

Wie mache ich meine XPages Applikationen 'social'?

Philippe Riand, IBM
Niklas Heidloff, IBM



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Agenda

- Social Business
- Social Enabler for XPages
- Under the Hood
- Sample Application XSnippets
- Open Source Applications
- Q & A

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Web 3.0: The Social Wave

- Social is no longer delivered by just stand-alone applications but is moving to the core of your business processes for “Social in Context”
 - CRM, Supply chain management, HCM, Manufacturing...
 - Or consumer applications, like mobile ones with tagging, rating...
- Social capabilities transform the whole experience by:
 - **Enabling interactions** through online social networks
 - Rich user profiles and social methods to collaborate, share, and reuse content
 - **Enhancing situational awareness** by analyzing social data
 - Consumer insight, expertise location, recommendations
 - **Supporting contextual collaboration** by integrating social capabilities into business applications
 - Communities, micro-blogging and content sharing, unified communications

Paths for Integrating 'Social' into your Applications

- Level 1: **Integrate** social services into existing web applications
 - Call REST services from your existing applications to add social capabilities within your business processes
- Level 2: **Embed** social capabilities in existing applications
 - Gadgets bring social capabilities to existing dashboards, without wholesale rip and replace of the application
 - Embedded experience rendered inside containers
- Level 3: **Extract** Socially Relevant Information, analyzing.
 - Gathering application data (Likes button, ActivityStreams, StatusUpdate...) on any existing platform creates “Social data” enabling analytics.
- Level 4: **Deploy** Social application components across platforms
 - The container is the new “center of gravity” for the user
 - Host for third party applications – new outlet for promoting application content, access to the container social data (social graph...)
 - The applications become visible and consumable via an application market

Which Social Services Are We Talking About?

- IBM Social Platform
 - IBM Connections
 - Social software for business that lets you access everyone in your professional network, including your colleagues, customers, and partners
 - IBM Lotus® Domino®
 - Domino data, Social mail (Calendar...)
 - IBM Sametime®
 - Integrated real-time communications services - voice, data and video
 - LotusLive™ – IBM SmartCloud™
 - LotusLive offers award-winning, online collaboration tools, e-mail and social networking services that work together
- External social networks
 - Facebook™, Twitter™, LinkedIn™
 - Well, you name them...

Integrate the capabilities from all these sources inside your applications

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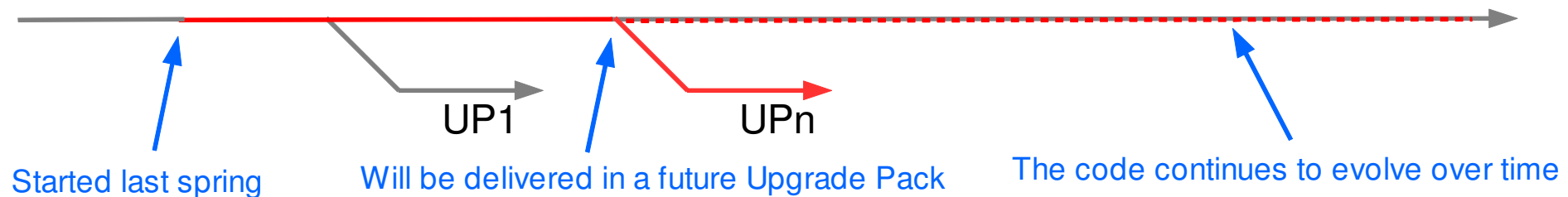
Social Enabler for XPages

- Your entry point for adding Social Capabilities to your Domino applications
- Social features are delivered as open source on openNTF, as part of the Extension Library
- The plan is to deliver some of these social features in a future revision of IBM Lotus Notes®/Domino® product

Get it now: <http://extlib.openntf.org/>

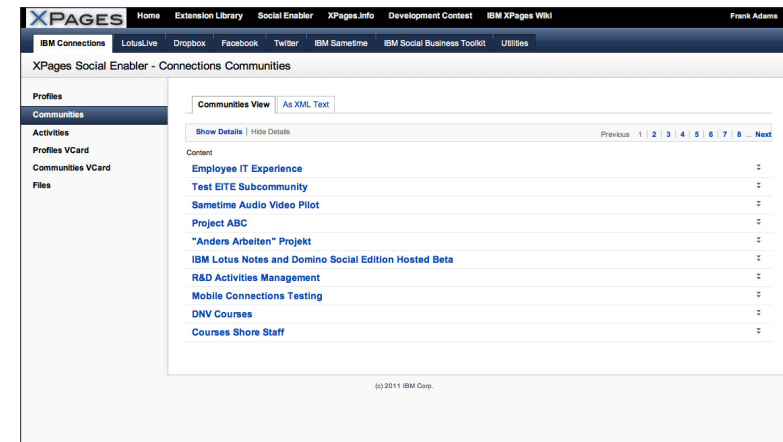


Continuous development released as open source



XPages Social Enabler Content

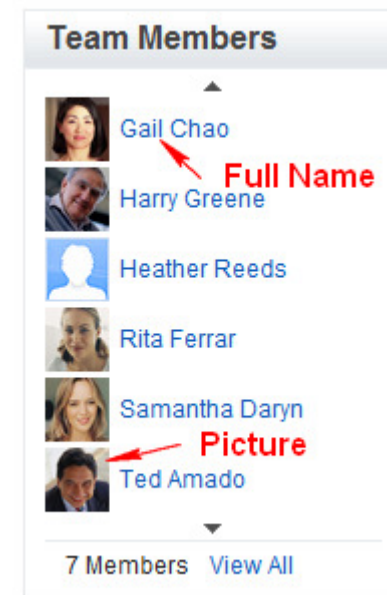
- Designed to make access to Social features as simple as possible
- Core layer providing the assets for building Social Applications
 - Built as new Java™ assets, part of the extension library
 - New data sources for REST services
 - Content type renderer renderers
 - New XPages controls and Dojo wrappers
 - Core services (proxy server, credential store...)
- Set of high level custom controls
 - Built on top of the core layer
 - Easily customizable from the Designer UI
- Includes ready to use sample code
 - Demo database showing all the features in action



Don't try to reinvent the wheel – It is designed to be secure with high performance

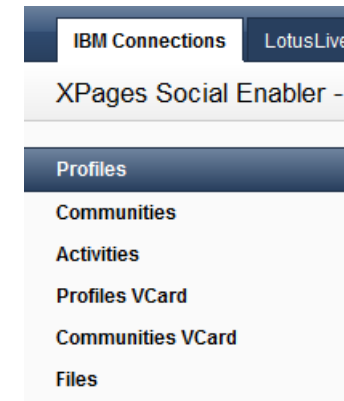
Accessing User Data (XPages Social API)

- This provides a way to get user related information, without having to actually know the source of data
 - Ex: Accessing the picture (thumbnail url) of a user
 - Used by many predefined controls, like the `userTreeNode`
- Surfaced using two predefined managed beans
 - `userBean`: gives access to the current user data
 - `peopleBean`: gives access to any user data, using the user id
- Data is accessed by simply referring to a property of the bean
 - `userBean.thumbnailUrl`
 - `peopleBean.getPerson('xxx').thumbnailUrl`
- Multiple sources can be used to find the data
 - The first non null value is actually returned
 - Highly customizable



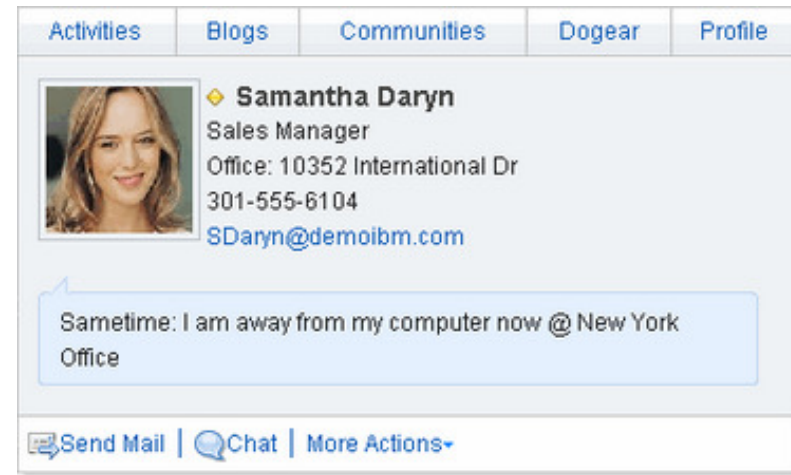
Accessing IBM Connections Services

- All the IBM Connections services are Atom based REST services
- The Extension Library provides a new data source for accessing the services
 - Used to access all the services
 - Communities, Profiles, Activities...
 - The data is read-only. Updates should be achieved by directly calling the REST API (helpers are provided)
 - Supports the rendering with a view panel, including paging, caching...
- As Atom is XML, binding is done through a new XPath binding language
 - `#{xpath:entry:title}`
 - Domino Designer does not yet understand it, but this is being planned to be fixed :-)
- Also used to connect to the LotusLive services (Activities, Communities and Files)



Integrating the IBM Connections UI Widgets

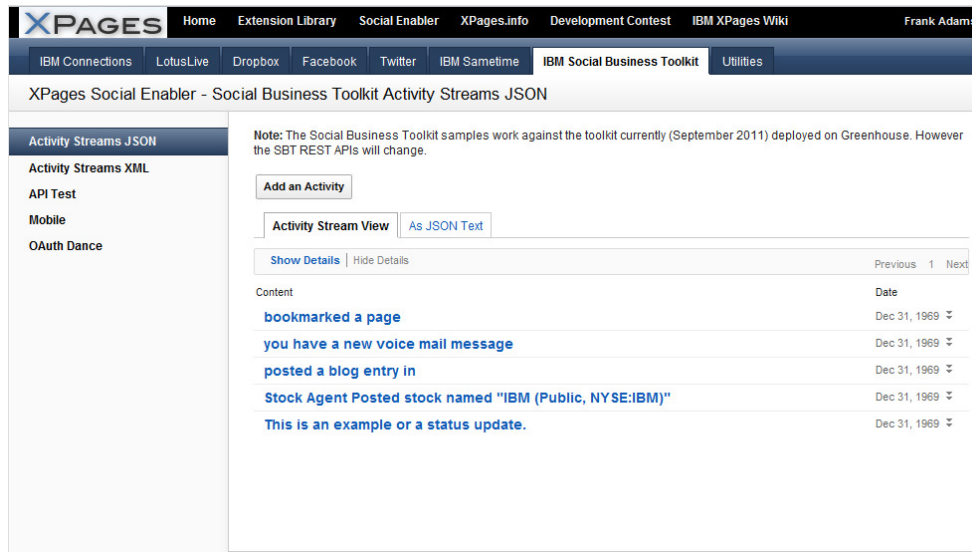
- IBM Connections provides two types of business card
 - Profiles business card
 - Communities business card
- These business cards require some client side JS library to be included in the HTML page
 - This is achieved through a new ConnectionsClient control
- Profile business cards can be displayed where XPages displays text (computed field or View column)
 - Set the contentType of the control to `xs:vc.vcard`
- Or use the new ConnectionsWidget control to display either one



