Extending MITRE's Reach: Business Networking For & Beyond the Enterprise

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Enterprise 2.0: Social Business Applications and Platforms Boston, June 2010

Research Objectives

Deploy:

- Trusted business networking platform to enable networking and collaborating both within the enterprise and across customer and partner organizations
- Address:
 - Security
 - Information sharing policy
 - User management strategies
 - Relationship management
 - Organizational scaling
 - Business functional requirements
- Assess:
 - Enterprise value
 - New business models

The MITRE Corporation

- MITRE is a private, not-for-profit organization chartered to work in the public interest
- Founded in 1958 to provide engineering and technical services to the U.S. Air Force
- Currently manages 4 Federally Funded Research and Development Centers
 - Department of Defense
 - Federal Aviation Administration
 - Internal Revenue Service/Department of Veterans Affairs
 - Department of Homeland Security

Supports a broad and diverse set of sponsors within the U.S. government, as well as internationally



McLean, Va.

3

7,000 employees worldwide



Vision for MITRE Information Intranet

Sponsors and partners exploit all relevant mission information and services

ci&t



Business Goals for Social Networking

Capture & leverage relationships

- MITRE staff with partners, sponsors, industry, and academia
- Improve cross-organizational collaboration and networking
- Bring broader segments of community to bear on important sponsor problems
 - Vet position papers/benchmark with broad audiences
 - Enable new business models and federal processes
 - Deliver information to sponsors and partners
- Support internal social networking
 - Cross-department, cross-domain, cross-location

Enable people tracking

- Retirees, alumni, students/coops, consultants

Improve situational awareness

- Relationships, activities, topics, and groups

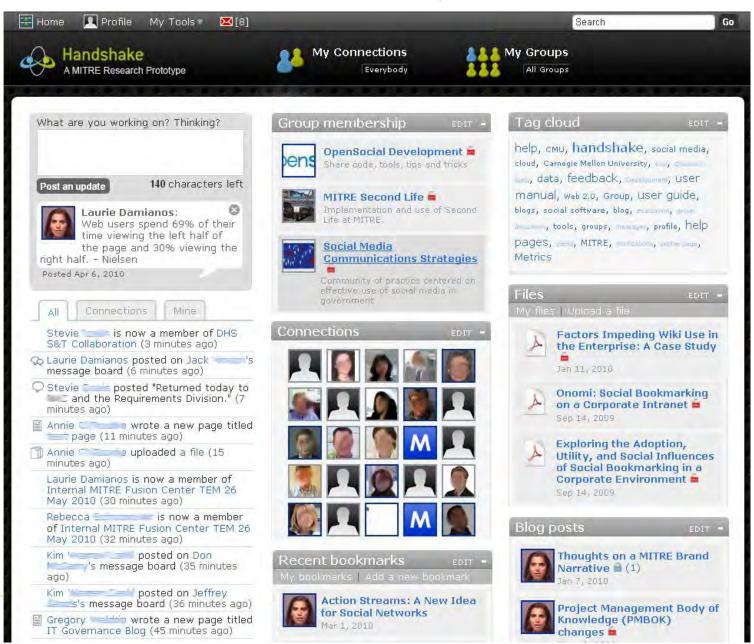
MITRE

Solution Criteria

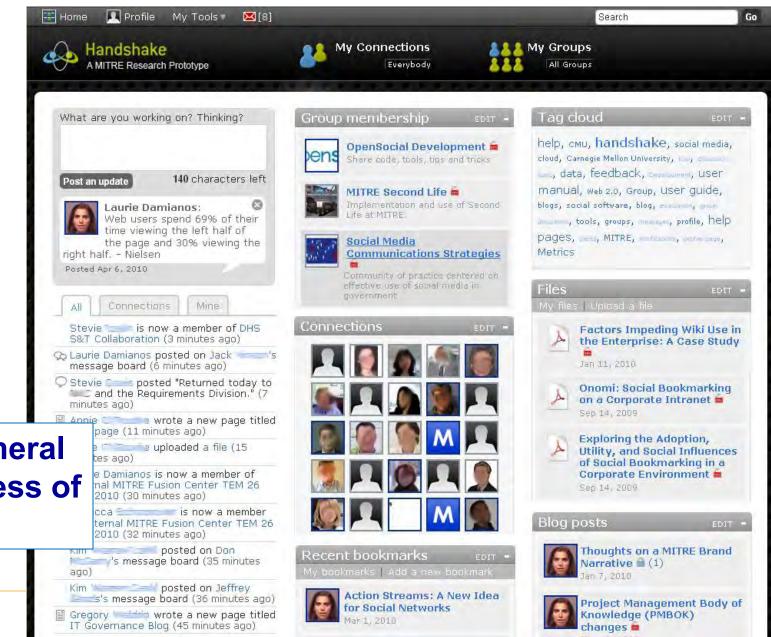
- Low cost
 - Inexpensive to explore for research
 - No licensing costs, unlimited users
- Customizable
 - Fully extensible, integrate-able, measurable, MITRE-izable
 - Single platform for internal and external use
- Easy to use
 - No training/similar to commercial soc net applications
 - Flexible yet understandable
- Trusted environment
 - Host on MITRE's servers
 - Fine-grained access control & invitation model

Selected Elgg, an open source platform

Handshake: Research Prototype



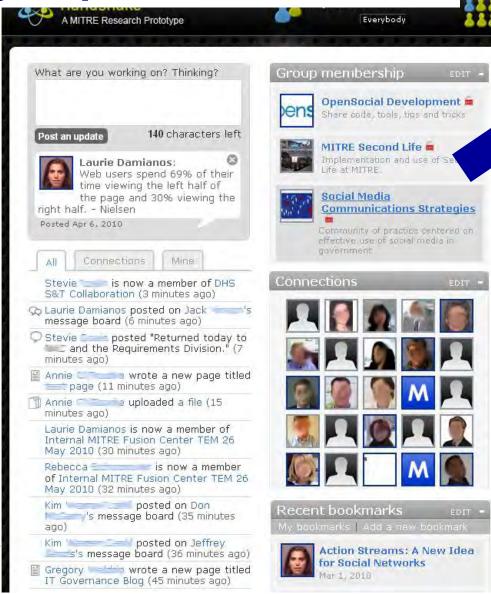
Home page provides access to... connections



...peripheral awareness of activity

Home page provides access to...

