

# Making System z Sexy Again with Social and Collaboration Software

*Tuesday, August 9, 2011: 4:30 PM-5:30 PM*

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*Client Technical Professional for  
Collaboration Solutions on System z*



# Agenda

- **Importance of becoming a social business**
- IBM gets social on System z with IBM Connections
- Getting started with implementing social software on System z

People transforming the **way they interact and the way they purchase**. This transformation presents new challenges



Marketers: **less control over their brands**

Product development: **deliver new products and services quickly and at lower cost**

Human resources: **difficulty increasing worker effectiveness**

Organizations: **paralyzed by security and governance concerns**



# Reinvent Relationships

**Business to  
Customer**

**Peer to  
Peer**

**Government to  
Citizen**

**Business to  
Business**

**Business to  
Employee**



**Social Transformation**

A large, colorful, abstract graphic representing social transformation. It features concentric, overlapping rings in shades of blue, purple, red, and yellow, creating a sense of depth and movement. The text "Social Transformation" is centered within the rings in a bold, orange font.

**Exceptional Web and Work Experiences**

# What does a Social Business look like to different business leaders?

## A Social Business

Builds trusted relationships and increases sales through relevant messages across all channels  
Drives brand advocacy through communities and dialog

Shares insights to generate breakthrough ideas and speeds time to market, gaining market insight and readiness

Reaches out to professional networks to respond faster with business decisions to new opportunities, saving money

### Entry Point



### Traditional Business

'Push' marketing via traditional channels  
Control over brand image and brand communication

**Deepen client relationships**

**Drive operational effectiveness**

**Workforce optimization**

Invest in R&D  
Generate new ideas internally  
Test ideas in market

Email and phone based communication  
Knowledge kept in silos

**Marketing,  
Customer  
Service**

**Product  
& Service  
Development**

**Operations,  
Human  
Resources**

# Get Social With Your Employees

Problem	Solution
Doing more with fewer employees?	Create and share content with the confidence of an end-to-end content management. <b>Reduce duplication!</b>
Remote workforce?	<b>Tap the expertise</b> of your network and collaborate instantly from within existing applications
Communication across organizations?	<b>Assemble special project teams</b> quickly from top talent from across the organization using profile tagging Keep track of what's happening with your tasks and projects with <b>activities and status updates</b>
Lower travel costs	Effective communication = fewer meetings Integrate <b>Sametime web meetings</b>

# Get Social With Your Customers

Problem	Solution
Reduce marketing costs	<b>Create customer communities</b> to allow customers to interact with your brand. Encourage <b>key spokespeople</b> to blog
Resolve customer challenges faster	Provide <b>live chat</b> on your website
Foster relationships with top customers	<b>Virtual customer councils</b> with forums and e-meetings Allow customer to <b>tag and rate</b> content to gather their feedback
Faster product development	Get customer's the products they ask for by creating <b>external communities</b>