CAUTION: There is an issue in Connections 3.0.1 and you need a fix pack to get this working

Contributing and Consuming the ActivityStreams

- ActivityStreams, a format for syndicating social activities
 - Based on a standard adopted by many vendors: <http://activitystrea.ms/>
 - Also part of the OpenSocial specifications: <http://docs.opensocial.org>
- ActivityStreams spec supports both ATOM and JSON based services
 - The Extension Library supports both, although JSON is simpler to use
 - A new data source is provided, similar to the Connections one
 - Supports the same read-only capability
 - Updates are achieved by calling the REST APIs, with the provided helpers



The screenshot shows the XPages Social Enabler - Social Business Toolkit Activity Streams JSON interface. The top navigation bar includes links for Home, Extension Library, Social Enabler, XPages.info, Development Contest, IBM XPages Wiki, and Frank Adams. Below this, a secondary navigation bar lists various tools: IBM Connections, LotusLive, Dropbox, Facebook, Twitter, IBM Sametime, IBM Social Business Toolkit (selected), and Utilities. The main content area is titled "XPages Social Enabler - Social Business Toolkit Activity Streams JSON". On the left, a sidebar menu lists "Activity Streams JSON" (selected), Activity Streams XML, API Test, Mobile, and OAuth Dance. The main content area contains a note about the toolkit's current state (September 2011) and a table of activity streams. The table has columns for Content and Date. The content column lists activities such as "bookmarked a page", "you have a new voice mail message", "posted a blog entry in", "Stock Agent Posted stock named 'IBM (Public, NYSE:IBM)'", and "This is an example or a status update.". The date column shows "Dec 31, 1969" for all entries. There are also buttons for "Add an Activity", "Activity Stream View", "As JSON Text", "Show Details", and "Hide Details".

Note: The Social Business Toolkit samples work against the toolkit currently (September 2011) deployed on Greenhouse. However the SBT REST APIs will change.

[Add an Activity](#)

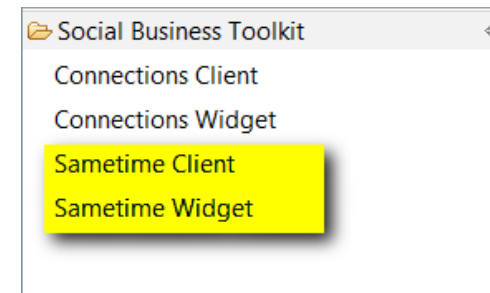
[Activity Stream View](#) [As JSON Text](#)

[Show Details](#) [Hide Details](#) [Previous](#) [1](#) [Next](#)

Content	Date
bookmarked a page	Dec 31, 1969 ▾
you have a new voice mail message	Dec 31, 1969 ▾
posted a blog entry in	Dec 31, 1969 ▾
Stock Agent Posted stock named "IBM (Public, NYSE:IBM)"	Dec 31, 1969 ▾
This is an example or a status update.	Dec 31, 1969 ▾

Connecting to Sametime

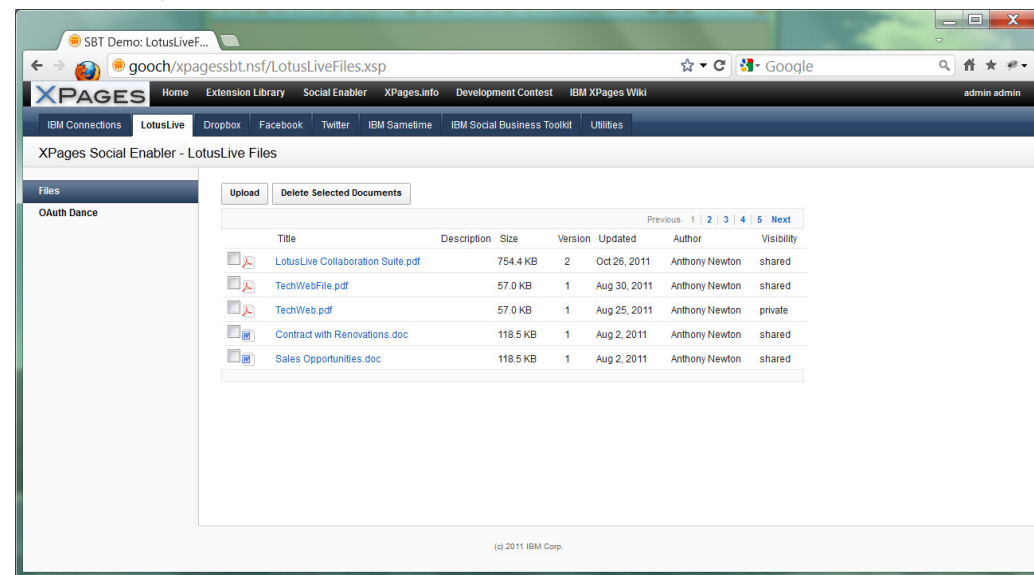
- Controls provided out of the box to provide Sametime awareness
- Sametime Client control makes an XPage “Sametime aware”
 - ST capabilities require some JS to be added to the HTML page, this is done automatically by the control
 - Allows users to log into Sametime from an XPage



- Sametime “Live Names” can be displayed any where XPages displays text (computed field or View column)
 - Set the contentType of the control to “xs:st.livename”

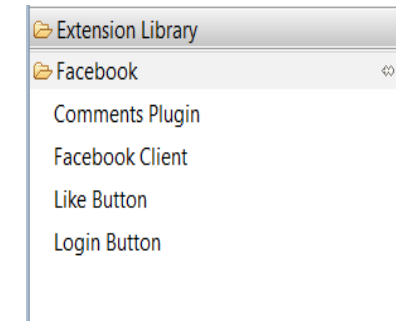
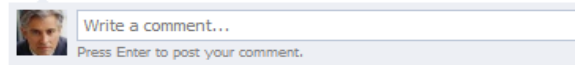
Sharing Files

- One simple data source for different file sharing providers
 - Currently supports Connections, LotusLive and Dropbox
 - Fully extensible to other providers
 - REST APIs are used to retrieve meta-data about user's files
 - File information is encapsulated in View Panel Row Data objects
 - Supports View Panel Paging
 - Supports Simple Actions
-
- Provides a list of files with URLs to automatically download them
i.e. built in proxy support
 - Customizable per file service to provide custom parameters on a per service basis
 - e.g. ability to dynamically retrieve 'subscriber id' for LotusLive Files



Consuming Social Networks

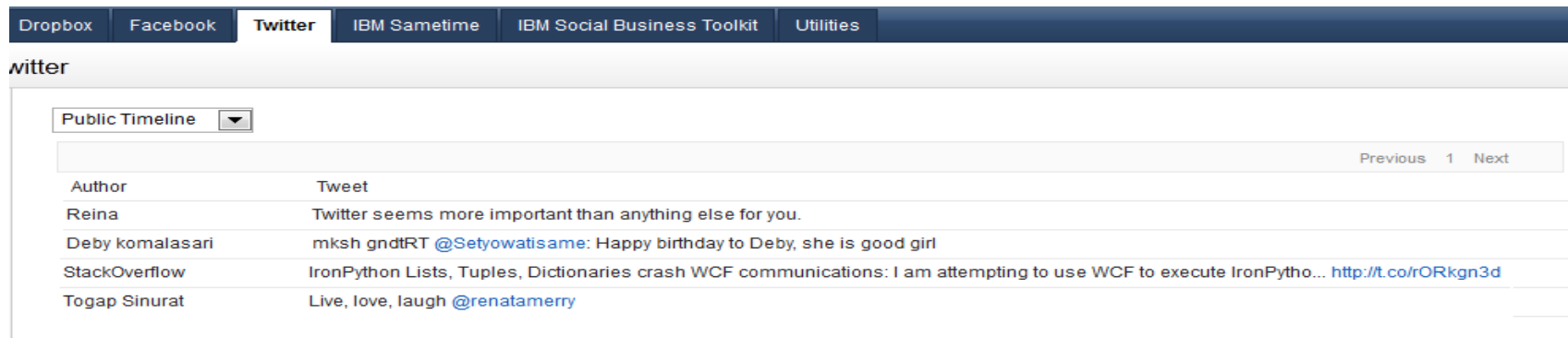
- Simple Data Sources built in to allow access to various social networks:
 - Facebook
 - Twitter
- XPages controls which allow the addition of 'Social Features' to your XPages:
 - Facebook Login
 - Facebook 'Like' button control
 - Facebook 'Comment' control
 - Twitter Content Type allows Twitter hashes and usernames render as links



Tweet

RT @jon.thar.vitt: How will the next generation of leaders shape business? <http://t.co/cDiXXPIT>

- Consistent setup across social networks and other services
- Can easily be adapted to any 'social network' that provides REST APIs



