

XPages 与 Domino 移动应用开发

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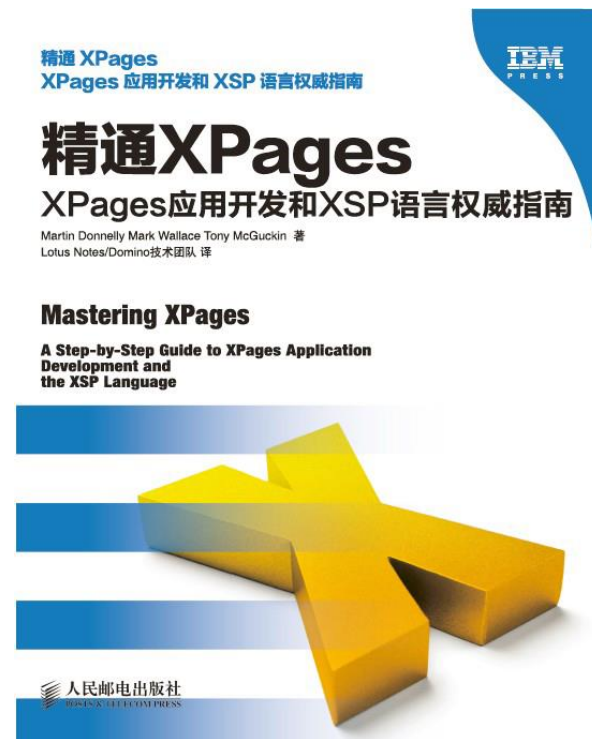


XPages学习资料和学习三部曲



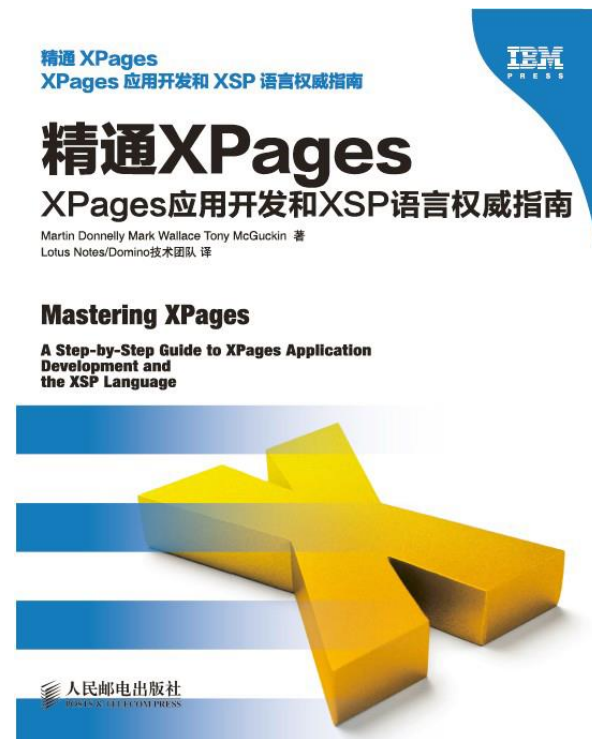
XPages学习三部曲-基础

- 第一部分
 - 第1章 XPages入门
- 第二部分
 - 第2章 准备工作
 - 第3章 创建第一个XPages应用
 - 第4章 剖析XPages
 - 第6章 创建XPages业务逻辑
 - 第7章 处理Domino文档
 - 第8章 使用Domino视图
- 第三部分
 - 第10章 定制控件
 - 第11章 高级脚本
 - 第14章 XPages主题



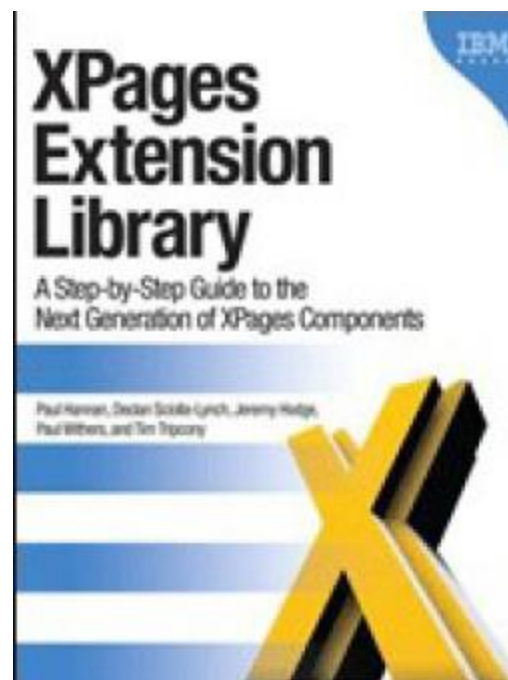
XPages学习三部曲-中等

- 第一部分
 - 第5章 XPages与JavaServer Faces
 - 第16章 应用性能和可扩展性
- 第二部分
 - 调试技术
- 第三部分
 - 第17章 安全性
 - 第12章 XPage可扩展性
 - 第13章 Notes客户机中的XPages
 - 第15章 国际化
 - Domino Designer中版本控制