# Power of Social Networks and Web 2.0

*Ready for the Enterprise*



## Corporate Social Network Platform



**Analytics & Compliance & APIs**



## IBM gets social on System z with IBM Connections

# IBM Connections



## Profiles

Find the people you need



## Communities

Work with people who share common roles and expertise



## Files

Post, share, and discover documents, presentations, images, and more



## Wikis

Create web content together



## Activities

Organize your work and tap your professional network



## Forums

Exchange ideas with, and benefit from the expertise of others



## Home page

See what's happening across your social network



## Social Analytics

Discover who and what you don't know via recommendations



## Micro-blogging

Reach out for help your social network



## Bookmarks

Save, share, and discover bookmarks



## Blogs

Present your own ideas, and learn from others

# New in IBM Connections 3.0.1



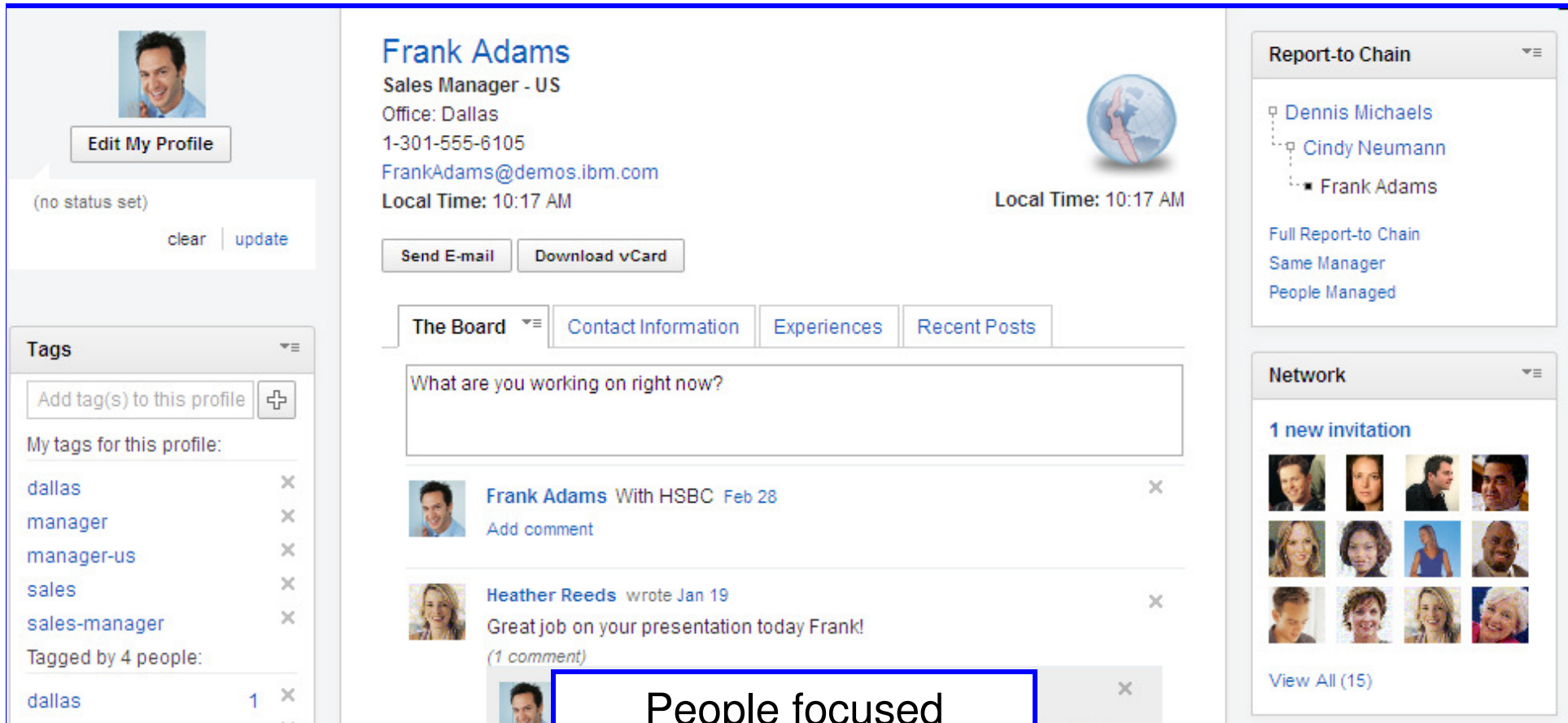
## Media Gallery

- Share pics and video online
- More compelling **web experience**

## Ideation Blogs

- Gather **structured feedback** on ideas
- **Promote** best reviewed ideas

# Leverage Knowledge...Not Just Documents



The screenshot displays a user profile for Frank Adams, a Sales Manager in the US, located in Dallas. The profile includes contact information (phone: 1-301-555-6105, email: FrankAdams@demos.ibm.com) and a local time of 10:17 AM. Navigation tabs include 'The Board', 'Contact Information', 'Experiences', and 'Recent Posts'. A 'Tags' sidebar on the left lists tags like 'dallas', 'manager', and 'sales'. A 'Report-to Chain' sidebar on the right shows a hierarchy from Dennis Michaels to Cindy Neumann to Frank Adams. A 'Network' sidebar shows 1 new invitation. The main content area features a status field 'What are you working on right now?' and a list of recent posts, including one by Frank Adams with HSBC and a comment by Heather Reeds.

**Frank Adams**  
Sales Manager - US  
Office: Dallas  
1-301-555-6105  
FrankAdams@demos.ibm.com  
Local Time: 10:17 AM

[Send E-mail](#) [Download vCard](#)

**The Board** | [Contact Information](#) | [Experiences](#) | [Recent Posts](#)

What are you working on right now?

**Tags**  
Add tag(s) to this profile +  
My tags for this profile:  
dallas ×  
manager ×  
manager-us ×  
sales ×  
sales-manager ×  
Tagged by 4 people:  
dallas 1 ×

**Report-to Chain**  
Dennis Michaels  
Cindy Neumann  
Frank Adams  
Full Report-to Chain  
Same Manager  
People Managed

**Network**  
1 new invitation  
View All (15)

People focused  
navigation and  
interface



# Encourage Adoption

- Stay in the tools you know!
- Embed expertise when and where you need it
- Take professional networks on the road – Out of the box mobile ready



- Enabling rich integration with IBM and vendor products and solutions

## Demo of IBM Use of Social


*All data can be served from System z*

# Connections and WebSphere Portal

- Portlets that integrate with **Activities, Blogs & Bookmarks, Profiles, Wikis and Tag Clouds**
- Provides **consolidated** list of content from each of the services
- **Compact size**, can be deployed as “home page” portlets
- **Easy navigation** to content details for further information and to take additional actions



**Blogs Summary**  
Blogs  
1 - 5 of 6 Page 1 | 2  
Sort By: [Date](#) | [Title](#) | [Most Recommendations](#) | [Most Comments](#)

-  **Working with a Smart Planet**  
Created By: [Frank Adams](#) | Updated: Tuesday 5:56 PM
-  **Be Careful Florida!**  
Created By: [Frank Adams](#) | Updated: Aug 5
-  **Greener Cars**  
Created By: [Frank Adams](#) | Updated: Aug 5
-  **Think about that coffee cup**  
Created By: [Frank Adams](#) | Updated: Aug 5
-  **Warehousing TIP 1**  
Created By: [Ted Amado](#) | Updated: Aug 3