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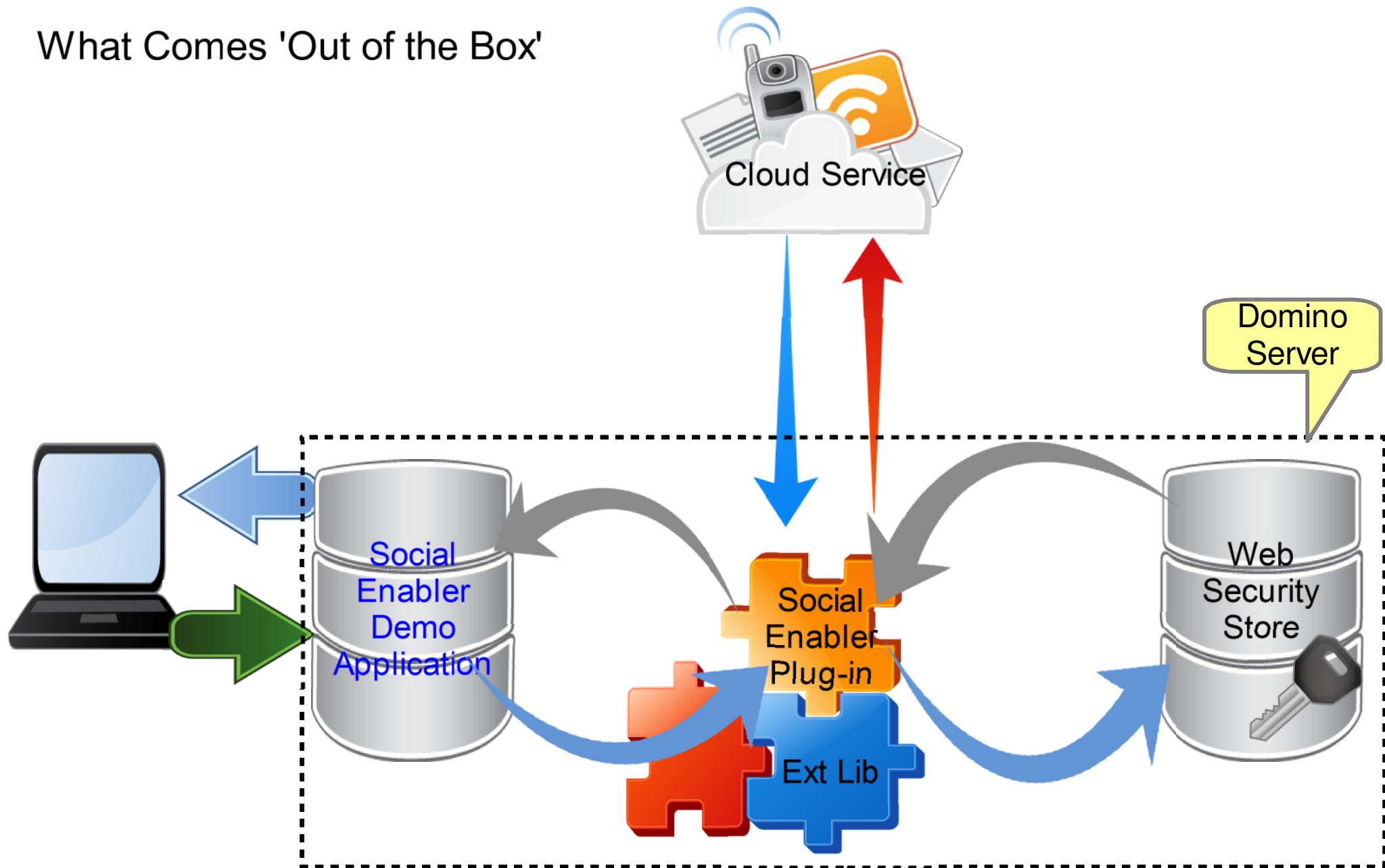
What Comes 'Out of the Box'

- XPages Social Enabler comprises of three primary components:
 - Social Enabler runtime plug-in
 - Web Security Store application
 - XPages Social Enabler demo application
- Social Enabler plug-in:
 - REST data source definitions
 - Social network data source definitions (e.g. Facebook, Twitter etc)
 - Social controls (e.g. Facebook 'Like' control etc)
 - APIs and infrastructure for sending authenticated requests to REST APIs
 - Utility classes
- Web Security Store:
 - Container for OAuth key, OAuth secret and OAuth URL info, and user credentials
 - **'Do NOT try this at home'**, it is 'easy' to create a token store, creating a secure one is not trivial
 - Use the pre-packaged token store (WebSecurityStore.nsf)
- XPages Social Enabler demo application contains sample Custom Controls capable of connecting to various social and online services using the Social Enabler plug-in
- **Application developers can add social capabilities to their own applications by using the Social Enabler plug-in and Web Security Store.**



**Ships as part of
Extension Library**

What Comes 'Out of the Box'



Endpoints

- XPages Social Enabler plug-in provides a mechanism for encapsulating a service into what is called an 'Endpoint'
- Each Endpoint has different configuration parameters
 - The type of endpoint used determines the type of authentication to be used
 - OAuth Endpoints require a service name, appld, token store, etc.
 - LotusLive Files, Dropbox, Twitter, Facebook
 - Basic Authentication Endpoints require a login page, etc.
 - Connections
- Multiple pre-canned Endpoints are provided by default:
 - Connections Endpoint
 - LotusLive Endpoint
 - Sametime Endpoint
 - Facebook Endpoint
 - Twitter Endpoint
 - Dropbox Endpoint
 - etc.....

Defining Endpoints

- An Endpoint is a managed bean with an XPages application.
- Endpoints are defined via faces-config within an application

```
<managed-bean>
  <managed-bean-name>lotuslive</managed-bean-name>
  <managed-bean-class>com.ibm.xsp.extlib.sbt.services.client.endpoints.LotusLiveFilesEndpoint</managed-bean-class>
  <managed-bean-scope>application</managed-bean-scope>
  <managed-property>
    <property-name>url</property-name> <!-- Specifies the url to the service -->
    <value>https://apps.lotuslive.com</value>
  </managed-property>
  <managed-property>
    <property-name>serviceName</property-name> <!-- Specifies the serviceName as defined in Web
Security Store -->
    <value>LotusLive</value>
  </managed-property>
  <managed-property>
    <property-name>appld</property-name> <!-- Specifies the application id as defined in Web Security
Store -->
    <value>XPagesSBT</value>
  </managed-property>
  <managed-property>
    <property-name>tokenStore</property-name> <!-- Specifies where the Web Security Store is located -->
    <value>NSFStore</value> <!-- In this case another bean defines the location of the security store -->
  </managed-property>
</managed-bean>
```

- Endpoints may also be defined within an extension library, or may be externalized entirely into an 'endpoint store'

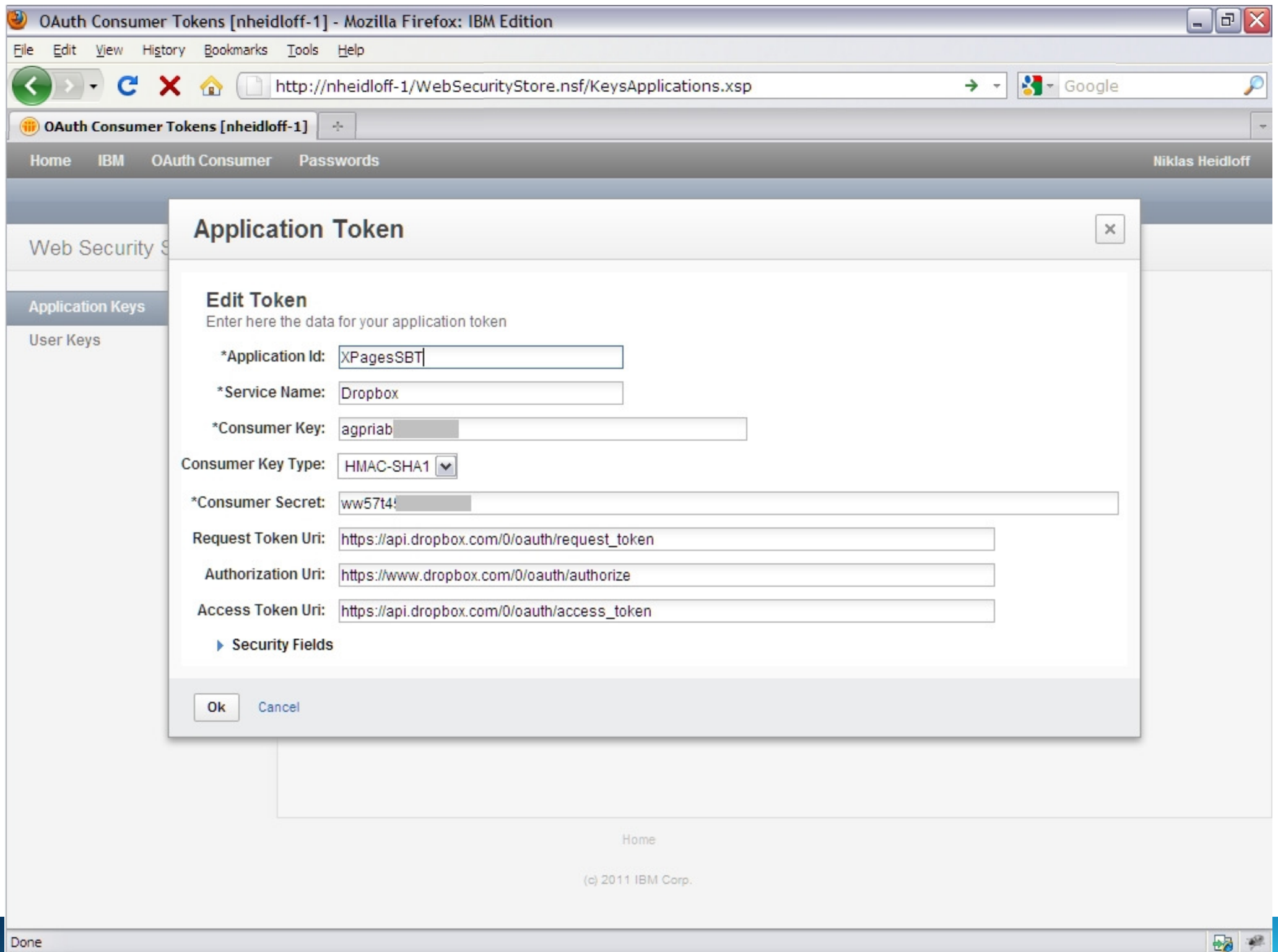
Managing Authentication

- The Social Enabler plug-in supports different types of authentication:
 - OAuth
 - Facebook authentication
 - Basic authentication
 - Anonymous authentication
 - *Extensible for the addition of further authentication techniques (SAML, LTPA etc)*
- The method of authentication is configurable at the Endpoint level (managed bean level)
 - Can be done by the administrator on a per application basis within the faces-config of an application
- A sample login page is provided with the XPages Social Enabler application for basic authentication
- OAuth is configured via the Web Security Store application

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, Twitter, LotusLive, LinkedIn etc..)
- XPages Social Enabler and related back-end code acts as an 'OAuth consumer'
- The Web Security Store application is responsible for storing the OAuth key and secret
- OAuth requests execute queries against the Web Security Store for the OAuth credentials and URLs.

