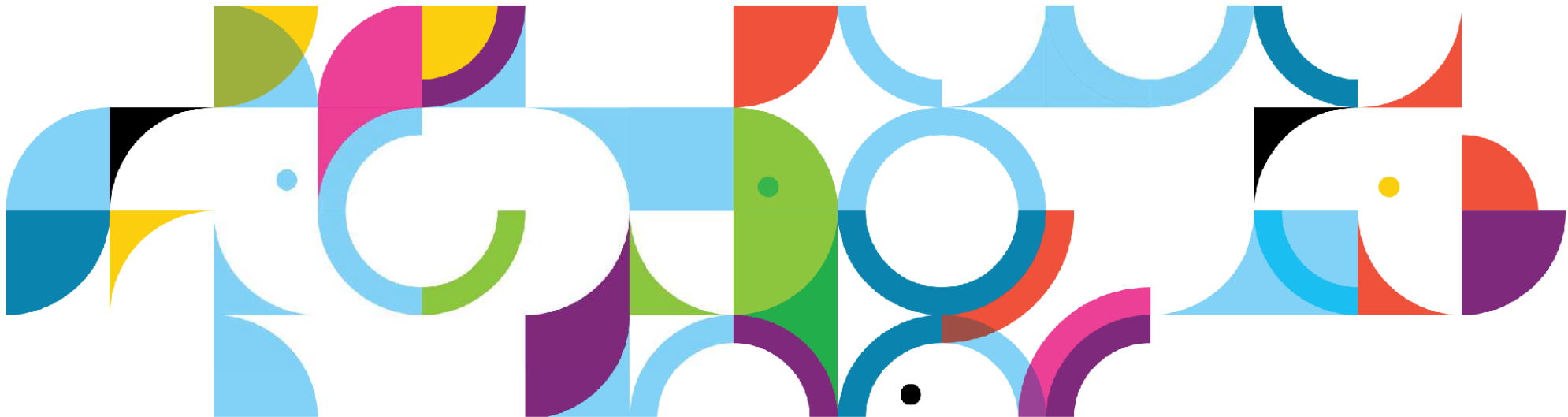


Entwicklercamp 2014 Track 2 Session 2

XPages und IBM Connections

Stefan Neth – IBM Deutschland GmbH



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Agenda

XPages and IBM SBT SDK

- What is the IBM SDK
- What you need to do to get started
- XPages Social stack
- XPages Social Enabler sample application

Trouble Ticket Application

- IBM Connections Integration – profiles, forums, communities
- Embedded Experience Integration

XPages and the SBT Playground

- Creating your 1st XPages social snippet
- Diving a little deeper on playground snippets

Q&A

IBM Social Business SDK

IBM Social Business Platform

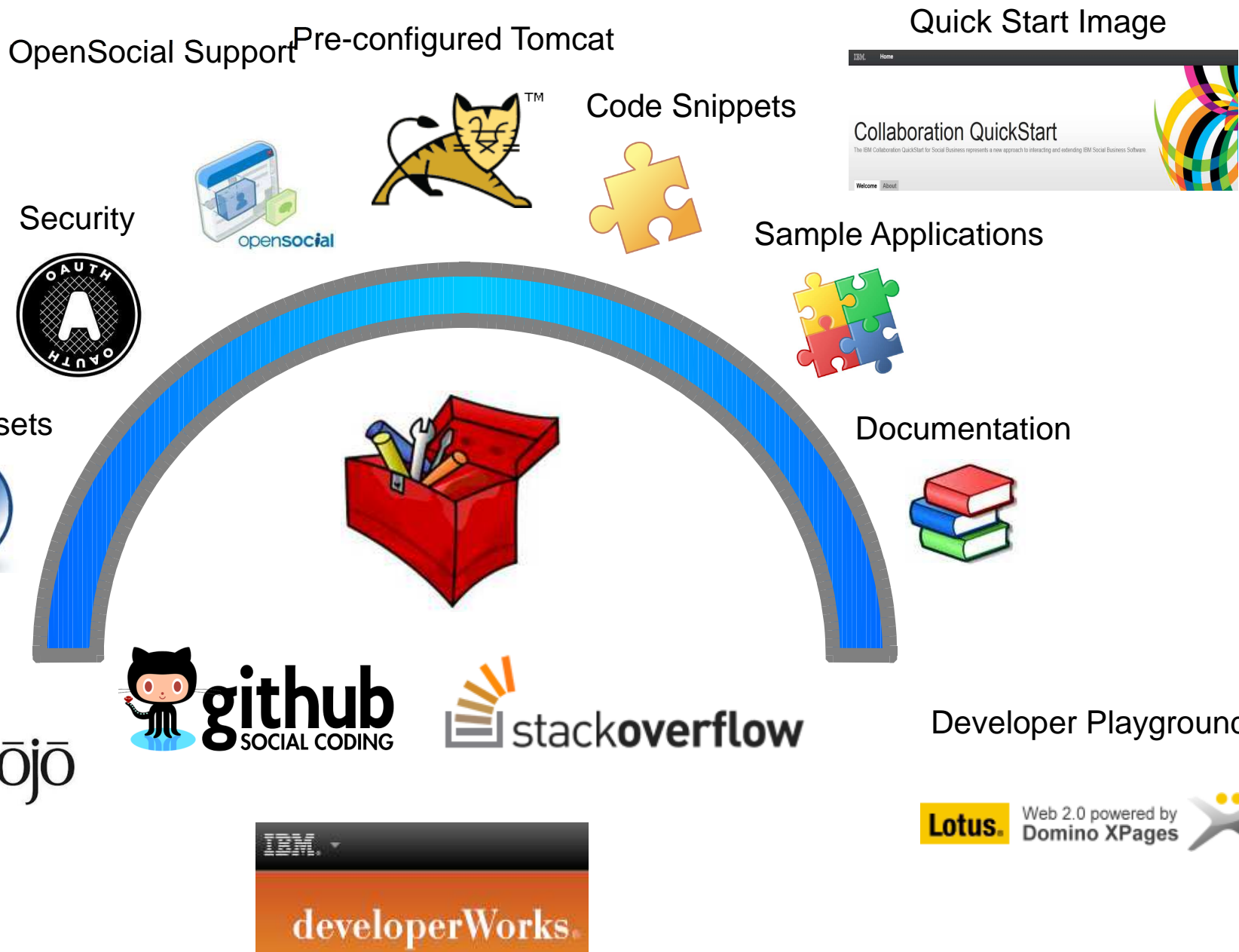
- Standards based support e.g. REST, OAuth, OpenSocial, ...
- Highly scalable and available deployment options
- High barrier to entry for application developers