XPages学习三部曲-高级

- 第一部分
 - XPages 扩展库介绍
 - 安装 XPages 扩展库
 - XPages 示例应用介绍
 - 学习示例: XPages 扩展库应用
- 第二部分
 - XPages 移动应用
 - XPages 与关系型数据库
 - XPages 与 Social
- 第三部分
 - 已有应用程序迁移
 - 移植业务逻辑/界面设计和布局



国外开发者社区

- openntf.org
- XPages.info
- collaborationtoday.info

Niklas Heidloff

I'm a software architect working for IBM on application development. I work on the community related topics OpenNTF, XPages and Social Business Toolkit.



stwissel [less info](#)



Fredrik Norling
XPage Developer and
IBM Champion for collaborative solutions

Per Henrik Lausten



[bio](#)
[vis.](#)



国内开发者社区

- Lotuschina.net
- LotusChina XPages Team



XPages移动开发进阶



Domino移动应用现状



Browser Access

Written in HTML5 JavaScript and CSS3. Quick and cheap to develop, but less powerful than native.



Browser Access

Hybrid Apps - Web

HTML5 code and Worklight runtime libraries packaged within the app and executed in a native shell.



Downloadable



Native Apps

Platform-specific. Requires unique expertise, pricy and long to develop. Can deliver higher user experience.



Downloadable

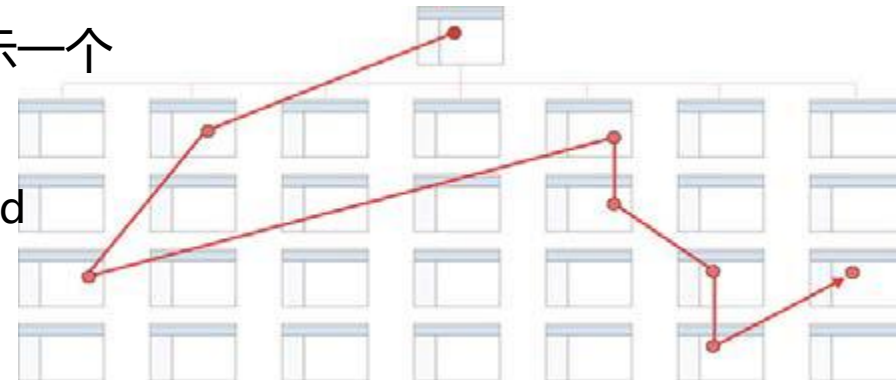


XPages移动路线图



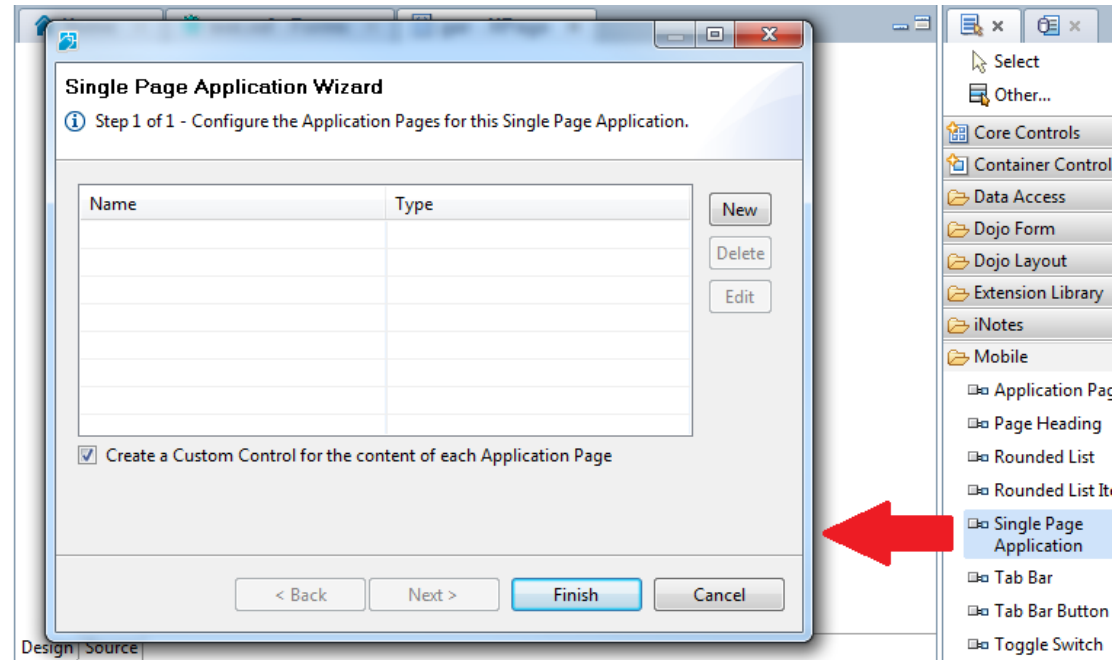
Domino 9.0.1 Mobile开发

- UI 行为例如过渡、动态检索、滚动等不能无缝地实现当应用程序中的多个页切换/交互时
 - 由于HTTP请求/响应往返
- Single Page Application (SPA)
 - 单个客户端页面用于管理过渡 / 互动
 - 内容由“views”组成-某一时刻显示一个
 - Views切换时产生过渡/翻转效果
 - Views可以是静态的或者lazy-loaded
 - 高度流体，无缝的行为被暴露