Demo – Dropbox Data Source





```
<managed-bean>
  <managed-bean-name>NSFStore</managed-bean-name>
  <managed-bean-class>com.ibm.xsp.extlib.sbt.security.oauth_10a.store.OAuthNSFTokenStore</managed-bean-class>
  <managed-bean-scope>application</managed-bean-scope>
  <managed-property>
    <property-name>database</property-name>
    <value>WebSecurityStore.nsf</value>
  </managed-property>
</managed-bean>

<managed-bean>
  <managed-bean-name>dropbox</managed-bean-name>
  <managed-bean-class>com.ibm.xsp.extlib.sbt.services.client.endpoints.DropboxEndpoint</managed-bean-class>
  <managed-bean-scope>application</managed-bean-scope>
  <managed-property>
    <property-name>url</property-name>
    <value>https://api.dropbox.com</value>
  </managed-property>
  <managed-property>
    <property-name>serviceName</property-name>
    <value>Dropbox</value>
  </managed-property>
  <managed-property>
    <property-name>appId</property-name>
    <value>XPagesSBT</value>
  </managed-property>
  <managed-property>
    <property-name>tokenStore</property-name>
    <value>NSFStore</value>
  </managed-property>
</managed-bean>
```

sbtFilesDropbox - Custom Control - IBM Lotus Domino Designer

File Edit Source Create Design Navigate Tools Search Project Mobile Documents Window Help

XSnpippetsTemp.nsf - Forms x *addToSBT - XPage x *ProfileUtil.java x *faces-config.xml x *sbtFilesDropbox - Custom Control x

```
<?xml version="1.0" encoding="UTF-8"?>
<xp:view xmlns:xp="http://www.ibm.com/xsp/core" xmlns:xe="http://www.ibm.com/xsp/coreex">

  <xp:this.beforePageLoad>
    <![CDATA[#{javascript:
if(!@Endpoint("dropbox").isAuthenticated()){
  @Endpoint("dropbox").authenticate(true);
}
}]]>
  </xp:this.beforePageLoad>

  <xp:this.data>
    <xe:fileServiceData var="fileServiceData1">
      <xe:this.serviceType>
        <xe:dropboxFileData></xe:dropboxFileData>
      </xe:this.serviceType>
    </xe:fileServiceData>
  </xp:this.data>

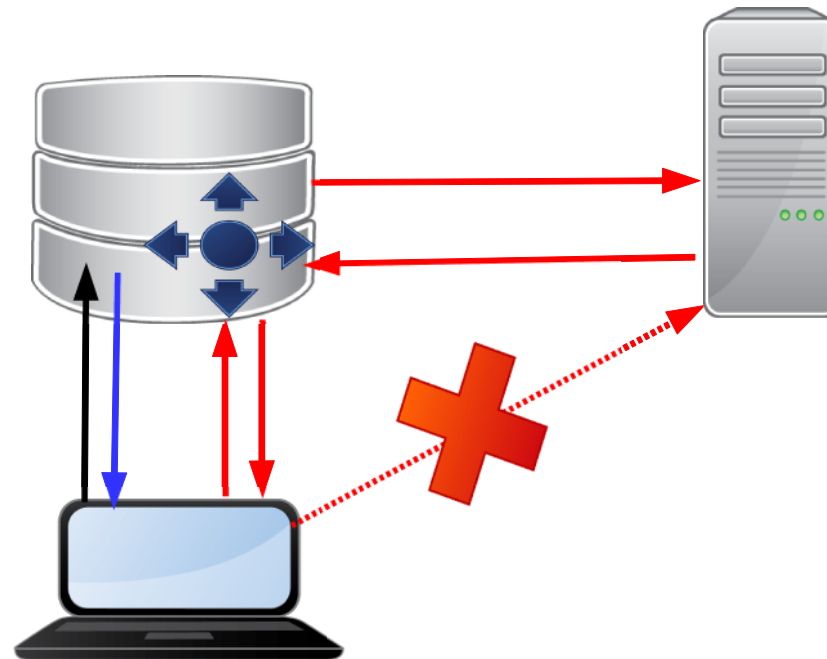
  <xp:viewPanel rows="200" id="viewPanel1" var="entry"
    value="#{fileServiceData1}" partialRefresh="true">
    <xp:this.facets>
      <xp:table xp:key="headerPager" style="width:100%">
        <xp:tr>
          <xp:td>
            <xe:breadCrumbs id="breadCrumbs2" style="margin:0px !important;">
              <xe:this.treeNodes>
                <xe:beanTreeNode
                  nodeBean="com.ibm.xsp.extlib.sbt.files.FilesBreadCrumbNode">
                </xe:beanTreeNode>
              </xe:this.treeNodes>
              <xp:eventHandler event="onItemClick" submit="true"
                refreshMode="complete">
                <xe:this.action><![CDATA[#{javascript:var path = context.getSubmittedValue();
```

Design Source

Office 40 : 58 Smart Insert Writable

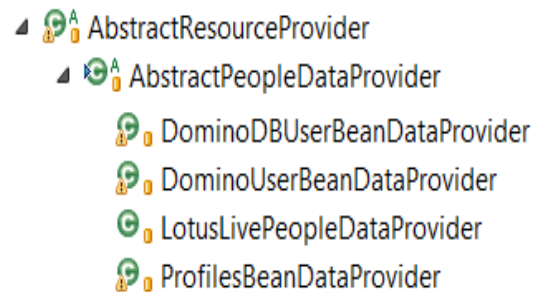
Proxy Server

- Extension Library has a highly secure proxy service built-in
- Servlets are instantiated within the hosting application and will (by default) only serve requests to the application
- Solves typical 'Cross Domain' request issue
 - In cases such as file download for Files data source a built-in FileHandler proxy is used



Extension Library Social APIs

- Provides extension points that allow services to provide user related data
- Contributed providers are turned **off** by default
 - EXCEPT those defined within the Application (nsf), and Domino* Providers
- Providers are enabled via the `extlib.people.provider xsp.properties` property
 - `extlib.people.provider=profiles;lotuslive`
- Providers are queried in the order they are encountered in `xsp.properties`
- Four pre-canned providers are supplied 'out of the box':
 - DominoDBUserBeanDataProvider – Provides ACL info for the current database
 - DominoUserBeanDataProvider – Provides 'Domino' user info related to the current user
 - LotusLivePeopleDataProvide – Provides the subscription ID for the current LL user
 - ProfilesBeanDataProvider – Provides Connections user info, such as email, role, title etc



Utility Classes

- @Functions:

- @Endpoint(name)

- returns the Endpoint object with the given name

```
if(!@Endpoint("twitter").isAuthenticated()) {  
    @Endpoint("twitter").authenticate(true);  
}
```

- @IdentityFromId(target, id)

- returns the user identity for a target (service) and Domino id

- @IdFromIdentity(target, identity)

- returns the Domino Id based on a target (service) and the user's identity within the target

Utility Classes

- Client service helper classes are provided for each contributed service
 - sbt.ActivityStreamsService
 - sbt.ConnectionsService
 - sbt.DropboxService
 - sbt.GenericService
 - sbt.LotusLiveService
 - sbt.TwitterService
- Service classes allow developers to easily invoke REST API calls from within Server Side JS code

```
if(!@Endpoint('twitter').getOAuthProvider().acquireToken())  
{ viewScope.text = "Please, acquire a token before calling the service";  
  return;  
}  
var svc = new sbt.TwitterService(@Endpoint('twitter'), "manage/oauth/getUserIdentity");  
var msg = svc.get(null, "text");  
viewScope.text = msg;
```

```
var p = {  
  startIndex: 1,  
  count: 5  
}  
var svc = new sbt.ConnectionsService("/activities/service/atom2/everything");  
var msg = svc.get(p, "xml");  
viewScope.text = msg.getXMLString(false);
```


Data Navigator Utility Classes

- Provides easy to use APIs for consuming JSON and XML data
 - Utilizes 'path' methodology that will be familiar to developers
 - Similar to XPath but better performance
 - Eliminates the need for exhaustive null checking within code
 - Provides built in type casting (e.g. stringValue(..) booleanValue(..) intValue(..) etc)
 - Makes code easier to read and more ROBUST!
-
- sbt.JsonNavigator – JSON Data Navigator
 - sbt.XmlNavigator – XML Data Navigator

```
{
  "contents": [
    {
      "path": "/7.2 Rule.pdf",
      "bytes": 28887,
      "modified": "Fri, 19 Aug 2011"
    },
    {
      "path": "/Pictures",
      "bytes": 0,
      "modified": "Sat, 10 Dec 2011"
    },
    {
      "path": "/Spec Docs",
      "bytes": 0,
      "modified": "Sat, 10 Dec 2011"
    },
    {
      "path": "/View_Spec.pdf",
      "bytes": 230783,
      "modified": "Thu, 23 Jun 2011"
    }
  ]
}
```

```
JsonNavigator navigator = new JsonNavigator(jsonObject);
DataNavigator contentsNav = navigator.get("contents");
for (int i = 0; i < contentsNav.getCount(); ++i) {
    FileEntry entry = new FileEntry();
    DataNavigator nav = contentsNav.get(i);
    try {
        String title = nav.stringValue("path");
        Date modified = nav.dateValue("modified");
        int size = nav.intValue("bytes");
    }
}
```

```
<statuses type="array">
  <status>
    <text>Where's all the gear? At U2 concert</text>
    <user>
      <id>142936</id>
      <name>Frank Adams</name>
      <screen_name>fadams</screen_name>
    </user>
  </status>
</statuses>
```

```
Document doc = (Document)svc.get(params, ClientService.FORMAT_XML);
XmlNavigator navigator = new XmlNavigator((Document)doc);
DataNavigator dn = navigator.get("statuses/status");
for(int i = 0; i < dn.getCount(); i++){
    DataNavigator tweetContent = dn.get(i);
    String body = tweetContent.stringValue("text");
    String author = tweetContent.stringValue("user/name");
}
```