Show 5 | 10 | 15 | 20 | 25 items per page Jump

**Activities Summary**  
Activities  
1 - 5 of 9 Page 1 | 2  
Sort By: [Last Updated](#) | [Due Date](#)

-  **Renovations Environmental Impact Assess**  
Created By: [Jasmine Haj](#) | Updated: Aug 5 | Due: Sep 30
-  **3 Day Event Planning**  
Created By: [Jasmine Haj](#) | Updated: Aug 5
-  **Project Meetings**  
Created By: [Jasmine Haj](#) | Updated: Aug 5
-  **Renovations Award Event**  
Created By: [Frank Adams](#) | Updated: Aug 3
-  **Review Business Guidelines**  
Created By: [Betty Zechmann](#) | Updated: Aug 3

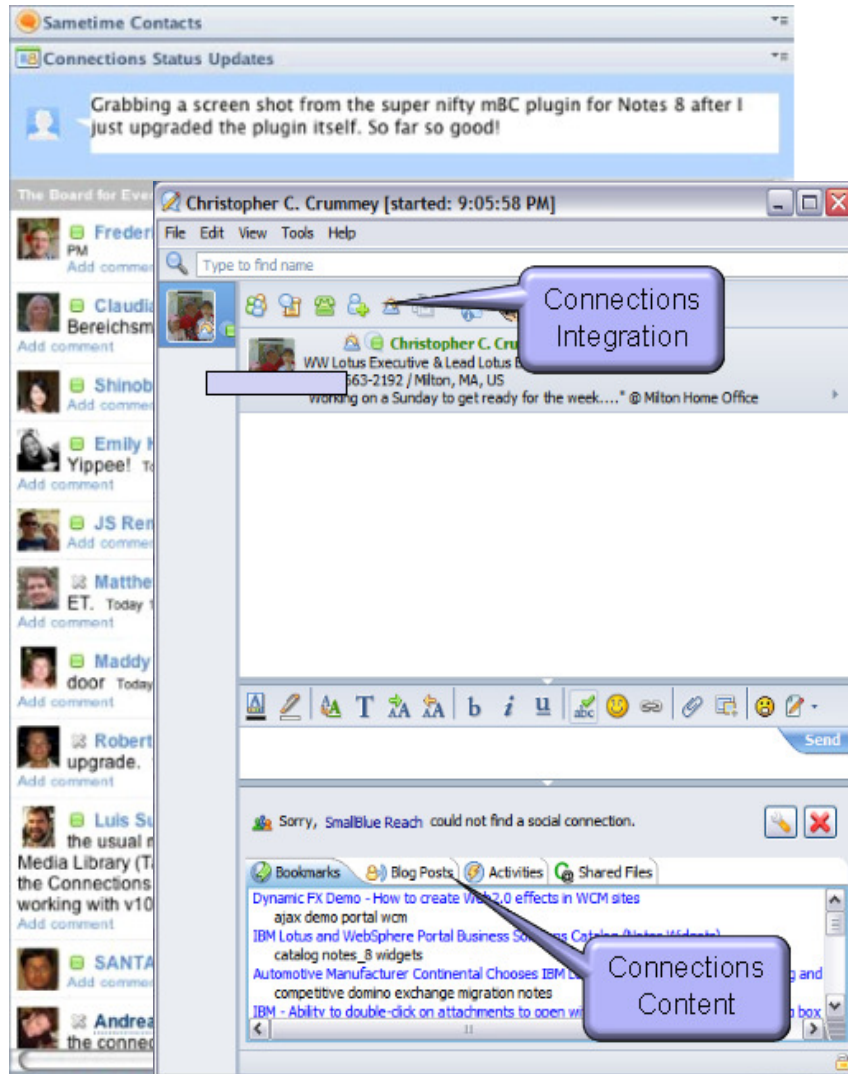
Show 5 | 10 | 15 | 20 | 25 items per page Jump

**Bookmarks Summary**  
Bookmarks  
1 - 5 of 44 Page 1 | 2 | 3 | 4 | 5 ... 9 Previous | [Next](#)  
Sort By: [Date](#) | [Popularity](#)

- Federal Chief Financial Officers Council**  
Created By: [Ron Espinosa](#) | Updated: Aug 3
- CFO.com - News and Insight for Financial Executives**  
Created By: [Ron Espinosa](#) | Updated: Aug 3
- IBM social software for business - Lotus Connections**  
Created By: [Ron Espinosa](#) | Updated: Aug 3
- IBM social software for business - Lotus Connections**  
Created By: [Ted Amado](#) | Updated: Aug 3
- IBM social software for business - Lotus Connections**  
Created By: [Betty Zechmann](#) | Updated: Jul 31

Show 5 | 10 | 15 | 20 | 25 items per page Jump to page 1 of 9 Previous | [Next](#)