Social Business SDK simplifies this

- Samples versus Documentation
- Configuration versus Coding
- Virtual Image versus Deployment

Social Business SDK an Open Source Project

- Transparent development
- Continuous releases
- External contributions



Getting started with XPages and IBM SBT SDK

What you need:


- Notes/Domino 9.0 or 9.0.1
 - <http://www.tinyurl.com/IBMDominoDesigner>
- IBM Social SDK
 - <http://ibmsbt.openntf.org/>

What you should have:

- Access to IBM Connections, e.g.
 - a greenhouse account on <https://greenhouse.lotus.com>
 - an IBM Collaboration QuickStart Image (free 60 day trial)
- Access to other Social platforms
 - Dropbox
 - Facebook
 - ... you name it !



Social Business Toolkit SDK - Release: Social Business Toolkit SDK - 20131218

Release Name	Social Business Toolkit SDK - 20131218	Released on	Dec 18, 2013
License	Apache License	Released by	Mark Wallace
Status	Released	Downloads	26
		Cleared 	Yes

Installation Information

Install the Domino SBT update site on Domino and Domino Designer

- <root>\redist\domino\com.ibm.sbt.domino.update.site.zip
- Use File > Application > Install menu in Domino Designer

Copy sample applications to Notes/Domino data folders

- sbtplayground.nsf
- XPagesSBT.nsf

Open and sign these applications in Designer or Administrator

Customize the end-points defined in your sample applications

Run the applications in a web browser or the Notes client

Users with older XPages SBT SDK:

- Ensure you have the latest XPagesSBT.nsf
- Uninstall old SBT SDK feature
- Verify your app's library dependencies

XPage Libraries

Select the libraries of extended XPage controls to use in this application.

Library ID	
<input type="checkbox"/>	com.ibm.xsp.sbtsdk.playground.library
<input checked="" type="checkbox"/>	com.ibm.xsp.extlib.library
<input type="checkbox"/>	com.ibm.xsp.extlib.bazaar.library
<input checked="" type="checkbox"/>	com.ibm.xsp.sbtsdk.library

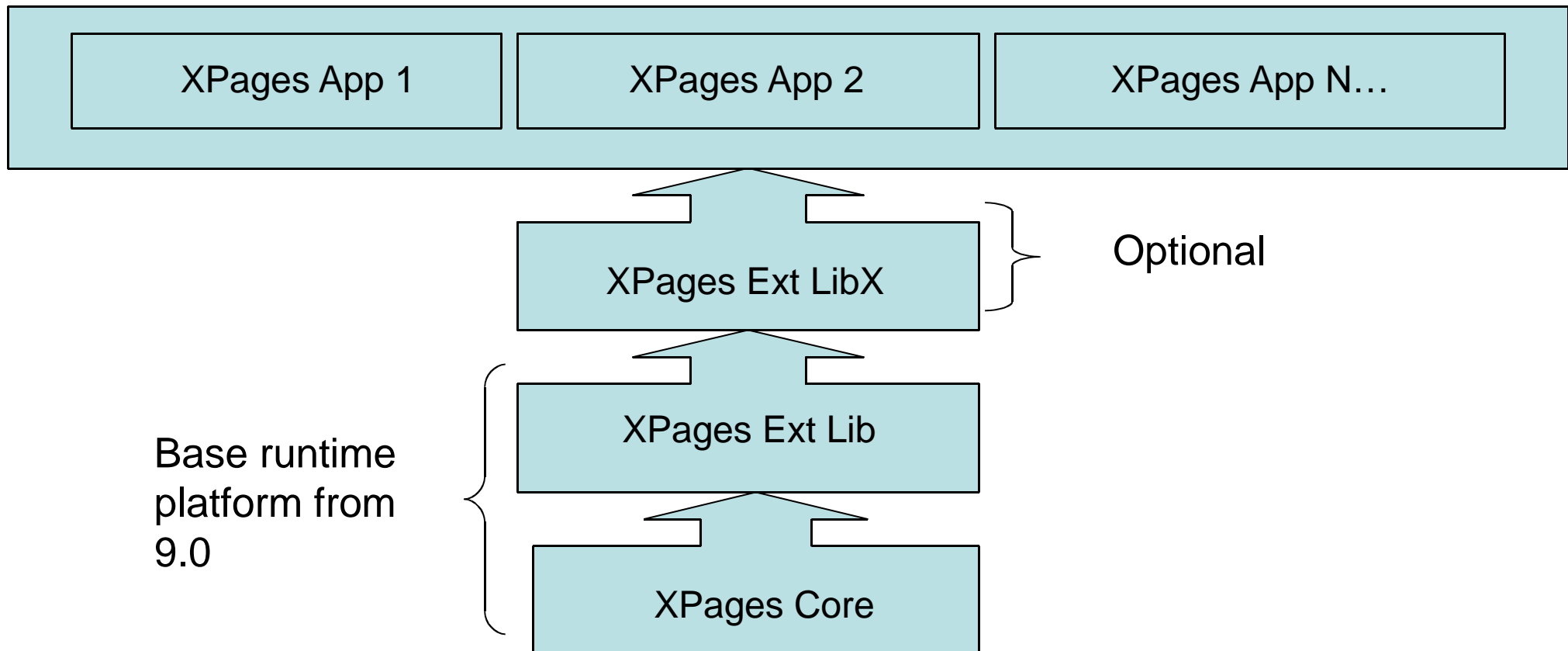
When running on the Web, the libraries must be available on the server. When running on the Notes client, the library plug-ins must be installed on the client.