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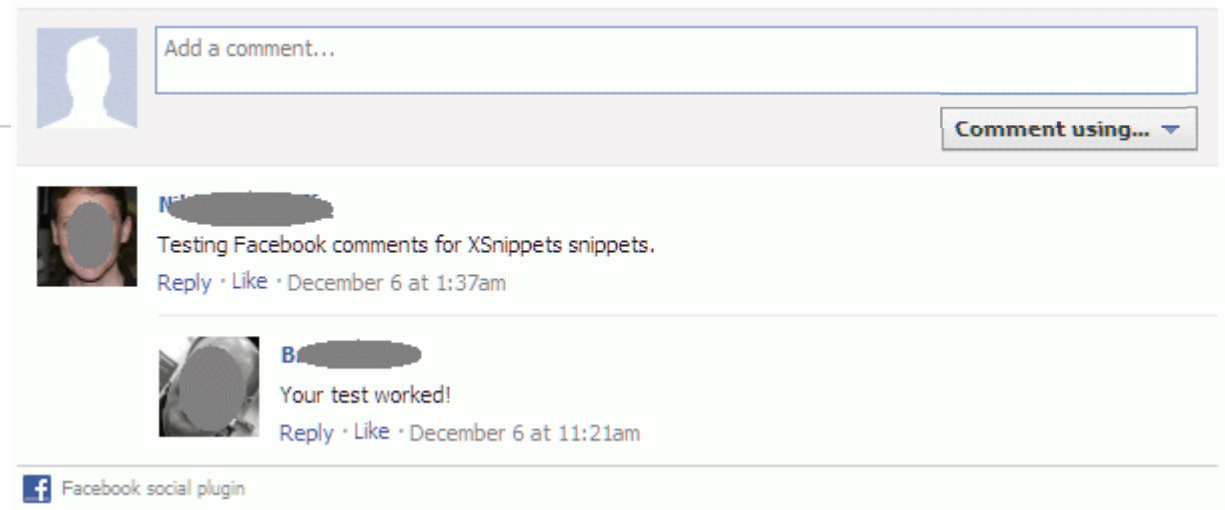
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OpenNTF XSnippets

- OpenNTF community service: Share your code with others
- <http://openntf.org/xsnippets>
- XPages application built by the community (Serdar Başığmez, Bruce Elgort, Frank van der Linden, Niklas Heidloff) for the community
- Available as open source

OpenNTF XSnippets

- Facebook comments



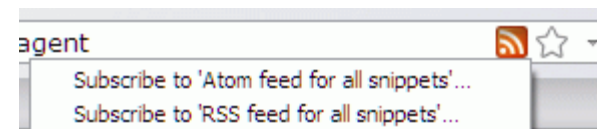
- Share box



- Related Twitter tweets



- Feeds



OpenNTF XSnippets

- Embeddable widgets

OpenNTF XSnippets

[Get SessionID in SSJS](#)

St...

[Adding Buttons to oneUI Place Bar from compositeData](#)

St...

[getHashUriVars](#)

Th...

[TypeAhead OnStart/OnComplete Event](#)

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Language XPages

Author [Nikolai Kovaloff](#)

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Author

XAgent

XPages

39

Nikolai Kovaloff

DbLookup & DbColumn, with cache, JavaScript (Server)

19

Tom...

OpenNTF XSnippets

- Update Connections status
- Publish Connections bookmark

Update my Status

Cool snippet - <http://openntf.org/s/xagent>

Send Status Update

Add Bookmark to one of my Communities

My Communities:

OpenNTF



Publish Bookmark

Access to IBM Connections from XPages

- Custom login page can be implemented
- Credentials can be saved so that users don't have to authenticate again
- Built in data sources for communities and activities
- UI controls for business cards
- Custom REST API calls for everything else
 - XML navigator API to easily parse XML/Atom

faces-config.xml - IBM Lotus Domino Designer

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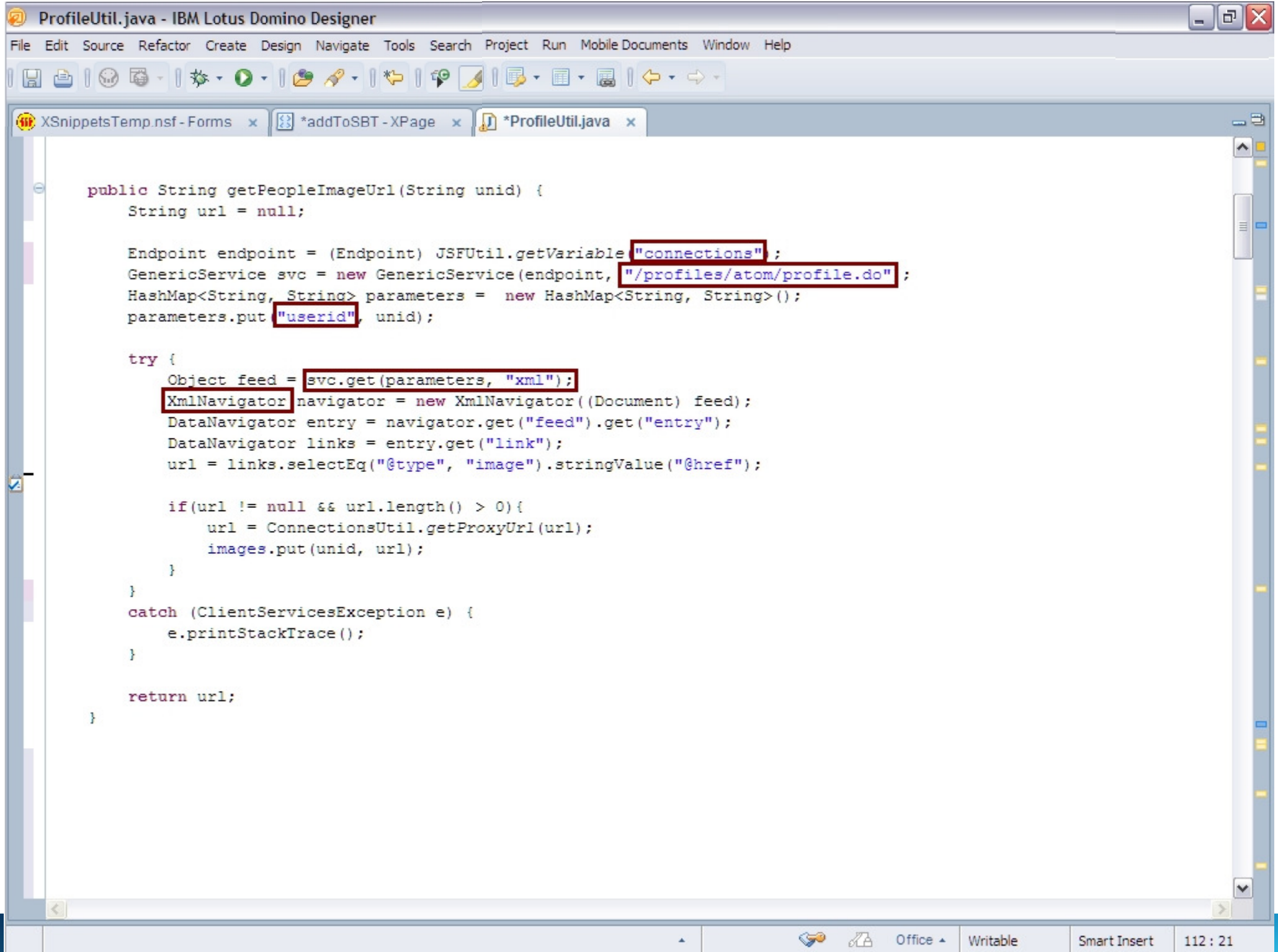
XSnippetsTemp.nsf - Forms x *addToSBT - XPage x *ProfileUtil.java x *faces-config.xml x

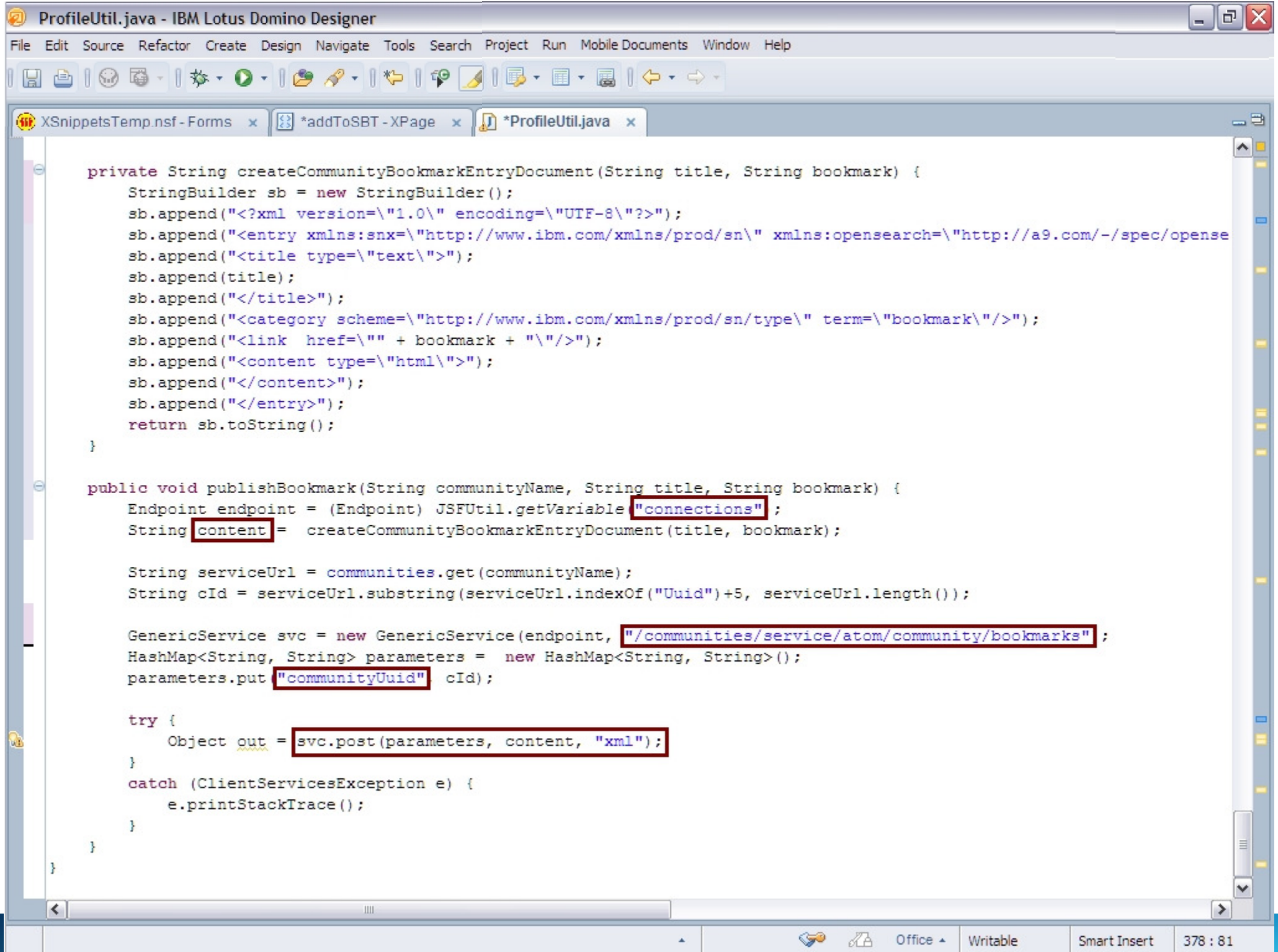
```
<managed-bean>
  <managed-bean-name>PwdStore</managed-bean-name>
  <managed-bean-class>com.ibm.xsp.extlib.sbt.security.password.store.BANSFPASSWORDStore</managed-bean-class>
  <managed-bean-scope>application</managed-bean-scope>
  <managed-property>
    <property-name>database</property-name>
    <value>WebSecurityStore.nsf</value>
  </managed-property>
</managed-bean>
<managed-bean>
  <managed-bean-name>connections</managed-bean-name>
  <managed-bean-class>com.ibm.xsp.extlib.sbt.services.client.endpoints.BasicEndpointBean</managed-bean-class>
  <managed-bean-scope>session</managed-bean-scope>
  <managed-property>
    <property-name>url</property-name>
    <value>https://greenhouse.lotus.com</value>
  </managed-property>
  <managed-property>
    <property-name>proxyEnabled</property-name>
    <value>true</value>
  </managed-property>
  <managed-property>
    <property-name>passwordStore</property-name>
    <value>PwdStore</value>
  </managed-property>
  <managed-property>
    <property-name>authenticationPage</property-name>
    <value>loginToConnections?endpoint=connections</value>
  </managed-property>
</managed-bean>
<managed-bean>
  <managed-bean-name>profileUtil</managed-bean-name>
  <managed-bean-class>org.openntf.connections.ProfileUtil</managed-bean-class>
  <managed-bean-scope>application</managed-bean-scope>
</managed-bean>
```