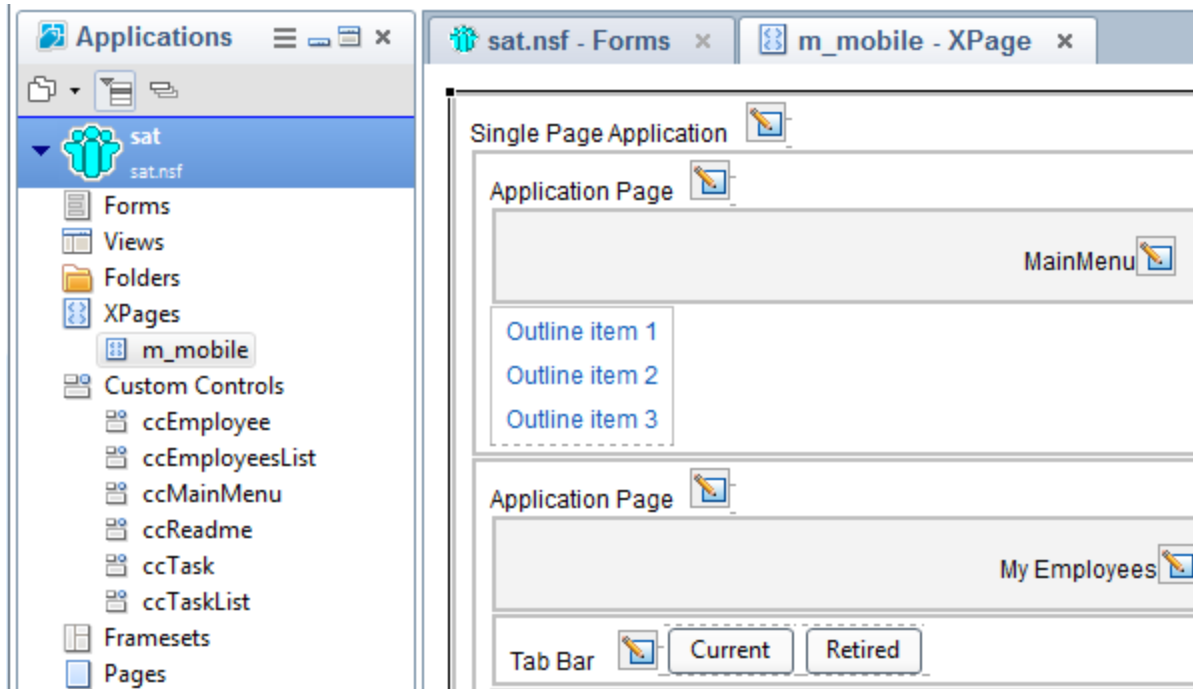
SPA向导

Available on OpenNTF.org since 13th December 2013

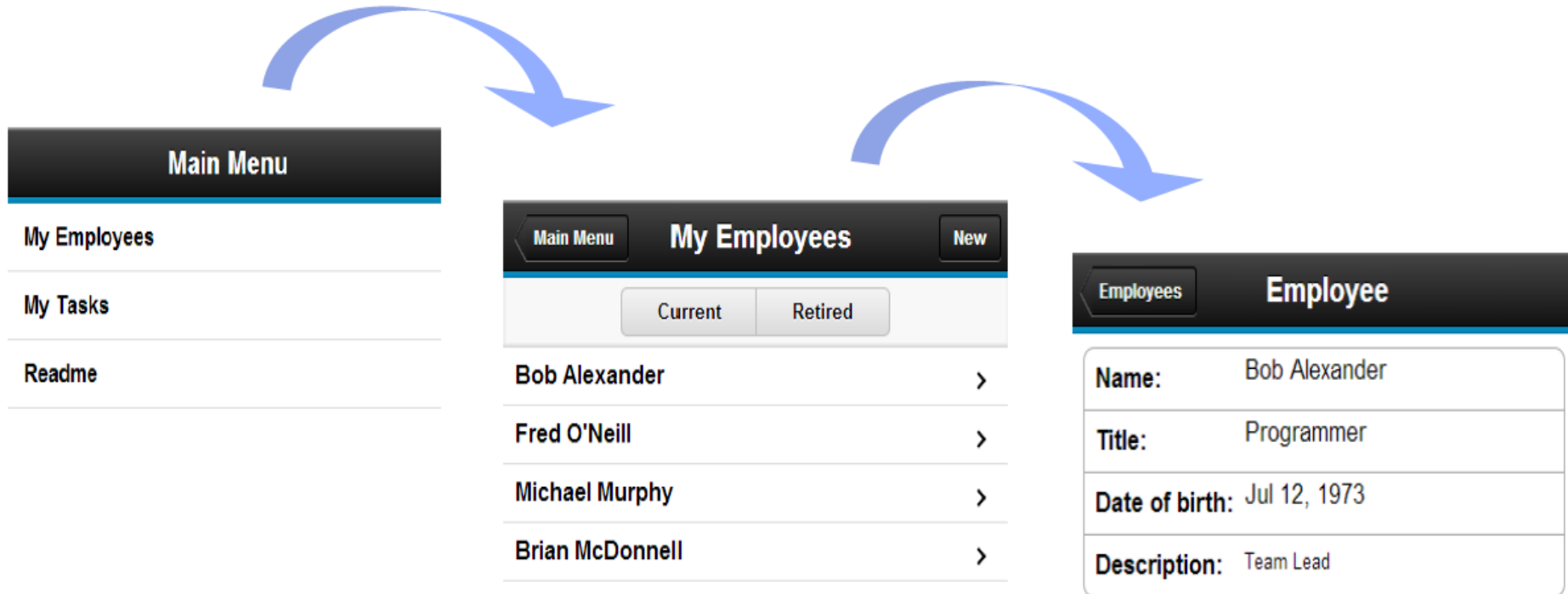


SPA向导 (续)