The XPages Stack

Generic Overview of XPages Runtime Stack

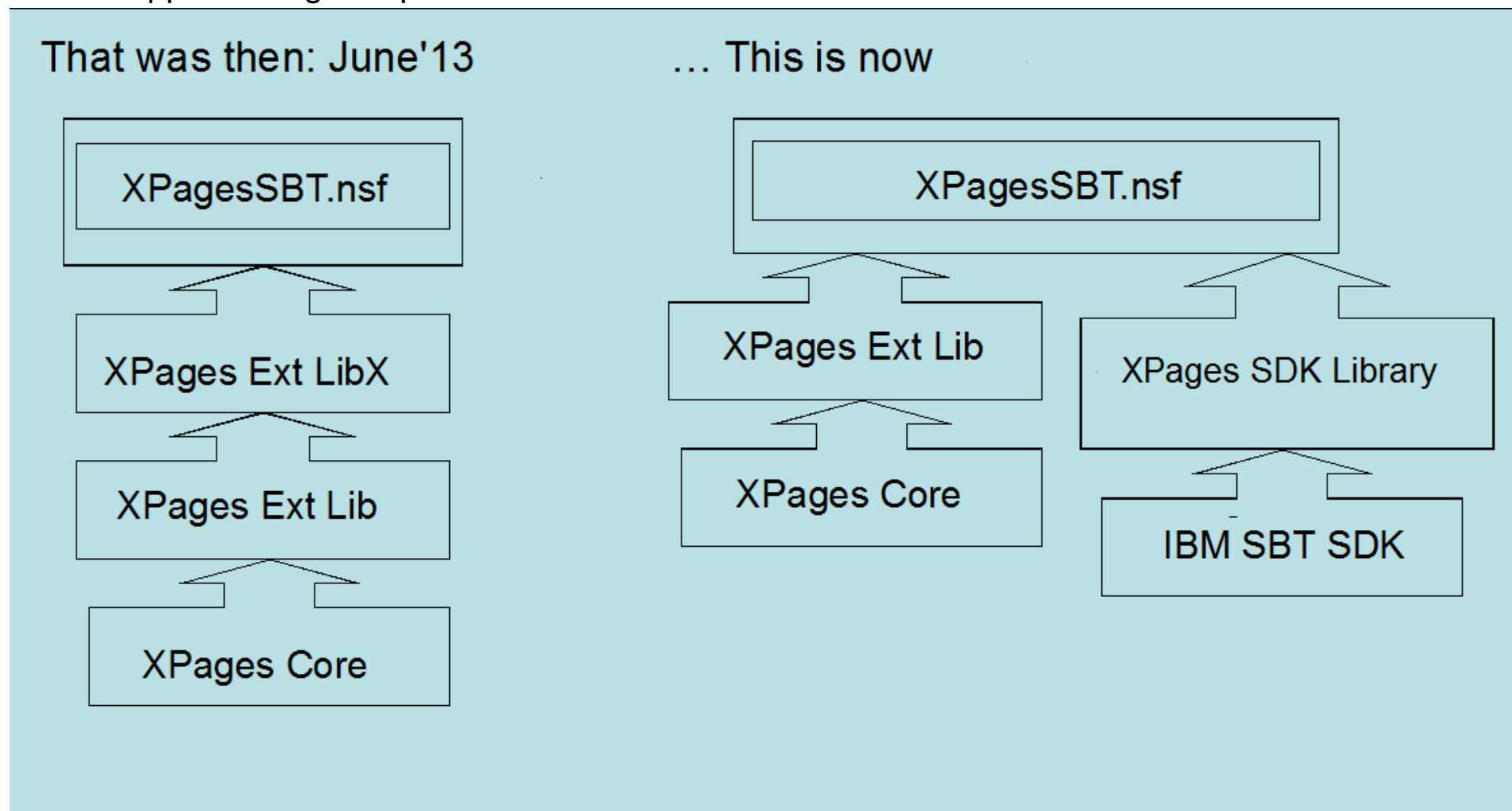
- XPages is an application framework with an extensible core



The XPages Social Stack

The XPages social stack has been refactored !