Design Source

faces-config/#text

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IBM's Social Business Toolkit

- Modular set of capabilities for a unified work experience across products on the user interface, on mobile devices, and in the cloud
- Comprehensive set of APIs, open standards, documentation, samples, best practices, and an active community
- An activity stream is a dynamic view of data that has been aggregated and published
- The embedded experience allows reading and taking actions on activities in the stream without having to leave the context
- Available as preview on Lotus Greenhouse

XSnippets in Embedded Experience

[Lotus Greenhouse](#)
[Home](#)
[Products](#)
[Labs](#)
[Forums](#)

[My Account](#)
[Solutions Catalog](#)
[Log Out](#)

Activity Stream Demo

[Publish Sample Events](#)
[Clear Events](#)

OpenNTF XSnippets Great Code Snippet
Check out this code snippet on OpenNTF.
9 Dec

Workflow event
Workflow Event
Workflow event
9 Dec

API Test bookmarked a page
API Toolkit
bookmarked a page
9 Dec

Voicemail System you have a new voice mail message
Voice Message - 1/31/2011
you have a new voice mail message
9 Dec

API Test posted a blog entry in API Test Blog
A Real Blog Post
posted a blog entry in
9 Dec

Stock Agent Posted stock named (Public, NYSE:)
stock passed your alert threshold.
9 Dec

API Test This is an example or a status update.
This is an example or a status update.
9 Dec

OpenNTF XSnippets Great Code Snippet

XAgent

Empty XAgent sample

Language XPages
Author Nik
Rating ★★★★★ You have rated 5 star(s) Overall rating is 4.60 by 5 person(s)
Downloads 39

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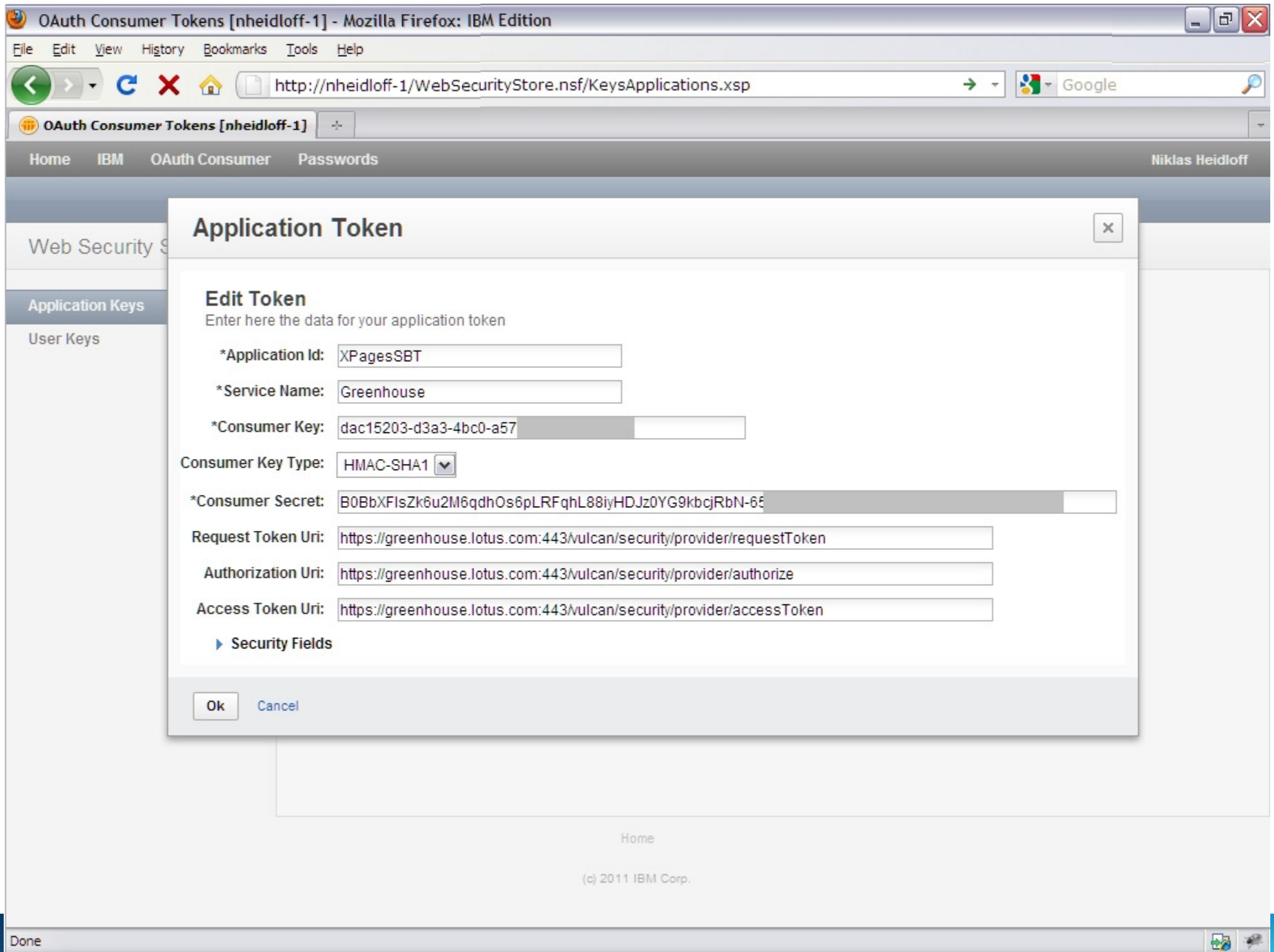
```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <!-- XPage which is not rendered but returns data like XML, JSON,
3 <!-- calls this technique XAgents
4 <!-- More: http://www. /blog/d6plinks/shwl-7mgfbn
5
6 <xp:view xmlns:xp="http://www.ibm.com/xsp/core" rendered="false"
7   <xp:this.afterRenderResponse><![CDATA[#{javascript:
8
9   var externalContext = facesContext.getExternalContext();
10  var writer = facesContext.getResponseWriter();
11  var response = externalContext.getResponse();
12
13  // set content type, e.g. ...
14  response.setContentType("text/xml");
15  // response.setContentType("application/json");
16
17  response.setHeader("Cache-Control", "no-cache");
18
19  // read parameters, e.g. ...
20  var param = context.getUrlParameter("myParam");
21
22  // write HTML output e.g. ...
23  writer.write("<br></br>");
24  // writer.write("{'jsonvar':'jsonvalue'}");
25
26  writer.endDocument();
27  }]]>
28 </xp:this.afterRenderResponse>

```

Access to IBM's Social Business Toolkit from XPages

- OAuth for delegated authorization
- Built in data source for the activity stream
- Custom REST API calls for everything else
 - JSON navigator API to easily parse JSON



faces-config.xml - IBM Lotus Domino Designer

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XSnippetsTemp.nsf - Forms x *addToSBT - XPage x *ProfileUtil.java x *faces-config.xml x

```
<managed-bean>
  <managed-bean-name>NSFStore</managed-bean-name>
  <managed-bean-class>com.ibm.xsp.extlib.sbt.security.oauth_10a.store.OAuthNSFTokenStore</managed-bean-class>
  <managed-bean-scope>application</managed-bean-scope>
  <managed-property>
    <property-name>database</property-name>
    <value>WebSecurityStore.nsf</value>
  </managed-property>
</managed-bean>

<managed-bean>
  <managed-bean-name>greenHouse</managed-bean-name>
  <managed-bean-class>com.ibm.xsp.extlib.sbt.services.client.endpoints.OAuthEndpointBean</managed-bean-class>
  <managed-bean-scope>application</managed-bean-scope>
  <managed-property>
    <property-name>url</property-name>
    <value>https://greenhouse.lotus.com</value>
  </managed-property>
  <managed-property>
    <property-name>serviceName</property-name>
    <value>Greenhouse</value>
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    <value>XPagesSBT</value>
  </managed-property>
  <managed-property>
    <property-name>tokenStore</property-name>
    <value>NSFStore</value>
  </managed-property>
  <managed-property>
    <property-name>proxyEnabled</property-name>
    <value>true</value>
  </managed-property>
</managed-bean>
```

