



Lotus Connections – The WebSphere Perspective UK WebSphere User Group - 17<sup>th</sup> September 2008 Adrian Spender, Karim Heredia – Lotus Connections Development



# Agenda

Lotus Connections

- Introduction to Lotus Connections
- Deployment
- APIs and extensions



#### **IBM's internal innovations**





Increasingly, workers of all roles and ages find themselves "virtual"

- 83% of IT Executives consider their company to be a virtual workplace (up from 57% in 2006)
- 91% of employees work in locations other than headquarters
- The number of virtual workers has increased by 800% from 2000-2005







Source: Building the Successful Virtual Workplace, 2007, Getting a Grip on Collaboration, 2005 Nemertes Research Inc.

We connect more often across the Web than across the table

## Demand for growth drives social software adoption

- Survey show innovators grow faster
- 75% of CEOs indicated that collaboration was important to innovation
- Top sources of innovation were business partners, employees and customers
- To thrive in this environment companies must:
  - Weave communities into the product development process
  - Execute those innovative ideas quickly



"Six months after a management consulting firm lost a lucrative contract with a large financial institution, it learned that another internal group had worked on a project with the prospective client and had in-depth knowledge of its business operations...."

-Kate Ehrich, IBM Research

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## Changing demographics



Within the next seven years, **33 million people** in Japan (26% of the population) will be **over 65 years old** 

In the year 2000, there were more people **receiving pensions** in Italy than **people working** (22 versus 21 million)

Source: Beazley, et. al, *Continuity Management,* Mackay, Alan. "Mature Age Workers: Sustaining Out Future Labor Force." An Ageless Workforce - Opportunities for Business' Symposium Conference Paper. August 27, 2003. www.ageing.health.gov.au/ofoa/wllplan/aawpapers.htm, Time to act quickly on aging." The Japan Times Online. August 23, 2002 www.japantimes.co.jp/cgi-bin/getarticle.pl5? ed20020823a1.htm, A. Paulli, "Pension systems and gradual retirement in Italy", September 2000, p.17.

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# How to find the right people and information?

- Work environments are more complex
- Work environments are more disconnected
- More interactions with unknown people



Lotus Connections







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## Need to improve business execution and reuse best practices

- Most work today involves dynamic processes being delivered by dispersed groups of people
- Making business decisions involves more than just traditional IT applications
  - ≅ Emails / Faxes / Forms
  - Instant Message Chats
  - ≅ Team Discussions
  - Web Pages, Documents, Presentations, or Spreadsheets
  - ≅ Web Conferences
- People need simple ways to structure adhoc activities and harvest best practice templates for the future



Adapted from: \*C. Hill, R. Yates, C. Jones, S. Kogan, *Beyond predictable workflows: Enhancing productivity in artful business processes*, IBM Systems Journal, Vol. 45, No. 4, 2006, http://www.research.ibm.com/ journal/sj/454/hill.html



## If these are the needs, what's the solution?

#### **Need for Innovation**



#### **Need to Connect**



Enterprise social software will be the biggest new workplace technology success story of this decade. 30% of enterprises will openly sponsor internal...social sharing spaces to help employees find others with similar interest, skills, backgrounds and experiences.

- Gartner, " Predicts 2007 - Big Changes Ahead in the High Performance Workplace", Dec 5, 2006







#### Lotus Connections social software



Lotus Connections social software for business **empowers you** to be more **innovative** and helps you **execute** more quickly by using dynamic networks of **coworkers**, **partners** and **customers**.





## Lotus Connections provides five key services



#### **Profiles**

Quickly find the people you need by searching across your organization using keywords that help identify expertise, current projects and responsibilities



#### Communities

Create, find, join, and work with communities of people who share a common interest, responsibility, or area of expertise



#### Blogs

Use a weblog to present your idea and get feedback from others; learn from the expertise and experience of others who blog



#### Dogear

Save, organize and share bookmarks; discover bookmarks that have been qualified by others with similar interests & expertise



#### Activities

Organize your work, plan next steps, and easily tap your expanding professional network to help execute your everyday deliverables, faster



## Lotus Connections at work in IBM





Connecting and empowering IBMers so they can respond faster using innovative solutions



## Lotus Connections functional topology





## Self contained pilot



- Supports only Windows 2003.
- Installation installs WAS 6.1.0.3 and DB2 Express.
- No LDAP is installed, and no integration with existing LDAP.
- Registered users are imported into the Self Contained Pilot via a text file.
- Maximum of 100 concurrent users.
- Support for migrating data from this pilot to a production deployment.