- Social apps no longer depend on ExtLibX but use the IBM SDK



XPages Social support in the SDK

New plugin name → `com.ibm.xsp.sbtsdk`

- Source code available on GitHub

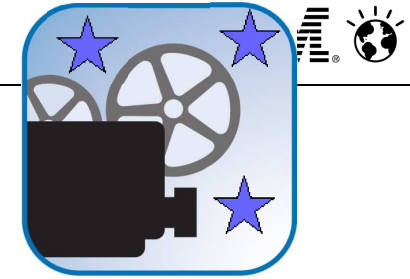
XPages layer provides Java assets

Data sources for REST services

XPages controls

High level custom controls

Ready to use sample code – XPages Snippets!

**Demo**

XPages Social Enabler Application

Demo

- See XPages social capabilities across a range of platforms
- Understand what resides where in the XPages social stack

The screenshot shows a web browser window displaying the XPages Social Enabler application. The browser's address bar shows the URL: `gouganebarra.cork.ie.ibm.com/XPagesSBT.nsf/ConnectionsCommunities.xsp`. The application's navigation bar includes links for Home, Extension Library, Social Enabler, XPages.info, Development Contest, IBM XPages Wiki, Anonymous, and Login. Below this, a secondary navigation bar lists various services: IBM Connections, IBM Sametime, IBM SmartCloud, Dropbox, Facebook, Twitter, Generic Services, and Utilities. The main content area is titled "XPages Social Enabler - Connections Communities, endpoint 'connections'". On the left, a sidebar menu contains links for Profiles, Communities (selected), Activities, Profiles VCard, Communities VCard, Files, and Activity Stream. The main content area has two tabs: "Communities View" (selected) and "As XML Text". Below the tabs, there are links for "Show Details" and "Hide Details", and a pagination control showing "Previous", "1", "2", "3", "4", "5", "6", "7", "8", and "Next". The content area displays a list of communities under the heading "Content":

- [Iniciativa Académica - IBM Venezuela](#)
- [BS4Retail](#)
- [IBM Connections Users](#)
- [Dining](#)
- [IRS Social Portal & Modernization](#)

Quick REST overview

Representational State Transfer

RESTful applications use HTTP

REST API's via HTTP request (PUT,POST,GET,DELETE)

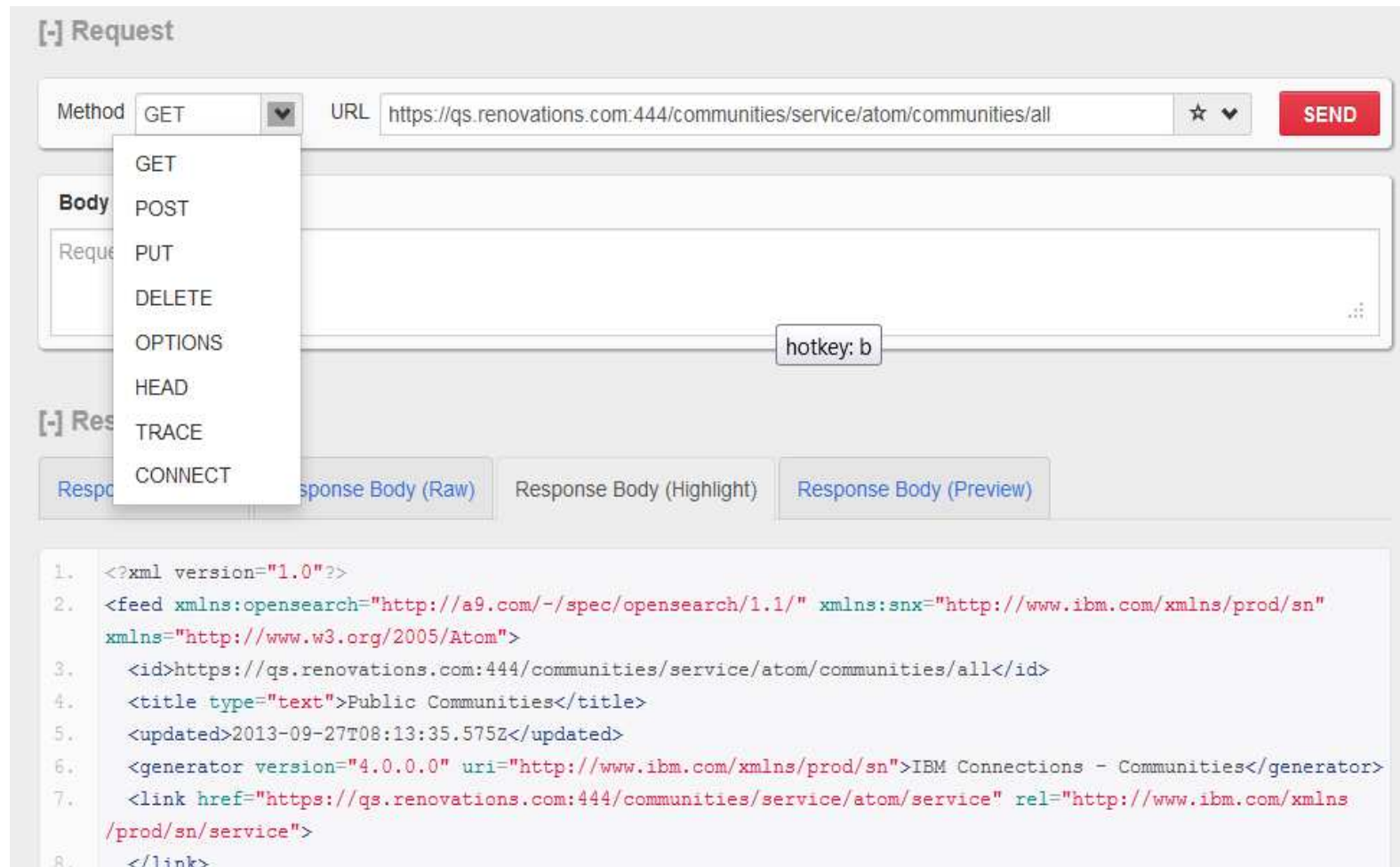
- post data (create and/or update)
- read data (make queries)
- delete data