- 添加了A Single Page Application 控件和一系列定制控件

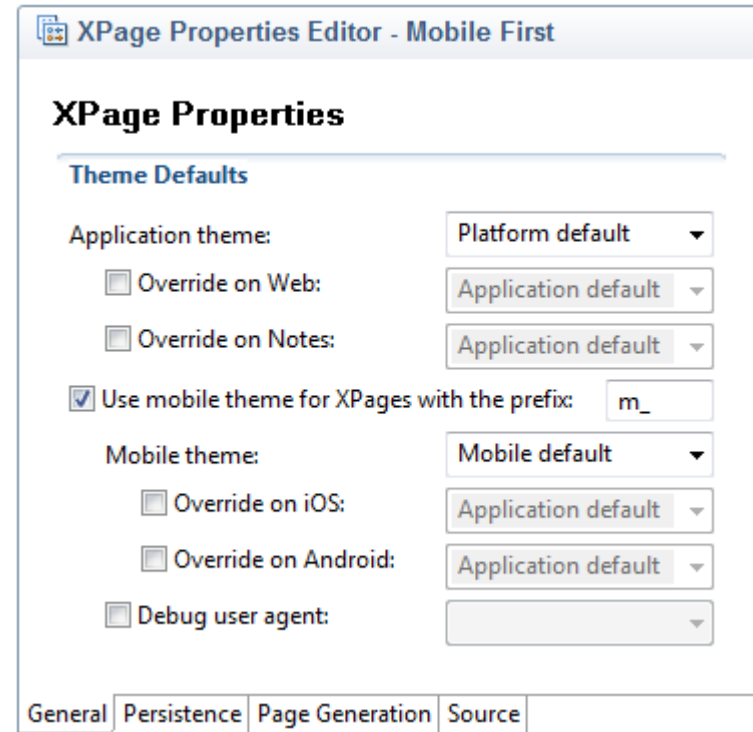


SPA向导 (续)



XPages Mobile主题

- 可以自由选择mobile主题
- 选择定制的主题
- 提供了新的Debug User Agent



XPage Properties Editor - Mobile First

XPage Properties

Theme Defaults

Application theme: Platform default ▼

Override on Web: Application default ▼

Override on Notes: Application default ▼

Use mobile theme for XPages with the prefix: m_

Mobile theme: Mobile default ▼

Override on iOS: Application default ▼

Override on Android: Application default ▼

Debug user agent: ▼

General Persistence Page Generation Source



IBM OneUI Mobile主题

XPage Properties Editor - app2

XPage Properties

Theme Defaults

Application theme: Platform default

Override on Web: Application default

Override on Notes: Application default

Use mobile theme for XPages with the prefix: m_

Mobile theme: OneUI IDX V1.3

Override on iOS: Mobile default

Override on Android: android

Debug user agent: iphone

The image shows a stack of three mobile application screenshots. The top screenshot, taken at 11:36 AM with 74% battery, shows a 'Recent Activity' screen with a 'Views' button and a '+' icon. The middle screenshot, taken at 11:34 AM with 75% battery, shows a 'Recent Activity' screen with a list of items including 'All Document', 'Announcement', 'Events', 'Status Repo', 'Members', 'Subteams', and 'Inactive Doc'. The bottom screenshot, taken at 11:35 AM with 74% battery, shows a 'New Document' dialog with 'Cancel' and 'Save' buttons, and a form with 'Subject:' and 'Content:' fields.

Web vs Mobile 展现

Welcome Anonymous [Login](#)

Greenwell Teamroom Setup

- Home
- All Documents
- Announcements
- Events
- Status Reports
- Calendar
- Members and Subteams
- Inactive Documents
- Top 1 Tags
- Welcomes

Recent Activity

Date	Activity	Time
Sep 27, 2013	Tony McGuckin scheduled meeting sat meeting	3:11 PM
Aug 19, 2013	Tony McGuckin scheduled meeting tonys meeting	8:36 PM
	Tony McGuckin wrote discussion new monday morning doc	10:28 AM
Jul 30, 2013	Tony McGuckin wrote discussion newdoc2_change1	10:03 PM
	Tony McGuckin added comment newreply1_change1_change2	10:01 PM
	Tony McGuckin wrote discussion newdoc1	9:59 PM
Jul 24, 2013	Tony McGuckin scheduled meeting my new meeting	8:57 AM
Jul 3, 2013	Tony McGuckin assigned action item hello world action item	1:54 PM
May 27, 2013	Tony McGuckin planned event Another big event (27/05/2013 12:00:00)	12:14 PM
Sep 19, 2012	Tony McGuckin wrote discussion Ciao!	1:46 PM
	Tony McGuckin planned event The Big Welcome Event! (28/09/2012 12:00:00)	1:45 PM

Show more...