## Small system / pilot deployment



 Appropriate for deployment to workgroup, small business, small deployment



### **Clustered system**



Appropriate for enterprise deployments



### Complex large deployment topology





## Lotus Connections APIs

## Simple

- Easy to learn REST-style HTTP based API with XML, Javascript and HTML formatted output
- Standard Web 2.0 web development methodology
- ≅ Atom style is "follow the links"

#### • Open

- ≅ Access for all users to all functionality, regardless of client or platform
- ≅ Based on Open standards: XML, HTTP, JavaScript, atom feeds

#### Extensible

- ≅ Leverages open standards extensibility (XML, HTTP, atom feeds, etc...)
- Sed internally by our own plugins, mashups and partners



### What is Atom?

- An open, standard means for creating, managing and accessing Web resources
- Entries are created in *collections*
- Resources presented as *feeds*
- Feeds consist of *entries*
- Typically used as Web feeds for *blogs* etc. via subscription
- Supported by IBM, Google, Sun, ...



## What is Atom?

- A pair of related standards
  - Atom Syndication Format (ASF): Defines format for syndication of Web content, typically via feeds
  - Atom Publishing Protocol (APP, AtomPub): Defines ways to add and edit this Web content
- Uses HTTP protocol as transport
- Uses XML syntax as format
- Various language libraries/helpers available for parsing Atom feeds and creating publishing protocol requests
- Utilized by all Lotus Connections services as the API
- Used by Lotus Connections "clients"
  - Solution ≤ Notes 7/8, Sametime 7.5, Portlet, Microsoft Office



# Integration with Notes, Sametime and Portal



**IBM Lotus Notes** Powerful activity sidebar, Search Profiles, Dogear databases and documents



**IBM Lotus Sametime** Save chats to Activities or

Communities, Profiles plug-in





#### IBM WebSphere® Portal

Multi-service Portlet allows access to all 5 Connections services from your portal pages and sites



### Integration with Microsoft



Microsoft Outlook Search profiles, store emails to activities

#### **Microsoft Communications Server**

Add presence awareness and additional features to profiles





Upload files to Activities, search profiles, create a blog, and make Activity To Do's



## Additional extensions

- Home Page and Profiles widgets
  - Based on the IBM iWidget standard
  - Build and add widgets to extend HP and Profiles

# Business card

- Add additional data sources into the business card
- Expose the business card in other applications
- Snippets
  - Expose Lotus Connections data in other web applications
- Lot's more
  - The full power of our APIs at your disposal