# Plugins for Notes/Outlook and Sametime

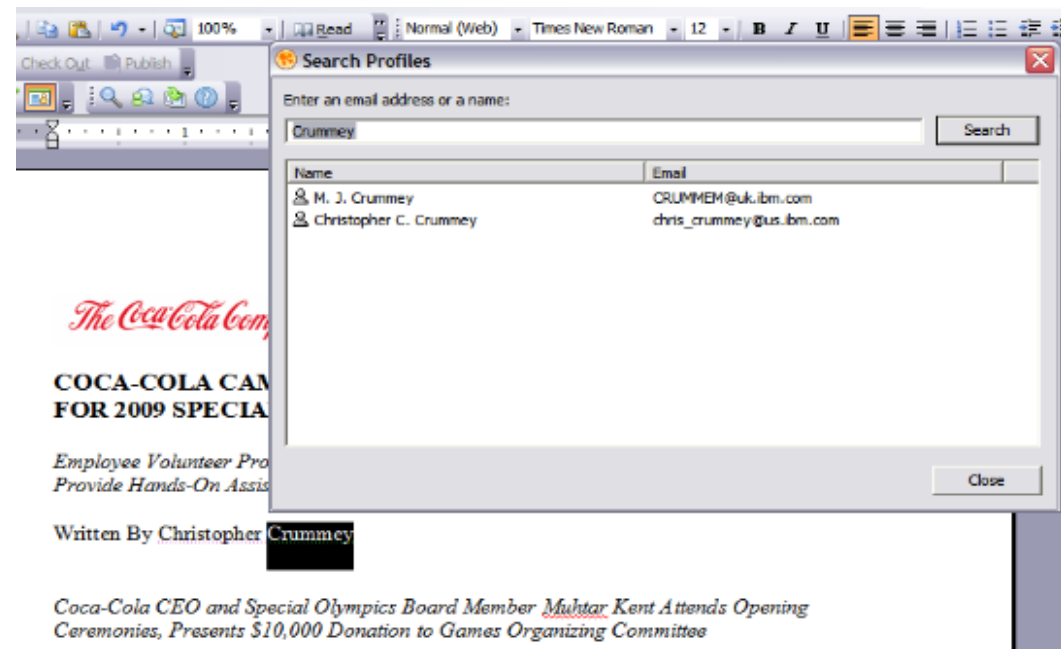


- Notes plugins for **social feeds, activities, files, bookmarks, microblogging**
- **Drag and drop** from Notes/Outlook into Connections
- Many features available in Sametime chat window



# Symphony/Office/Sharepoint/Explorer

- Add files to an activity via **Windows Explorer**
- Connections business cards, Profiles search in **Sharepoint**
- Publish Office docs to **Blogs**
- Office: Highlight name and get automatic **Profiles lookup**
- Office: One click publish to **Activities**



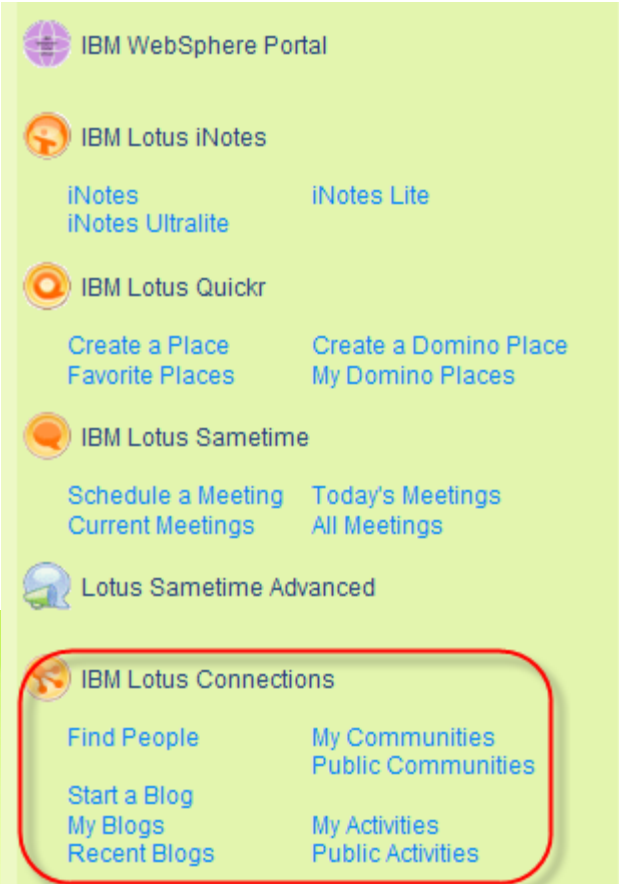
# Lotus Greenhouse

- Find **additional plugins and widgets** on Lotus Greenhouse
- Access and **use** full suite of collaboration software (Portal, iNotes, Quickr, Sametime, Connections)
- <http://greenhouse.lotus.com>



*Lotus Greenhouse Where Ideas come to grow*

**Lotus Greenhouse** is a live community website where you can use Lotus Collaboration Products for free! Join the community to exchange ideas, collaborate with others, and share information on innovation and collaborative products.