Design Source

-- faces-config/#comment 65 : 11 Smart Insert

addToSBT - XPage - IBM Lotus Domino Designer

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XSnippetsTemp.nsf - Forms x *addToSBT - XPage x *ProfileUtil.java x *faces-config.xml x

```
<xp:this.data>
  <xe:objectData var="paramters"><xe:this.createObject><![CDATA[#{javascript:return {
"params": { "format":"json", "userId":"@me", "groupId":"@all", "appId":"@all",
  "activityId":"","startIndex":0, "count":5 },
  "content":"","result":"" }}}}]>
  </xe:this.createObject></xe:objectData>
  <xe:objectData var="objectData"><xe:this.createObject><![CDATA[#{javascript:
var snippetId=param.id;
return {
  "id":"http://projectvulcan.lotus.com/activity/1323442534315",
  "permalinkUrl":"http://projectvulcan.lotus.com/608201527/posts/",
  "link":"http://projectvulcan.lotus.com/608201527/posts/1323442534315",
  "postedTime":1323442534315,
  "title":"Great Code Snippet",
  "actor":{
    "id":"05343561-89b3-4875-9c6e-aba025bd08cf",
    "displayName":"OpenNTF XSnippets"},
  // add other parameters here
  "standardLinks":{
    "alternate":[{"href":"","type":"application/gadget-instance+json","inline":
      {
        "ee:component-instance-data":{
          "ee:context":{"bookmarkTitle\":"Niklas\","xPageUrl\":"
          \http:\\\\\\\\openntf.org\\\\XSnippets.nsf\\\\gadget.xsp?id=" + snippetId ."\\"},
          "ee:component-definition":"http:\\\\openntf.org\\\\XSnippets.nsf/gadget.xml"} } }],
        "container":[{"href":"http://projectvulcan.lotus.com/community","type":"text/html"}]}
      }
    }
  }
}]]></xe:this.createObject></xe:objectData>
</xp:this.data>
<xp:button value="Create Entry in Activity Stream">
  <xp:eventHandler event="onclick" submit="true"><xp:this.action><![CDATA[#{javascript:
var svc = new sbt.ActivityStreamsService(greenHouse, "/vulcan/shindig/rest/activitystreams")
var msg = svc.execRequest("post", parameters, objectData, "json");
objectData1.result = msg}]]></xp:this.action>
  </xp:eventHandler>
</xp:button>
```

Design Source

#text

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Agenda

- Social Business
- Social Enabler for XPages
- Under the Hood
- Sample Application XSnippets
- Open Source Applications
- Q & A

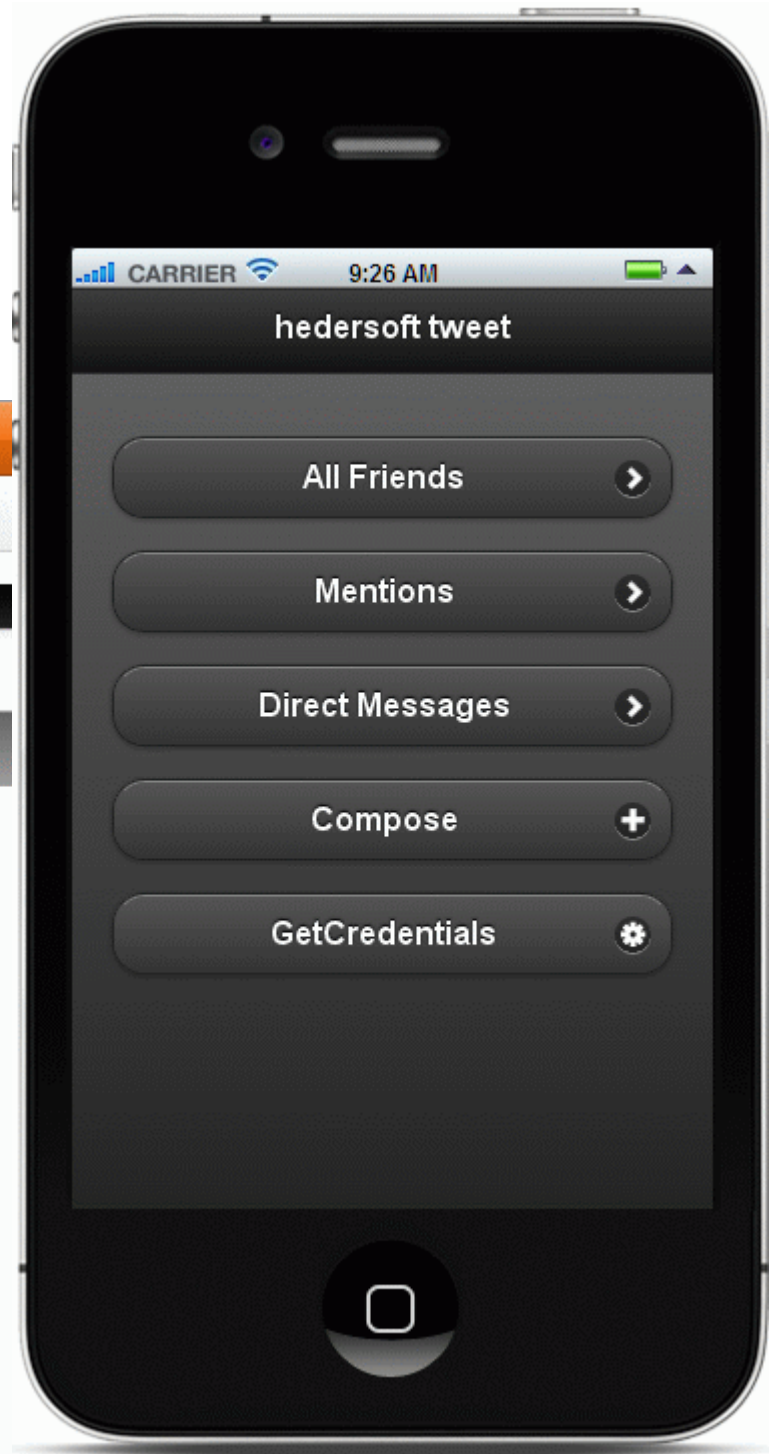
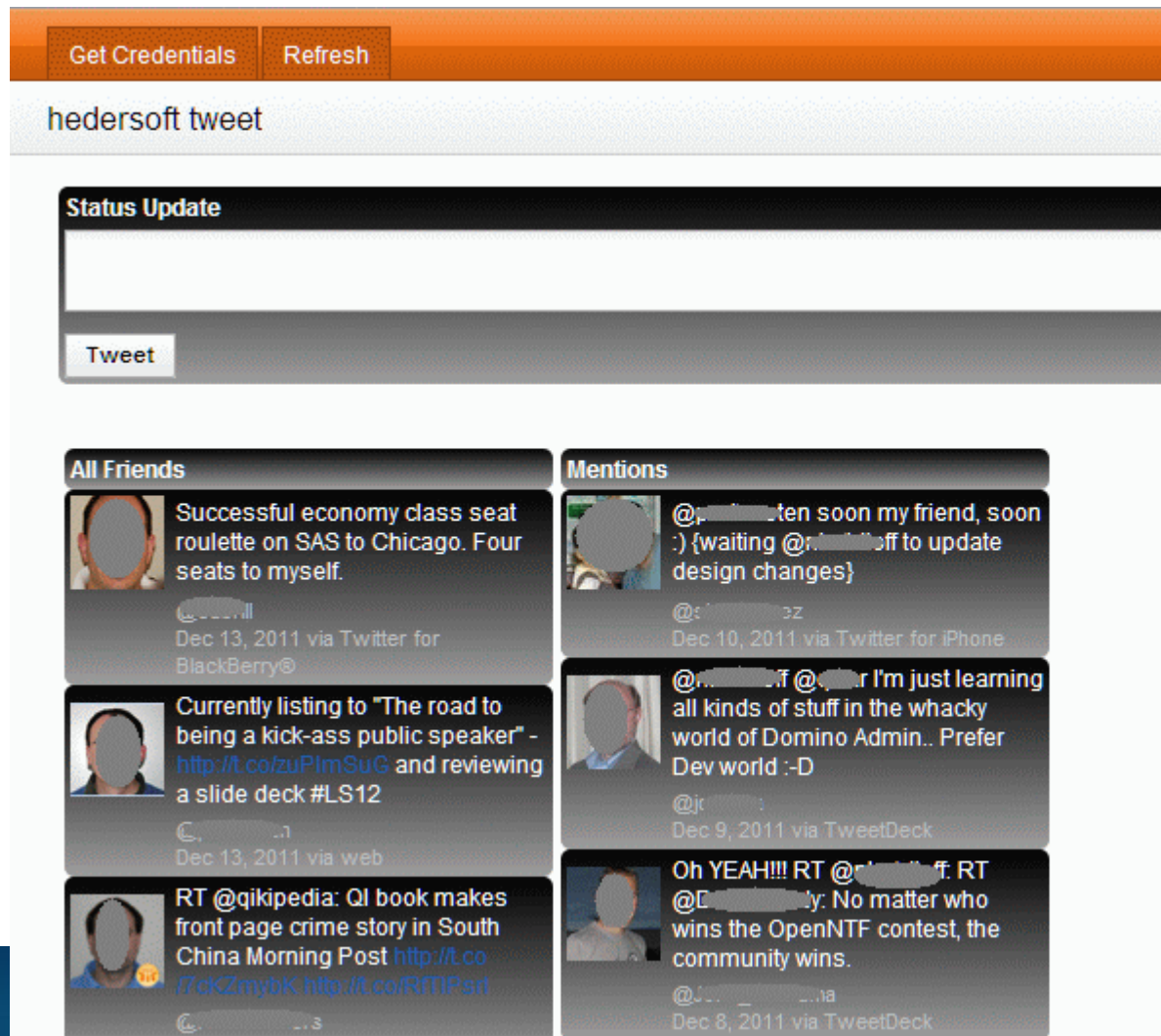
Open Source Applications

- Available on OpenNTF.org
- Contributed as part of the second OpenNTF XPages Development Contest



Twitter Controls – Henning Schmidt

- Twitter controls for desktop browsers and mobile devices



Lotus People – Mariusz Jakubowski

- Application to find experts with certain skills at certain locations

Lotus People

[Login](#) | [Register](#)