TeamRoom Purpose

The Greenwell Team Room used by the Sales team

Team Members

- Gail Chao
- Sam Brooks
- Samantha Daryn
- system
- Tony McGuckin

5 Members [View All](#)

O2-UK 11:34 AM 75%

Views Recent Activity

Sep 27, 2013

- sat meeting**
Tony McGuckin | 27/09/13 15:11

Aug 19, 2013

- tonys meeting**
Tony McGuckin | 19/08/13 20:36
- new monday morning doc**
Tony McGuckin | 19/08/13 10:28

Jul 30, 2013

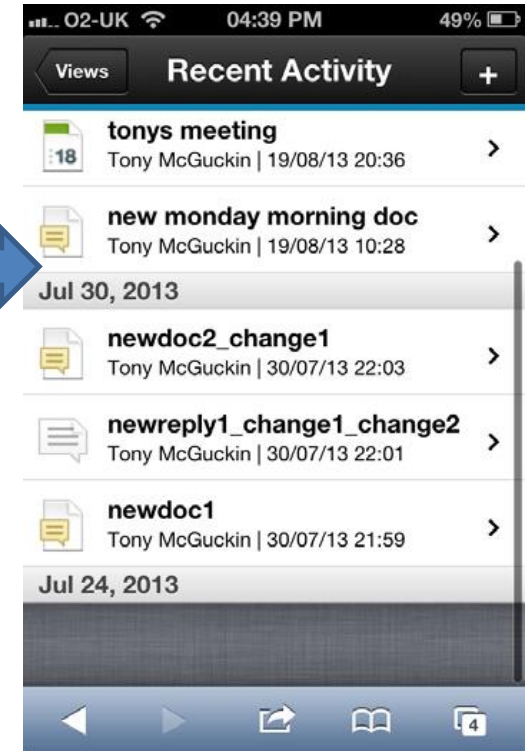
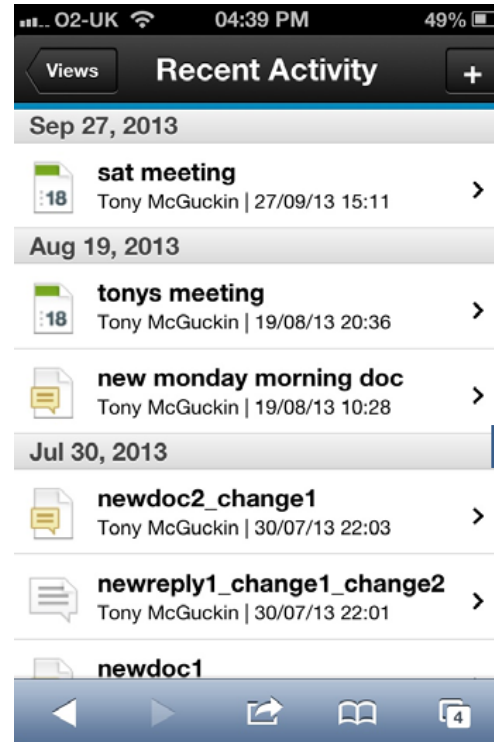
- newdoc2_change1**
Tony McGuckin | 30/07/13 22:03
- newreply1_change1_change2**
Tony McGuckin | 30/07/13 22:01
- newdoc1**