IBM WebSphere Portal

IBM Lotus iNotes

iNotes  
iNotes Ultralite

iNotes Lite

IBM Lotus Quickr

Create a Place  
Favorite Places

Create a Domino Place  
My Domino Places

IBM Lotus Sametime

Schedule a Meeting  
Current Meetings

Today's Meetings  
All Meetings

Lotus Sametime Advanced

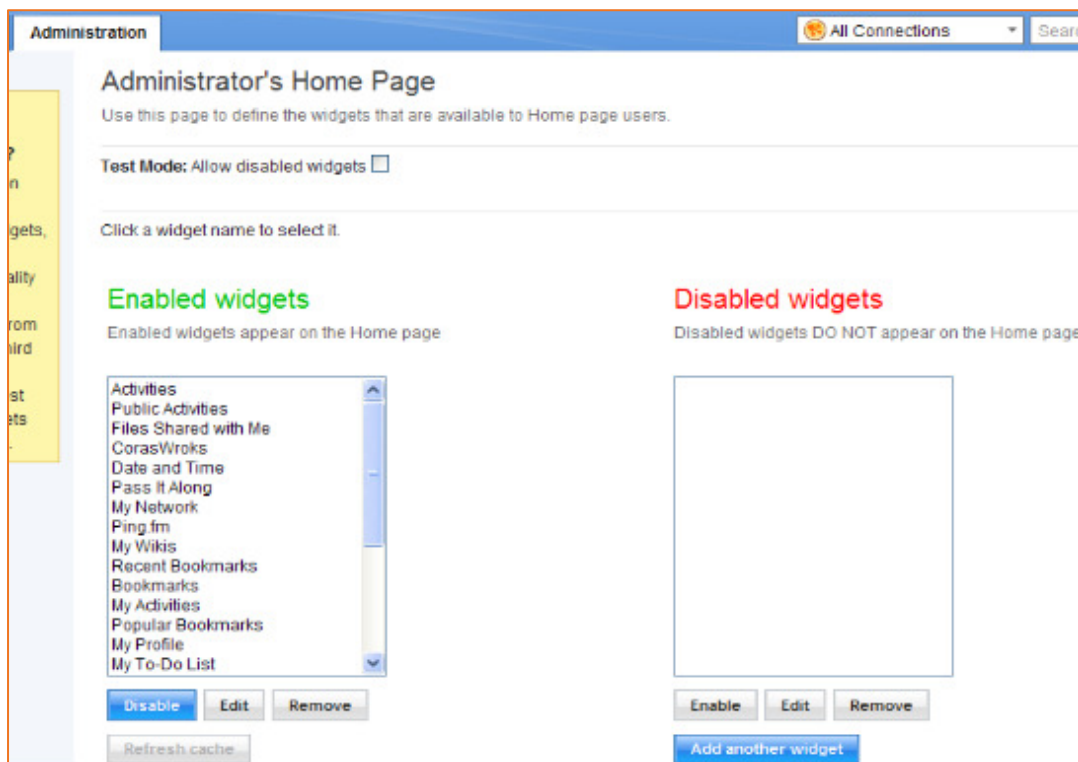
IBM Lotus Connections

Find People  
Start a Blog  
My Blogs  
Recent Blogs

My Communities  
Public Communities  
My Activities  
Public Activities

# Administration UI

- **Customize** Connections interface
- Add/remove content (widgets)
- **Manage content** in blogs, wikis, etc and flag content



- Control **access** of individual users
- **Limit file upload / download limits**

# Integrated Solutions Console

- Restrict user access to particular feature through ISC
- Familiar functionality for WAS administrators
- Role based access can be given to everyone or particular LDAP groups or users

**Enterprise Applications**

[Enterprise Applications](#) > [Blogs](#) > Security role to user/group mapping

Security role to user/group mapping

Each role that is defined in the application or module must map to a user or group from the domain user registry.

☒ ☐

Select	Role	Everyone?	All authenticated?	Mapped users	Mapped groups
<input type="checkbox"/>	person	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/>	everyone	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	admin	<input type="checkbox"/>	<input type="checkbox"/>	FAdams	
<input type="checkbox"/>	search-admin	<input type="checkbox"/>	<input type="checkbox"/>	FAdams	
<input type="checkbox"/>	widget-admin	<input type="checkbox"/>	<input type="checkbox"/>	FAdams	
<input type="checkbox"/>	reader	<input checked="" type="checkbox"/>	<input type="checkbox"/>		



## Built-in Usage Stats

- Track usage of all Connections features individually
- Numbers can be utilized to **increase product adoption** and plan for proper **system sizing**
- Use scripts to write usage output to files (keep a history)
  - Statistics in .CSV format for use in spreadsheets

### Profiles Metrics

As of: 6/15/11 2:55 PM

Total number of employees	22
Number of employees in the profiles database	
Number of employees who have updated their background	3
Number of employees in the profiles database who have updated their background	
Number of employees with a picture supplied	7
Number of employees in the profiles database who have supplied a picture	