Niklas Hoff

Pader, Paderborn, Germany

Website: <http://hoff.net>

Niklas Hoff

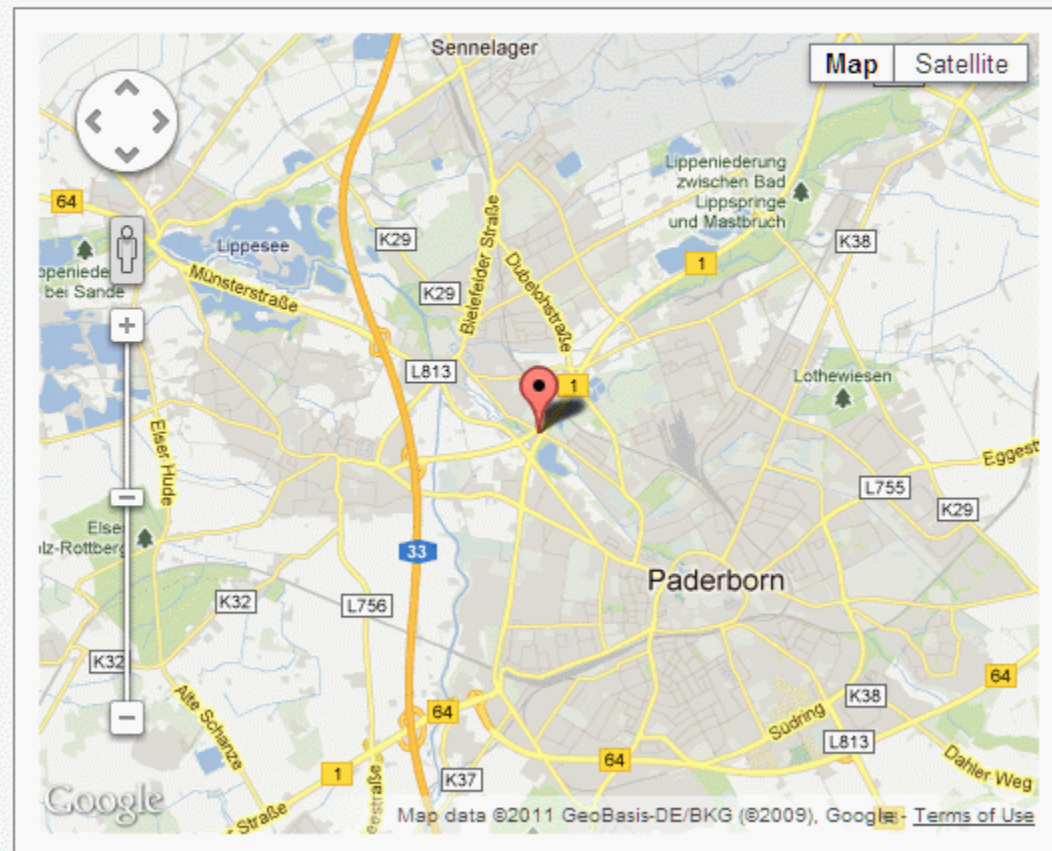
Software Architect at IBM
Bielefeld Area, Germany

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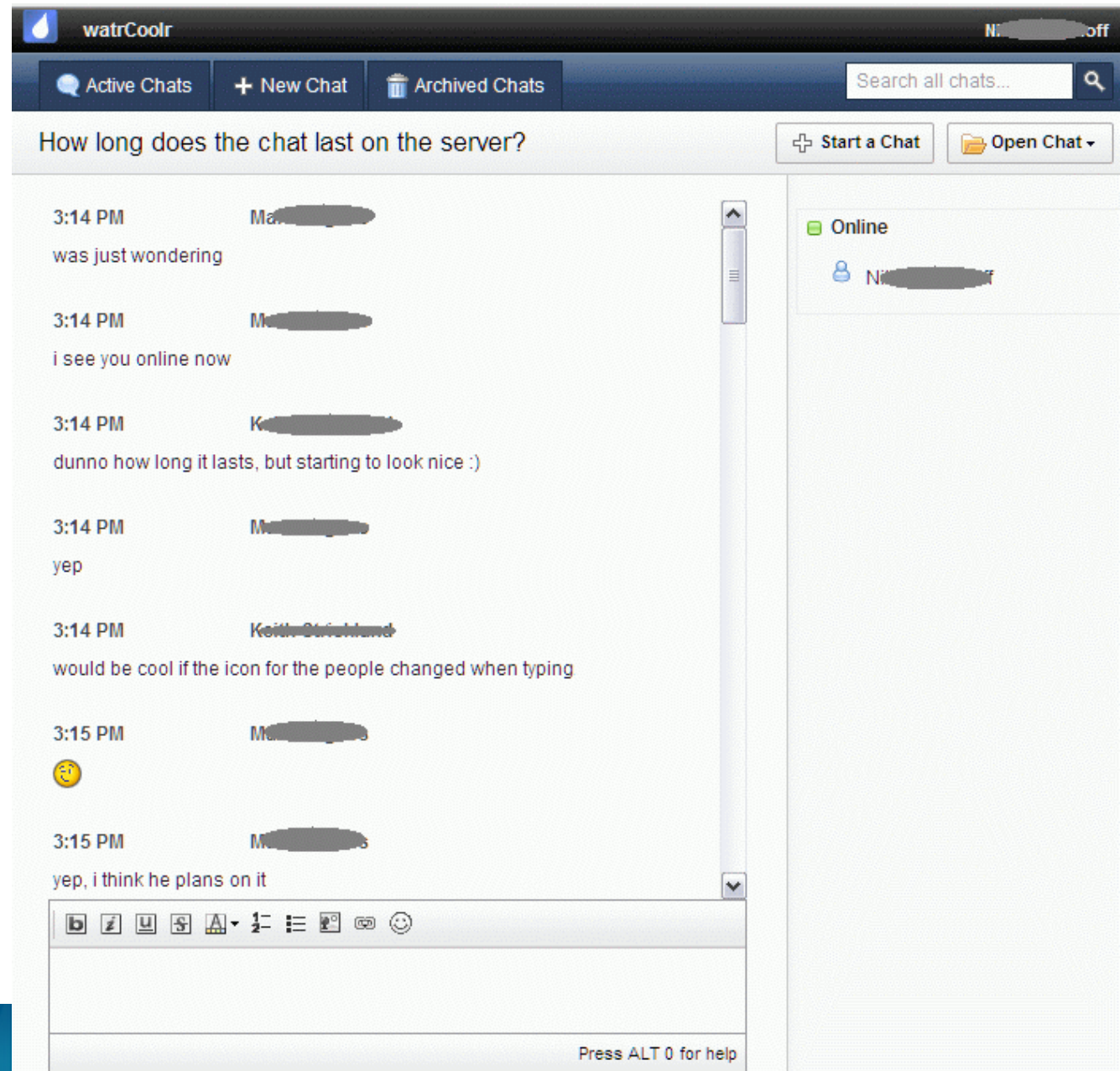
Skills:

- XPages



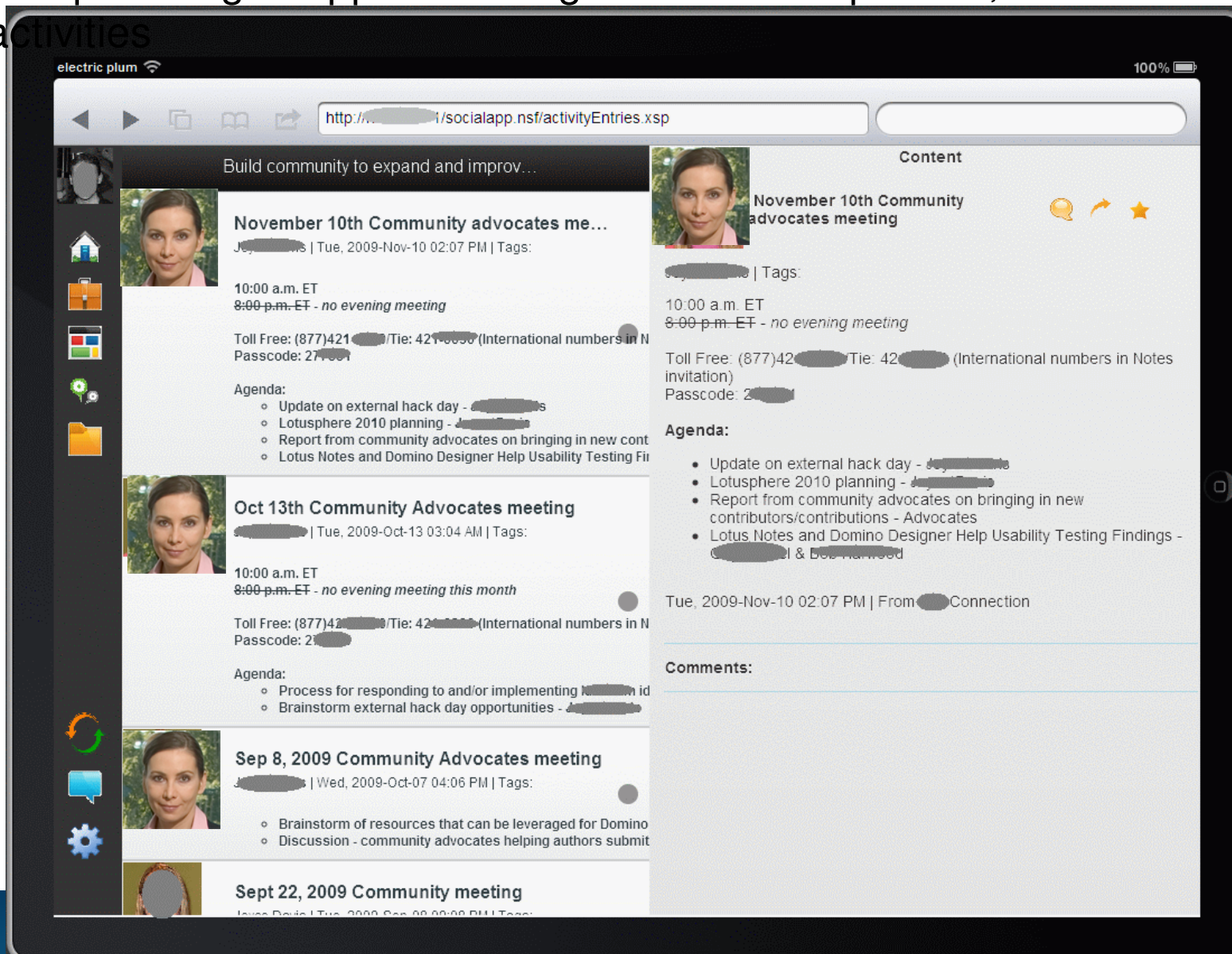
WatrCoolr – Tim Tripcony

- Persistent group chat application



XPages based App for IBM Connections

- Sample XPages app accessing Connections profiles, communities and activities



Summary

- The XPages Extension Library brings a new set of social capability to XPages
 - Access to the IBM Social Business Toolkit APIs (Connections, LotusLive, Sametime...)
 - Access to external social networks (Twitter, Facebook, Dropbox...)
 - New ready to use custom controls
- These features are already available on OpenNTF and will be gradually integrated into the product, via UpgradePacks
 - <http://extlib.openntf.org/>
- This is an evolving piece of work, and a major focus for 2012
 - Support for OpenSocial Gadgets and Embedded Experience
 - Support for more Social Networks and Plug-ins
 - Preview of Domino as an OAuth provider (monitor OpenNTF!)

Q & A

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