Navigation: Back, Forward, Home, Search, Refresh



DataView触摸滚动

- 触摸滚动
- 局部刷新Lazy load下一页
- 可计算属性infiniteScroll

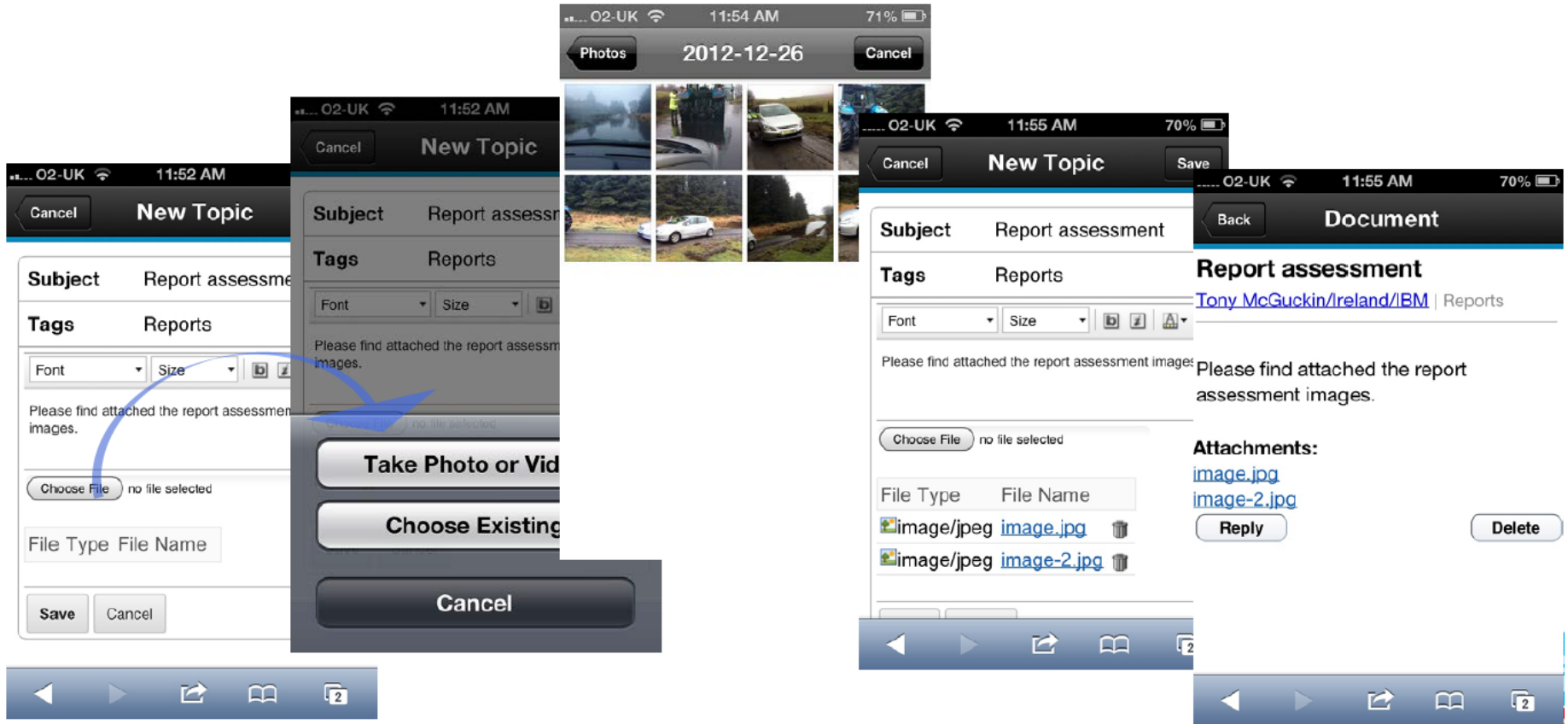


事件和动作

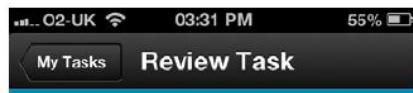
- 事件
 - onOrientationChange()
 - onResize()
 - onBefore/AfterTransitionIn/Out()
- 动作
 - MoveTo SimpleAction
- 方法
 - XSP.moveToMPage()



Photo / File 上传



Date / Time Pickers



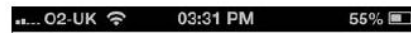
Task: Review latest insurance c

Status: ON

Due Date: 1 Feb 2014

Start Time: 03:30 PM

End Time: 05:30 PM



Task: Review latest insurance c

Status: ON

Due Date: 1 Feb 2014

Start Time: 03:30 PM

End Time: 05:30 PM



Mobile app header showing 'My Tasks' and 'Review Task'

Status: ON

Due Date: 1 Feb 2014

Start Time: 03:30 PM

End Time: 03:30 PM

Mobile app header showing 'My Tasks' and 'Review Task'

Status: ON

Due Date: 1 Feb 2014

Start Time: 03:30 PM

End Time: 05:30 PM



Device Bean / RESS

- 新设备Bean deviceBean
 - deviceBean.isIphone() / deviceBean.isAndroid() / etc
- 可扩展的 (提供扩展点)
 - deviceBean.getAddressBook() / deviceBean.getOrientation()



XPages未来

- Dojo Mobile 1.8.3
- 客户端JS Script using **Touch API onTouchStart/Move/End etc**
- 内嵌Dojo Mobile **ScrollableView/Pane's**
- Responsive Server-Side (RESS) 和Responsive Web Design (RWD)

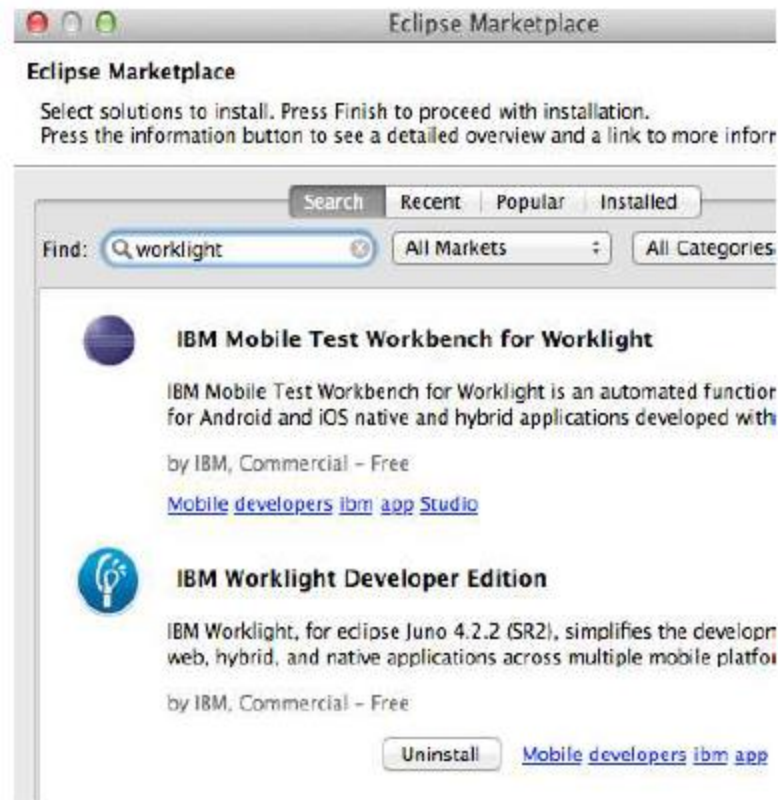


Hybrid应用



IBM Worklight

- <http://www.ibm.com/developerworks/mobile/worklight/download/install.html>
- 似曾相识？
 - Yes ! Eclipse平台