# Compliance and Auditability

- Enable the capability to **track all data changes** in all Connections components
- Enable the ability to **track key words or phrases** even when content has been deleted or updated
- Fully **compliant with U.S. Federal government regulations** for accessibility



***Value = Boost productivity while meeting regulations***

## Getting started with implementing social software on System z

# Security of Increasingly Crucial Data

- Securing data
- Proximity to data
  - Never have to leave the hardware
  - Multi tier applications on same box
  - Web server > Portal > Data resources
  - **Reduces intrusion points!**
- Access to sensitive host applications
- **All strengths of System z!!**



# Leverage Existing Skill Sets

## **WebSphere** software

- All products run as WebSphere Application Server applications
- Does not require additional licensing for WAS

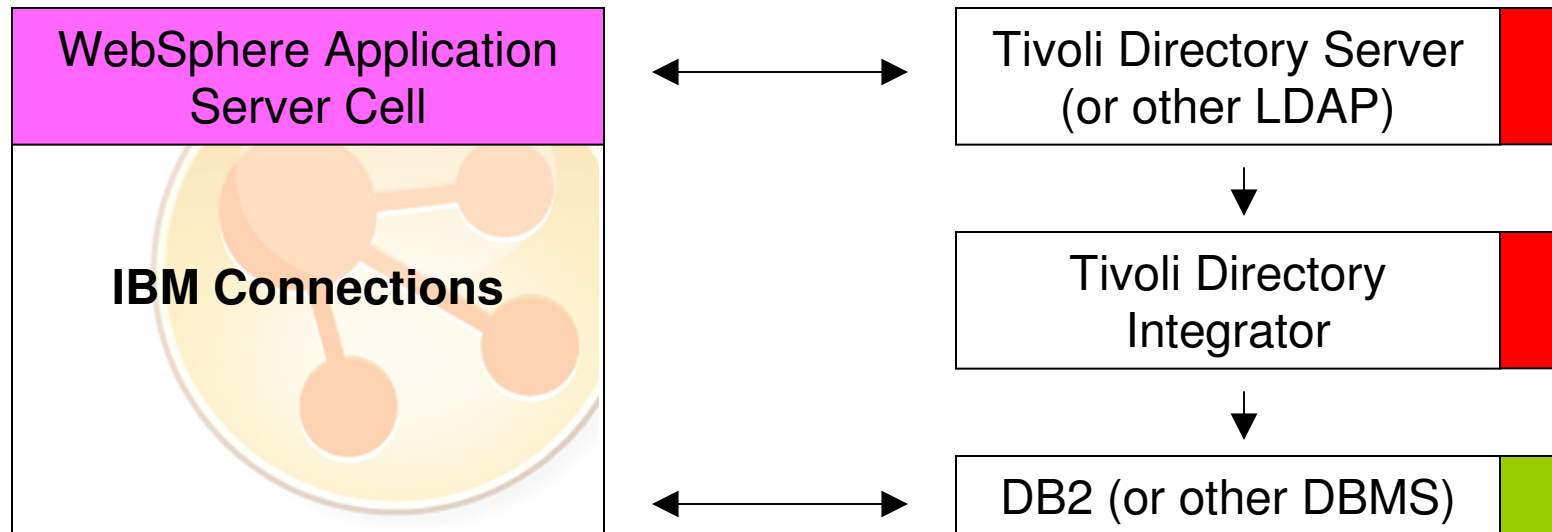


- IBM Connections requires a database back end
- DB2, Oracle, SQL Server, Derby, etc

## **Tivoli** software

- LDAP server required (Tivoli Directory Server, Active Directory, etc)
- IBM Connections utilizes Tivoli Directory Integrator for keeping LDAP and database in sync

# High Level Connections Architecture



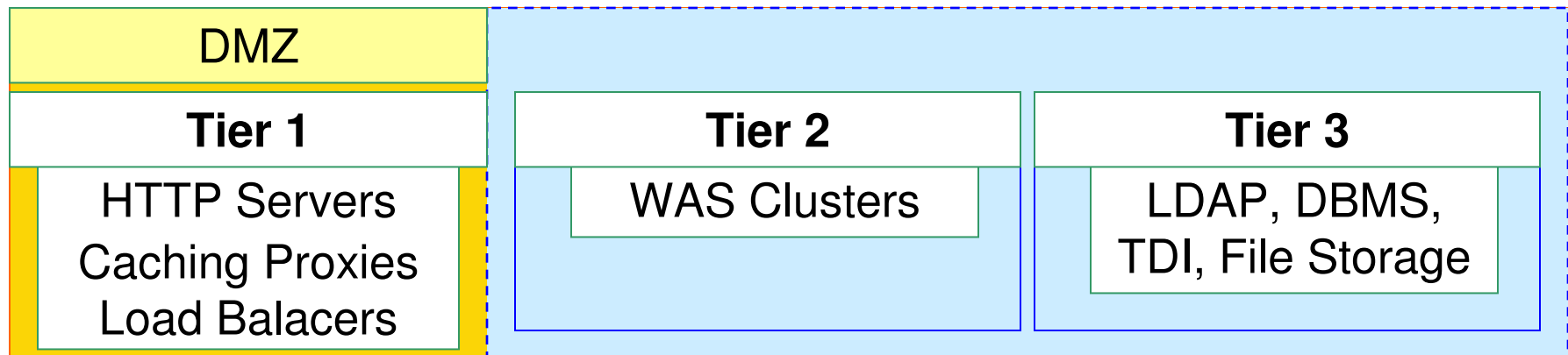
- TDI syncs Connections users from LDAP to DB2
- Connections app uses WAS security to authenticate users
- License for TDI and DB2 included with Connections
- Preferable to deploy TDI and DB2 on separate Linux image