REST API's give a response (200, 301, 404)

- Body data which is the information returned
- Headers describing type the content returned (XML, JSON...)

REST client for Firefox

REST Client in Firefox



Connections + REST

Connections REST API doc

<http://www-10.lotus.com/ldd/appdevwiki.nsf/xpDocViewer.xsp?lookupName=IBM+Connections+4.0+API+Documentation#action=openDocument&content=catcontent&ct=prodDoc>

Mechanisms to access the data

- Anonymous – only for limited GET requests
- Basic – User name and password
- OAuth – Using secret Key
- SSO – Using Lpta Token

API's to access to Activities,Activity Stream,Blogs, Profiles ...

Trouble Ticket Application

End to End Work Flow application

- Create, Assign, Update and Close Tickets

Enhancements

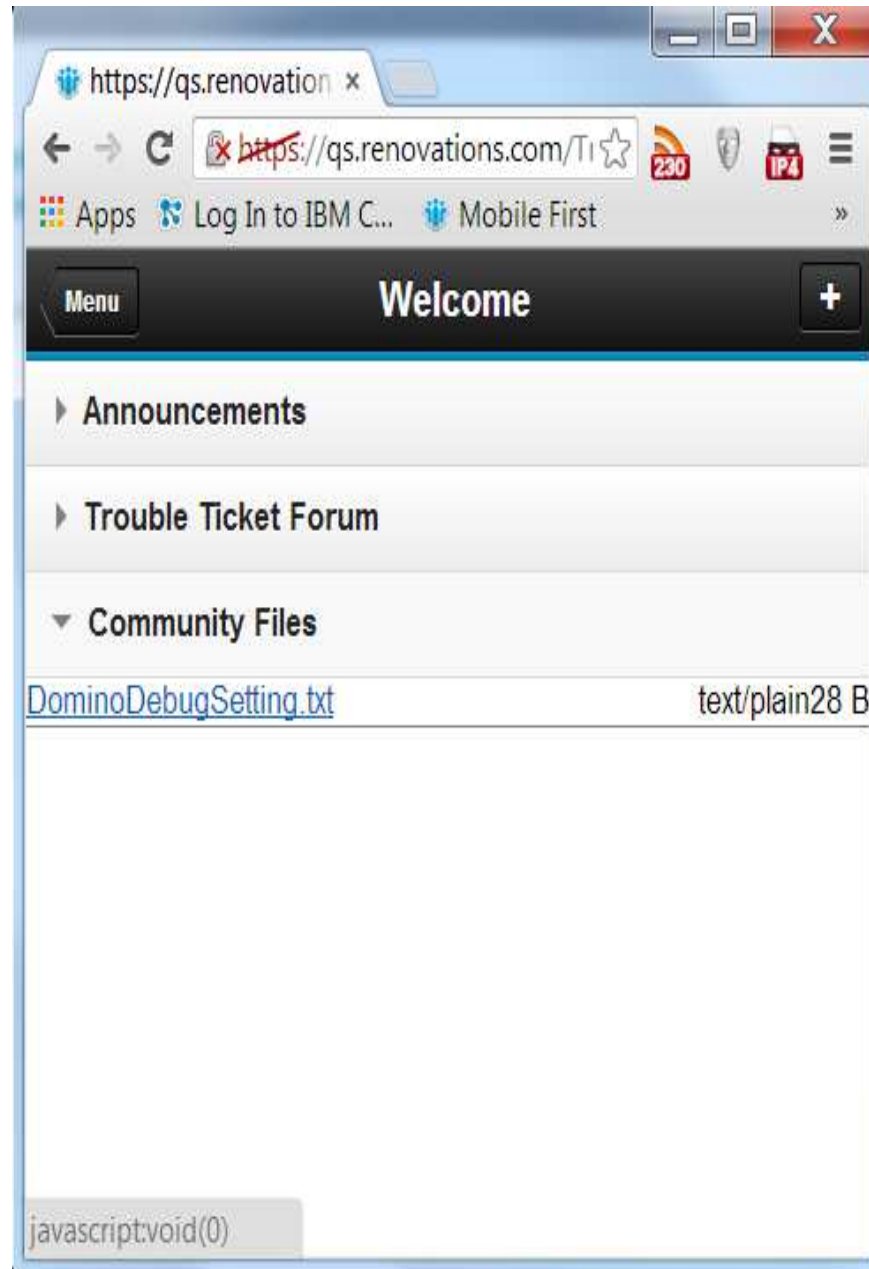
- Management Setup Page
 - Enable/Disable IBM Connections Integration
 - Simplified Endpoint configuration for authentication
- Mobile UI
- Forums, Profiles and Communities Integration
- Embedded Experience via sendMail Simple Action
- Trouble Ticket iWidget

Available to download on OpenNTF and source code available on GitHub

Trouble Ticket Application – Mobile + Social

Mobile UI


- Welcome Page
- Assigning Tickets
- Community Files



Trouble Ticket Application – Dashboard

Trouble Tickets

Welcome My Tickets Staff Manager

Search... 