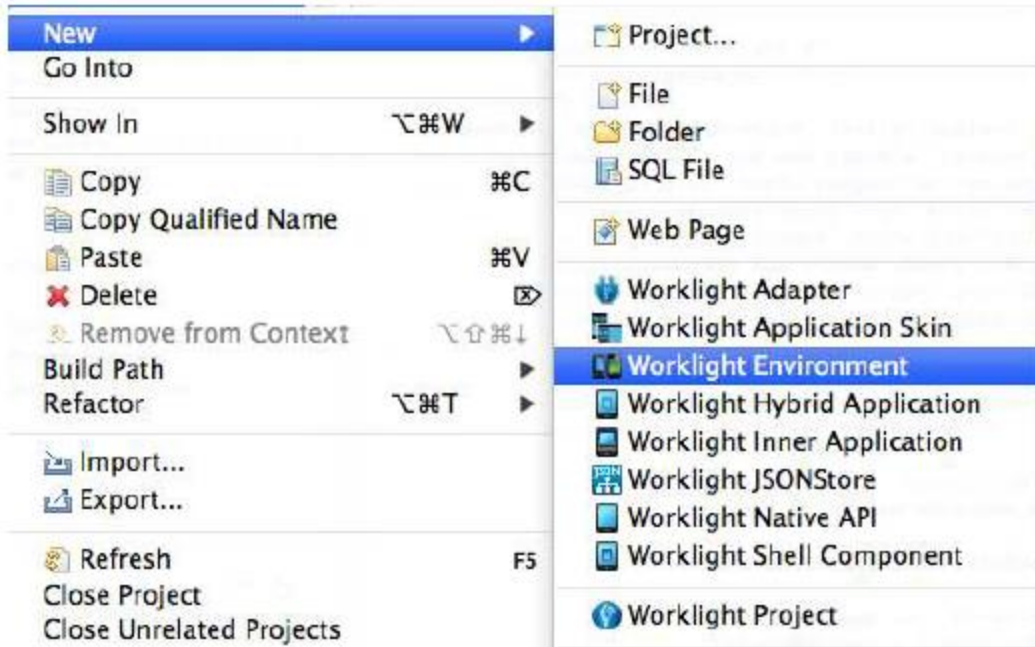


IBM Worklight (续)

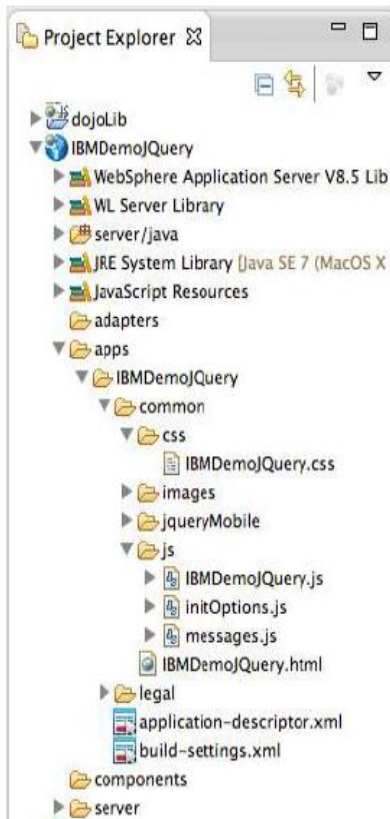
The image shows three overlapping screenshots from the IBM Worklight IDE:

- Left Screenshot:** A menu titled "Worklight Project" is open, listing various project types: Worklight Project, Worklight Adapter, Worklight Hybrid Application, Worklight Inner Application, Worklight Shell Component, Worklight Native API, Worklight Environment, Worklight Application Skin, and Worklight JSONStore. A red arrow points from the "Worklight Project" menu item to the "Project Templates" section of the next screenshot.
- Middle Screenshot:** A "New Worklight Project" dialog box. The "Name" field contains "IBMConnectApp". Under "Project Templates", a list includes: Hybrid Application, Inner Application, Native API, and Shell Component. A red arrow points from the "Worklight Project" menu item to the "Project Templates" list.
- Right Screenshot:** A "New Worklight Project" dialog box for a "Hybrid Application". The "Application name" is "IBMDemoQuery". It has a warning icon and text: "You have selected more than one JavaScript file to import. Having multiple copies of jQuery Mobile in your app may hamper tooling performance." Under "jQuery Mobile Installation", "Add jQuery Mobile" is checked, and the location is "/Users/johnjardin/Documents/jqueryMobile/jc". A list of files to import is shown, including "index.html", "jquery.mobile-1.3.2.css", "jquery.mobile-1.3.2.js", "jquery.mobile-1.3.2.min.css", and "jquery.mobile-1.3.2.min.js". Under "Dojo Installation", "Add Dojo Toolkit" is unchecked. Under "Sencha Touch Installation", "Add Sencha Touch" is unchecked.