# Architecting for Volume and Availability

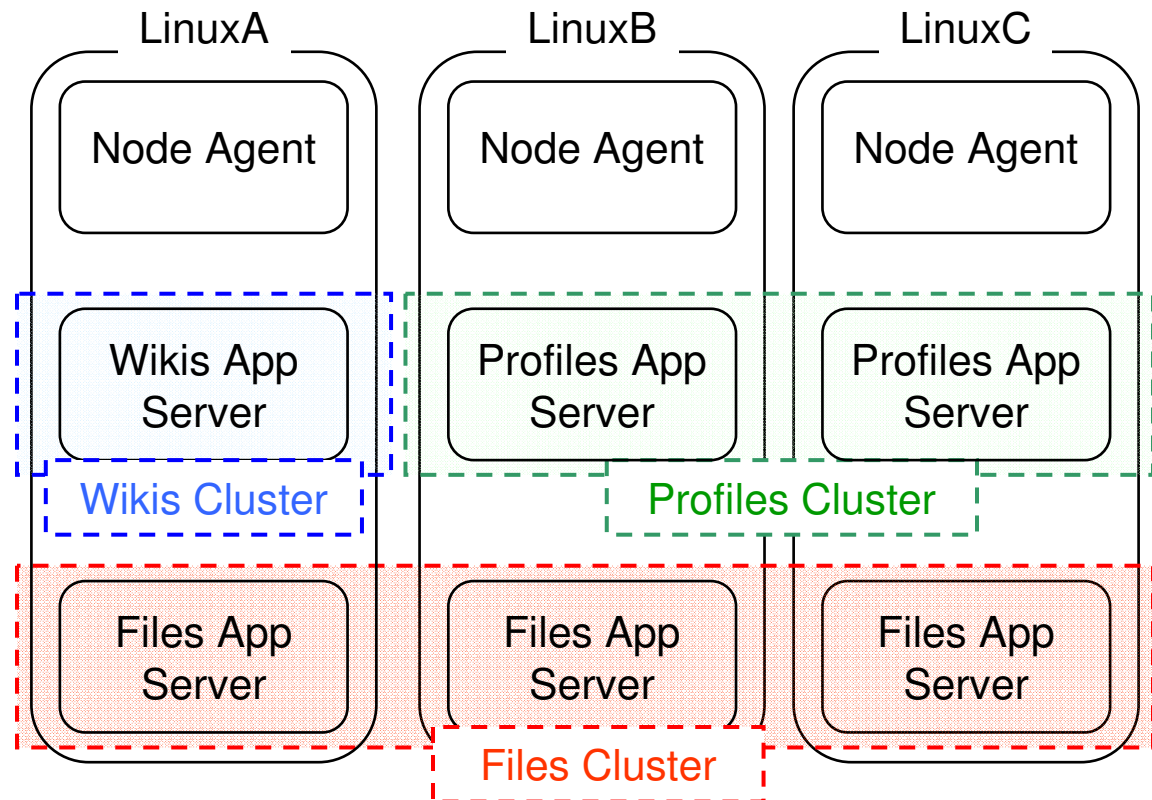
## *Tier 1 Web Front Ends*

- IBM Connections is a typical 3 tiered web application
- **Tier 1** – Accessible to internet if external facing site
  - Load balancers / http servers
  - 70% of traffic is from feed readers that can be serviced by caching proxies
  - Reduce load on WAS tier 2