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utonomic computing	developerWorks offers this page to provide an overview of Java technology basics within the overall context of the language. It includes starting points for further investigation in the form of links to relevant introductory developerWorks content, other educational resources, and IBM downloads and products.	• Eclipse.org
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iva™ technology	What is Java technology?	• Java SE
New to Java™	Java technology is both a high-level, object-oriented programming language and a platform. Java technology is based on the concept of a single Java virtual machine	• Java EE
technology	(JVM) a translator between the language and the underlying software and hardware. All implementations of the programming language must emulate the JVM, enabling Java programs to run on any system that has a version of the JVM.	• Java ME
Downloads & products		<ul> <li>Java Community Process (JCP)</li> </ul>
Open source projects	The Java programming language is unusual because Java programs are both compiled (translated into an intermediate language called Java bytecode) and interpreted (bytecode parsed and run by the JVM). Compilation occurs once, and interpretation happens each time the program runs. Compiled bytecode is a form of	Java certification
Technical library	optimized machine code for the JVM; the interpreter is an implementation of the JVM.	• XP.org
Training	The Java platform is a software-only platform that runs on top of various hardware-based platforms. It comes in three versions (see Multiple editions of the Java	1.1
Forums & community	platform, below). It consists of the JVM and the Java Application Programming Interface (API), a large collection of ready-made software components (classes) that	Special offers
Events	ease the development and deployment of applets and applications, including robust, secure, and interoperable enterprise applications. It spans everything from basic objects, to networking and security, to XML generation and Web services. The Java API is grouped into libraries of related classes and interfaces; the libraries are	
nux	known as packages.	Webcasts: IBM softwaredevelo
pen source	Along with the Java API, every full implementation of the Java platform includes:	tools and resou
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DA and Web services	<ul> <li>Standard mechanisms for deploying applications to users.</li> </ul>	New eval softw demos, & more
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ML	develops and revises Java technology specifications, reference implementations, and technology compatibility kits. In August 2006, Sun Microsystems announced its	Technical Brid
eedback	intention to open source the Java platform in stages and began soliciting feedback on the best approaches for licensing and governance.	→ More offers
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<b>ava™ technology</b> New to Java™ technology	Java technology is both a high-level, object-oriented programming language and a platform. Java technology is based on the concept of a single Java virtual machine (JVM) a translator between the language and the underlying software and hardware. All implementations of the programming language must emulate the JVM,	• Java EE • Java ME	
Downloads & products	enabling Java programs to run on any system that has a version of the JVM.	<ul> <li>Java Community Process (JCP)</li> </ul>	
Open source projects Technical library	The Java programming language is unusual because Java programs are both compiled (translated into an intermediate language called Java bytecode) and interpreted (bytecode parsed and run by the JVM). Compilation occurs once, and interpretation happens each time the program runs. Compiled bytecode is a form of optimized machine code for the JVM; the interpreter is an implementation of the JVM.	Java certification     XP.org	
Training Forums & community Events	The Java platform is a software-only platform that runs on top of various hardware-based platforms. It comes in three versions (see <u>Multiple editions of the Java</u> <u>platform</u> , below). It consists of the JVM and the Java Application Programming Interface (API), a large collection of ready-made software components (classes) that ease the development and deployment of applets and applications, including robust, secure, and interoperable enterprise applications. It spans everything from basic	Special offers	
inux Ipen source	objects, to networking and security, to XML generation and Web services. The Java API is grouped into libraries of related classes and interfaces; the libraries are known as packages.	Webcasts: IBM softwaredevelo	pme
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OA and Web services /eb development	<ul> <li>Development tools for compiling, running, monitoring, debugging, and documenting applications.</li> <li>Standard mechanisms for deploying applications to users.</li> <li>User interface toolkits that make it possible to create sophisticated graphical user interfaces (GUIs).</li> </ul>	PowerPack New eval softw demos, & more	
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ML	Java technology was developed by Sun Microsystems. The Java Community Process (JCP), an open organization of international Java developers and licensees, develops and revises Java technology specifications, reference implementations, and technology compatibility kits. In August 2006, Sun Microsystems announced its	complimentar Technical Brie	
eedback	intention to open source the Java platform in stages and began soliciting feedback on the best approaches for licensing and governance.		
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ISV resources alphaWorks (emerging	Why is Java technology important?	About the Java	
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IBM Redbooks IBM Press books	Scaling up, the language is an ideal framework for server-side Web programming. Because it was designed level of security when operating over the Internet. In essence, Java technology extends a user's computing Docted. Between the Web.	Open Source Code Analyzers in Java	2
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#### **Questions?**



## Learn more about how Lotus Connections can work for you



#### Latest product info, research, podcasts, and more

http://www.ibm.com/lotus/connections

Product demonstration http://docs.dfw.ibm.com/lotusconn/

#### IBM developerWorks®

http://www.ibm.com/developerworks/lotus/products/connections/

#### **Product documentation**

http://www.ibm.com/developerworks/lotus/documentation/connections/

#### Lotus Greenhouse – experience the software 'live'

https://greenhouse.lotus.com/home/login.jsp

#### Synch.rono.us blog – keep up to date on Social Software activities @ IBM!

http://synch.rono.us/social/blog.nsf