Trouble Tickets Demo

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis tellus. Donec ante dolor, iaculis nec, gravida ac, cursus in, eros. Mauris vestibulum, felis et egestas ullamcorper, purus nibh vehicula sem, eu egestas antenisi non justo. Fusce tincidunt, lorem neque dapibus consectetur, leo orci mollis ipsum, eget suscipit eros purus in ante.

- Donec sapien ante, accumsan ut
- Maecenas a elit lacina urna posuere

[View My Tickets](#)[New Ticket](#)

Announcements

Summary	Date
List of XPages Sessions at Connect 2014	Dec 23, 2013
Whats new in the IBM XPages support in the SDK?	Dec 23, 2013

Domino
Data

Community Files

Filename	Filetype	Size
DominoDebugSetting.txt	text/plain	28 B

[Upload File](#)

Community Forum

Topic	Content
lost my badge	lost my badge
The printer is out of Ink	Printer has no black ink Frank
Upgrade my laptop network bios	network bios
Need help with my video card	Mobile card broke
Need some printer ink	Need Ink

IBM
Connections
Data

My Files


Filename	Filetype	Size
chinese.txt	text/plain	15 B
console.log	text/plain	36 KB

[Upload File](#)

Trouble Ticket Application – Management Setup Page

Management Setup Page

- Simplifies EndPoint Configuration via ConnectionsBean

 Renovations Inc

New TicketSetup

Trouble Tickets

WelcomeMy TicketsStaffManager

Connections Setup

Set the Connections URL, Community UID and Forum ID here.
ID format = XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX

Enable Connections Integration: ☒ ON ☐ OFF

Connections Login Type:

Connections URL:

Connections Community UID:

Community Forum ID:

Save and CloseCancel

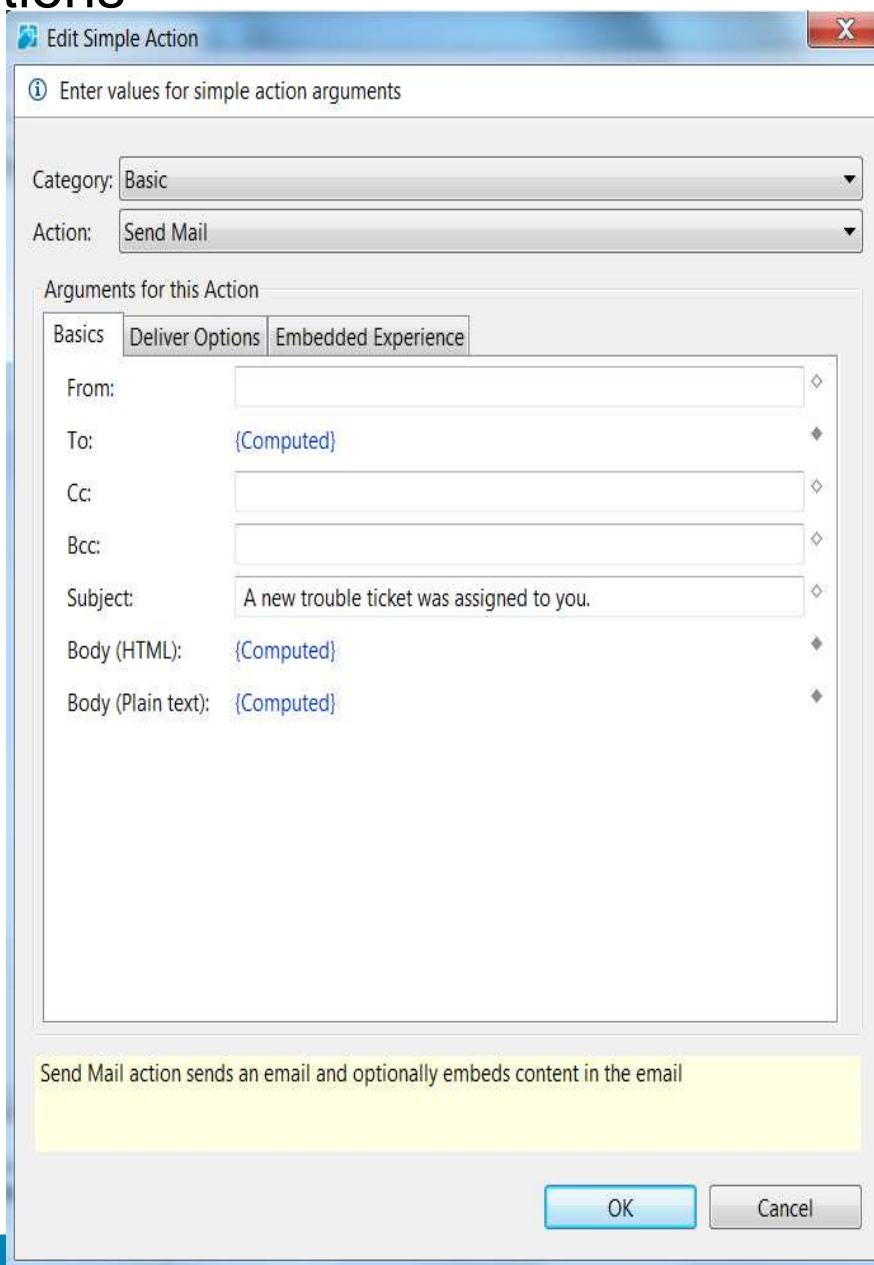
Trouble Ticket Application – ~~IBM Connections~~