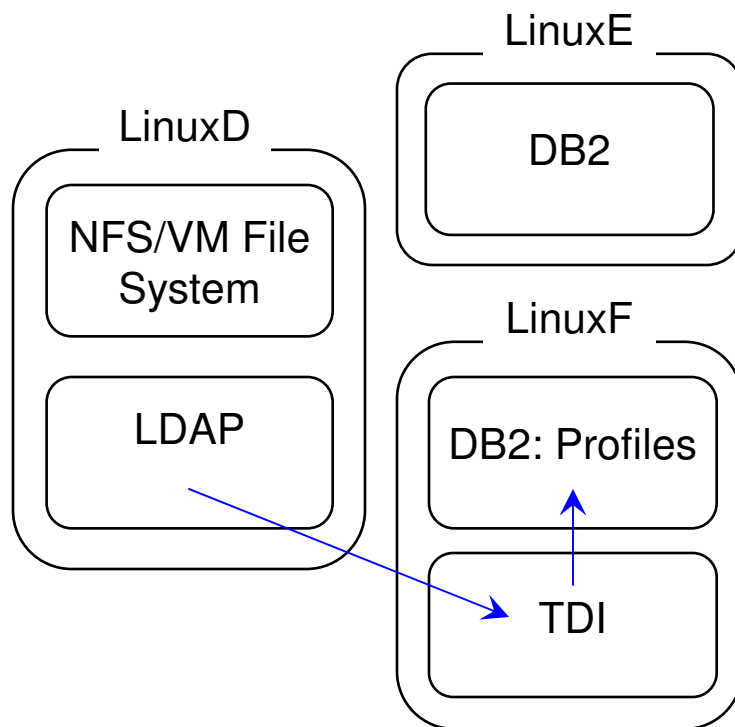


## Tier 2 – WebSphere Application Server

- Connections applications run in WAS clusters
- **Small deployment** = All apps in 1 cluster
- **Medium deployment** = Apps grouped into clusters
- **Large deployment** = Each application its own cluster
- Heavily used components can be **scaled individually**
- Create more cluster members for highly used functions
  - Clusters have 1 member by default
- Number of Linux VMs based on type of deployment and desired number of nodes



## Tier 3 – DBMS, LDAP, TDI, File Storage



- Backend data components
- Supports **many LDAP** server types
- Internal usage patterns in IBM indicate that the RDBMS is one of the **most heavily utilized** components of the architecture.
- **Activities, Blogs, Files, Wikis** use the file system
- Tivoli Directory Integrator is used to aggregate data into the PEOPLEDB (Profiles)
- LDAP/NFS may already exist in your infrastructure

# Planning for Disk Space & Memory

- Heavily **dependent on the number of users** and what functions each user is taking advantage of
  - IBM will **size for CPU** but not memory and disk
  - Best to start with “**systems requirements**” doc and adjust as adoption of product increases (**scalability**)
- File system storage
  - Stores search index, UI components, and uploads
  - Limit upload **file size, retention period** to save disk
  - Can be done via Connections admin panels
- **Relational DB** used to store Connections-specific data
  - Bookmarks, tags, etc
  - Can be part of existing instance or have its own instance

## More Planning Considerations

- How many user repositories do you have?
  - TDI can integrate **multiple directories** into one repository
  - Used for authentication and profile information
  - Profile database contains complete user community
- **Common file share** for Activities Blogs, Communities, Wikis and Files services
  - Can be done via NFS mount or linked VM directory
  - **Monitor** space usage
    - Disk can fill quickly when uploading files, creating blogs, etc

## Steps for a small deployment

- Install Rational Installation Manager (used for many products)
  - Start with **1.4.2 of RIM** rather than Connections provided version (no 64-bit!)
- Install WAS + maintenance
- Install DB2 and create instance
- Install Tivoli Directory Integrator and apply FP 5
- Enable WAS security by adding **LDAP as a federated repository**
- Create a linux user ID to run the Connections process
- Create the databases using the **database wizard** (GUI or silent)
- Populate the database using the **population wizard** (GUI or silent)
- Install IBM Connections code

### Install doc for small deployment

- [http://dwlhub.swg.usma.ibm.com/ldd/lotusdraftwiki.nsf/dx/Scenario\\_1\\_\\_Installing\\_Lotus\\_Connections\\_3.0\\_Small\\_Deployment](http://dwlhub.swg.usma.ibm.com/ldd/lotusdraftwiki.nsf/dx/Scenario_1__Installing_Lotus_Connections_3.0_Small_Deployment)



## Once Connections Is Running

- Sync **LDAP changes with DB2** using TDI
  - Allows new people in LDAP to use Connections
  - Changes in job role, title, etc will get reflected in Connections
    - [http://www-10.lotus.com/ldd/lcwiki.nsf/dx/Synchronizing LDAP directory changes with Profiles lc3](http://www-10.lotus.com/ldd/lcwiki.nsf/dx/Synchronizing_LDAP_directory_changes_with_Profiles_lc3)
    - Can resync **entire LDAP** or do a **changes-only** sync
- Create backups of **all components**
  - DB2, WAS, File System
- Monitor disk space usage
  - **Can increase quickly** when uploading documents

# References

- **Download Connections 3.0.1**
  - <https://www-304.ibm.com/support/docview.wss?uid=swg24029337&wv=1>
- **System requirements**
  - [https://www-304.ibm.com/support/docview.wss?uid=swg27021342&wv=1#Linux\\_Operating\\_Systems](https://www-304.ibm.com/support/docview.wss?uid=swg27021342&wv=1#Linux_Operating_Systems)
- **Greenhouse or LotusLive to try Connections**
  - <http://greenhouse.lotus.com>
  - [www.lotuslive.com](http://www.lotuslive.com)

# Goals

1. Show that social is important form of communication
2. Prove that System z is an excellent platform for implementing your social strategy

To continue discussion, contact me during or after Share:  
Paul Houde – [phoude@us.ibm.com](mailto:phoude@us.ibm.com)