IBM Worklight (续)



IBM Worklight (续)



```
<!DOCTYPE HTML>
<html>
  <head>
    <meta charset="UTF-8">
    <title>AddressBookDemo</title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0, maximum-scale=1.0, minimum-sc
    <link rel="shortcut icon" href="images/favicon.png">
    <link rel="apple-touch-icon" href="images/apple-touch-icon.png">
    <link rel="stylesheet" href="css/AddressBookDemo.css">
    <script>window.$ = window.jQuery = WLJQ;</script>
  </head>
  <body id="content" style="display: none;">
    <iframe class="iframe"
      src="http://demo.xomino.com/ronina/IBM/WorklightConnect14.nsf/xJQM.xsp">
    </iframe>
    <script src="js/initOptions.js"></script>
    <script src="js/messages.js"></script>
    <script src="js/AddressBookDemo.js"></script>
  </body>
</html>
```



Native应用

Native Apps

Platform-specific.
Requires unique expertise, pricy and long to develop.
Can deliver higher user experience.

Native Application

```
100101010101101001010  
0100101011101001001101  
0101010100100100101111  
001001100101010101010  
101010010101010101010  
010101111100000101010  
1010101001001010101010  
1010001111010100011110  
10100110101011110010  
1101111010001011001110
```

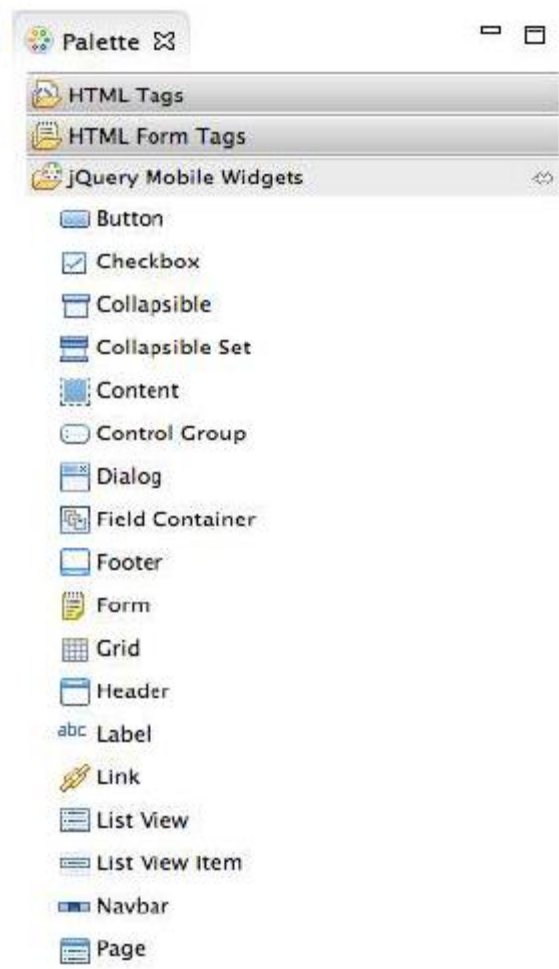
Device APIs

Downloadable



Domino Data Service

- REST API
- Internet标准协议
- Worklight控件



Your Choice ?



Q&A 答疑

讲义下载地址：<http://ibm.biz/BdxsDt>



1. Domino 8.5.3 中是否有 Mobile 主题?

我们建议 Domino 8.5.3 的用户从 IBM Passport Advantage Online 网站下载安装 Upgrade Pack 1,

http://www-10.lotus.com/ldd/ddwiki.nsf/dx/Getting_the_upgrade_pack_from_Passport_Advantage_ddxl853

或者从OpenNTF.Org下载扩展库Library: <http://extlib.openntf.org/>
无论是从哪个途径安装, 主题都已经被包含在Library中, 在不同的手机上, 主题的切换是自适应的。



2. Extension Library 如何安装到客户端?

从OpenNTF.org 下载 Extension Library, 安装包会包含详细的说明, 其实跟在 Eclipse 中安装插件是一样的。



3. IBM Worklight 能否整合在 Domino Designer 里

虽然 IBM Worklight 是基于 Eclipse 开发环境的, 但是目前还没有在 Domino Designer 中嵌入 Worklight 的相关文档



4. XPages 开发的 Mobile 应用可以打包成手机 app 供用户下载吗？

是的，可以通过 Worklight 打包使用 Domino Designer 开发的 Xpages 应用，面向用户提供安装包下载。



5. 有相关简单Xpages应用范例么？

请参考 Domino 9.0.1 的 Teamroom 或者 Discussion 模板，可以直接通过手机访问 URL 查看效果。

OpenNTF.org 的 Extension Library 页面也有应用范例可供参考。



6. XPages主题是自适应的吗？例如手机与平板的屏幕大小是不同的

是的，Xpages主题是自适应的，除非指定OneUI主题。可以在手机和平板上根据屏幕大小展现不同的效果。
对于平板，更倾向于开发 **Browser** 应用。



7. IBM Worklight 可以调用NSF么？

可以，相当于Worklight在基于 Xpages 的应用外面加了一个壳，调用NSF的URL被隐藏起来，用户不会意识到他们在通过浏览器访问NSF。



Jovi Wang的Xpages开发视频系列:

<http://pan.baidu.com/s/1hqIaX16>

提取密码:n8u1

欢迎加入QQ群 : Lotus爱莲说 (53392741) 参与讨论

XPAGES 开发演示

BY JOVI WANG