Disable IBM Connections Integration

- Use Domino data sources
 - Or alternative data sources
- SendMail action for Embedded Experience in IBM Notes and iNotes

EE support for XPages

- URLs to web pages rendered in iFrames
- Context is passed via URL parameters
- SSO and basic authentication



The screenshot shows the 'Edit Simple Action' dialog box. At the top, it says 'Enter values for simple action arguments'. Below this, there are two dropdown menus: 'Category' set to 'Basic' and 'Action' set to 'Send Mail'. Under the 'Arguments for this Action' section, there are three tabs: 'Basics', 'Deliver Options', and 'Embedded Experience'. The 'Basics' tab is active, showing fields for 'From:', 'To:', 'Cc:', 'Bcc:', 'Subject:', 'Body (HTML):', and 'Body (Plain text):'. The 'To:' field contains '{Computed}', and the 'Subject:' field contains 'A new trouble ticket was assigned to you.' The 'Body (HTML):' and 'Body (Plain text):' fields also contain '{Computed}'. At the bottom of the dialog, there is a yellow box with the text 'Send Mail action sends an email and optionally embeds content in the email'. The 'OK' and 'Cancel' buttons are at the bottom right.

XPages Snippets in the Playground

60 + XPages Snippets and increasing!

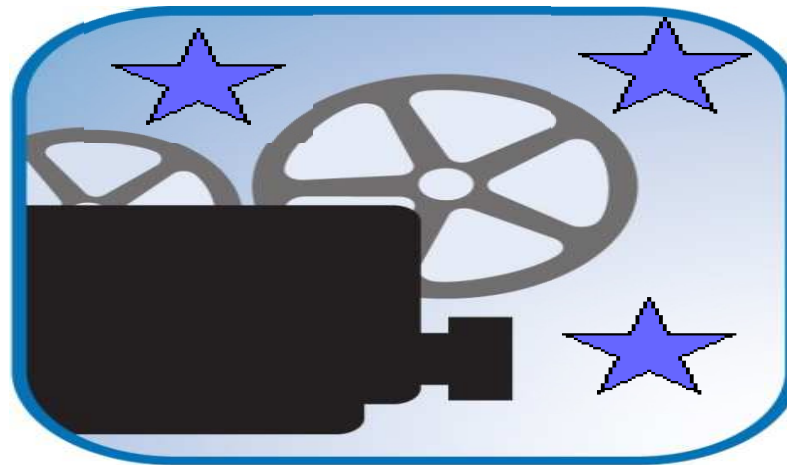
- Forums, Communities
- Activities, Blogs
- Profiles, Files

Extending examples to include IBM SmartCloud, Dropbox, Twitter etc

sbtplayground.nsf available to download as part of SDK release

XPages Snippets in the Playground

Demo



Demo

SDK controls in XPages

SBT Client control

- Embed any SDK control
- Call the SDK client side API's

```
<xe:sbtClient id="sbtClient1"></xe:sbtClient>
<div id="gridDiv"></div>
<xp:scriptBlock>
  <xp:this.value><![CDATA[//
try {

require(["sbt/dom", "sbt/connections/controls/communities/CommunityGrid"],
function(dom, CommunityGrid) {
  var grid = new CommunityGrid({
    type: "my"
  });

  dom.byId("gridDiv").appendChild(grid.domNode);
  grid.update();
});}
catch(e) {
  document.getElementById('gridDiv').innerHTML = 'Exception:'+e.toString();
}
]]></xp:this.value>
</xp:scriptBlock>
```

Session Summary

What You Learned:

- Calling SBT SDK APIs via JavaScript in XPages
- Calling SBT SDK APIs via Java in XPages
- Using XPages to bind to IBM Connections data via XPath
- Using XPages data sources to access IBM Connections data
- Integrating a IBM Domino application with the IBM Connections applications
- Embedding an SDK Control

```
<xe:dataView rows="10" id="dataView1"
  value="connectionsAtom1" columnTitles="true" var="entry"
  collapsibleDetail="true" detailsOnClient="true">
  <xe:this.data>
    <xe:connectionsData var="connections1"
      serviceUrl="/communities/service/atom/communities/all"
      maxBlockCount="3">
    </xe:connectionsData>
  </xe:this.data>
  <xe:this.summaryColumn>
    <xe:viewSummaryColumn columnTitle="Content"
      value="#{xpath:entry:title}">
    </xe:viewSummaryColumn>
  </xe:this.summaryColumn>
```

XPages
Connections
Data Source

Data Binding
Using XPath

Engage Online

SocialBiz User Group socialbizug.org

- Join the epicenter of Notes and Collaboration user groups

Follow us on Twitter

- [@IBMConnect](#) and [@IBMSocialBiz](#)

Engage Online

LinkedIn <http://bit.ly/SBComm>

- Participate in the IBM Social Business group on LinkedIn:

Facebook <https://www.facebook.com/IBMSocialBiz>

- Like IBM Social Business on Facebook

Social Business Insights blog ibm.com/blogs/socialbusiness

- Read and engage with our bloggers

Questions & Answers

Contact Information:

martin_donnelly@ie.ibm.com

padraic.edwards@ie.ibm.com



Thank You!

Your feedback is important!



Merci

ඔබගේ

Gracias

நன்றி

Danke 多谢 Buíochas

धन्यवाद

Grazie

Спасибо شكراً

Obrigado

감사합니다 多謝

Access Connect Online to complete your session surveys using any:

- Web or mobile browser
- Connect Online kiosk onsite

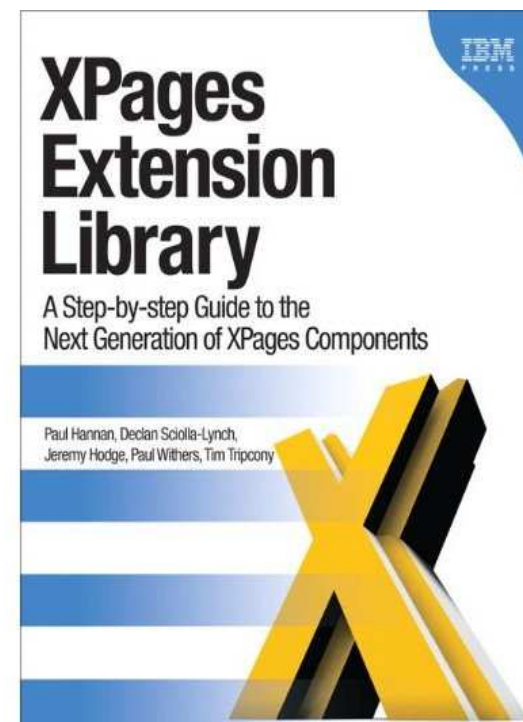
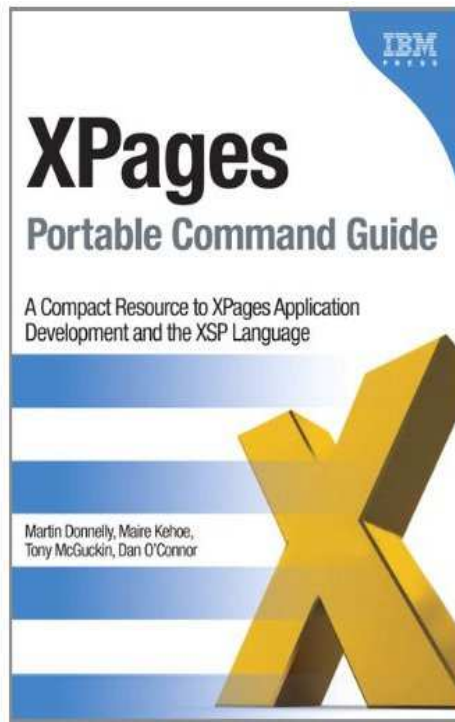
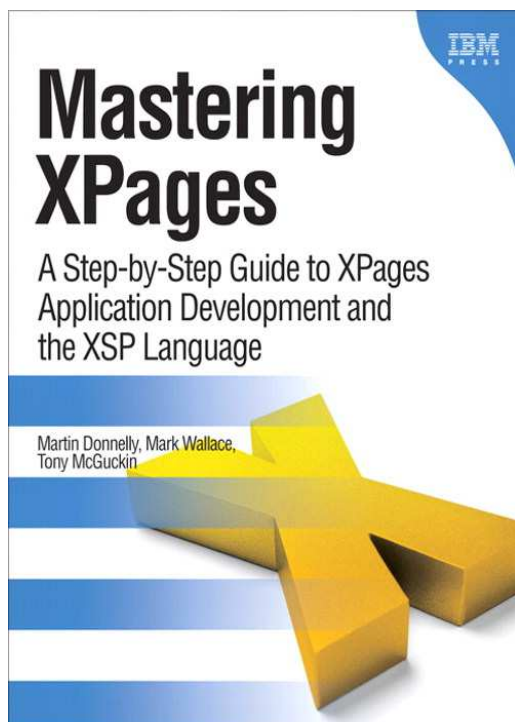
Session ID: AD308

Session Title: XPages in a Social World

Technical Education

IBM Press Books and eBooks

- Three major publications over the past two years
- All available for evaluation in the bookstore in the Solutions Expo



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XPages as an OAuth Consumer

What is OAuth?

- “An **open** protocol to allow **secure API authorization** in a **simple** and **standard** method from desktop and web applications.”
- It is used extensively by cloud services and social networking sites as the preferred means of authentication(e.g. Facebook, Dropbox,IBM SmartCloud etc..)

XPages Social Enabler and related back-end code acts as an 'OAuth consumer'

The Web Security Store is responsible for storing the OAuth key and secret

OAuth requests execute queries against the Web Security Store for the OAuth credentials and URLs.



OAuth Flow