...groups & communities



Group membership



OpenSocial Development 📼

Share code, tools, tips and tricks



MV

MITRE Second Life

Implementation and use of Second Life at MITRE.



Social Media Communications Strategies

Community of practice centered on effective use of social media in government



pa

Me

Innovation at MITRE

Discussions about what we're doing to improve innovation in IT, KM and business processes through the institutionalization of an agile innovation management process and customer engagement.



All Things Agile 🖮

For development teams interested in using and sharing knowledge of agile development methodologies



Elgg for the Enterprise

a group to conaborate on using eigg as a business networking platform in the enterprise



Human Computer Interaction Interest Group

interest group for human-comptuer interaction



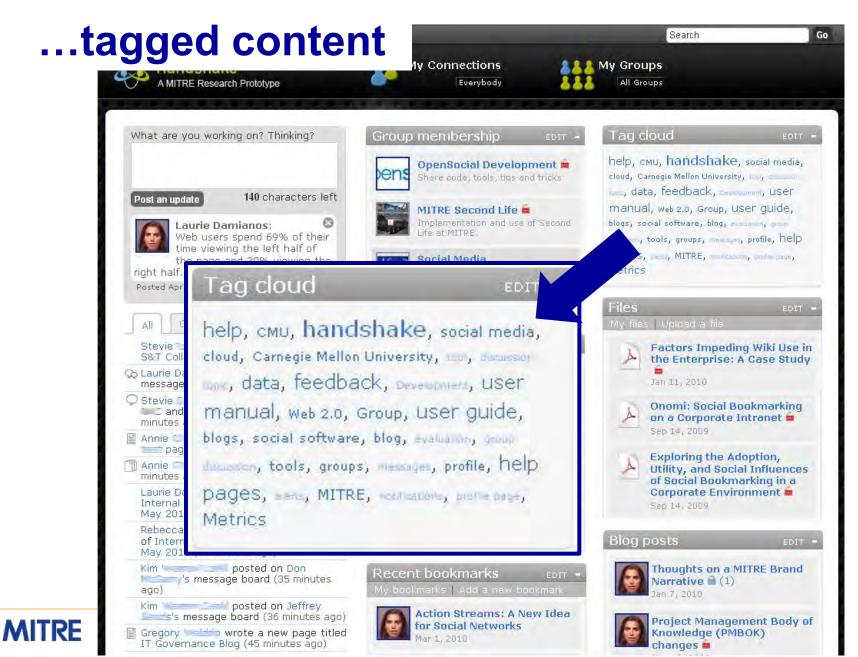
SIKM Leaders Boston 🛎



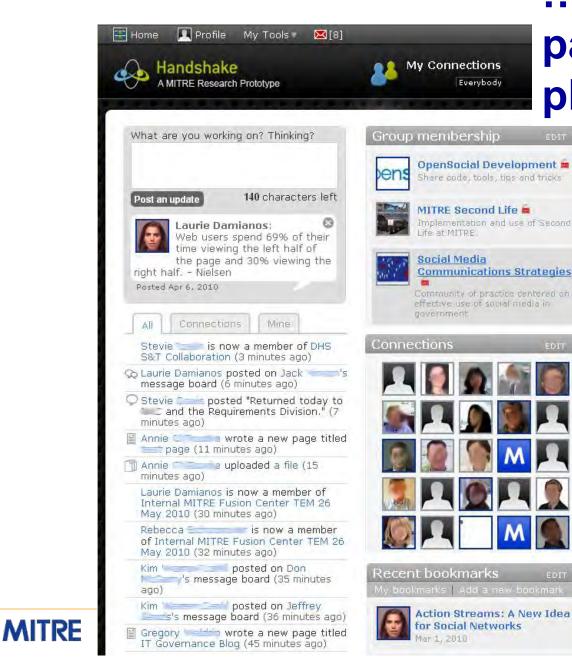


EDIT

Home page provides access to...



Home page provides access to...



...files, blogs, wiki pages, bookmarks, photos

help, CMU, handshake, social media, cloud, Carnegie Mellon University, Ivar, deucation lunc, data, feedback, beusburren, USEr manual, web 2:0, Group, USEr guide, blogs, social software, blog, examined, group maximum, tools, groups, measure, profile, help pageS, gest, MITRE, minication, orche bege, Metrics	
Files EDIT · My files Upidad a file	
Factors Impeding Wiki Use in the Enterprise: A Case Study	

Tag cloud

Onomi: Social Bookmarking on a Corporate Intranet Sep 14, 2009

Exploring the Adoption, Utility, and Social Influences of Social Bookmarking in a Corporate Environment Sep 14, 2009



Profile page lets you share with others

Handshake

Search

My Groups

All Groups

Go



Each profile field is access controlled

You choose what you share with whom

Personal interests: golf, cross country skiing

/r _____

Professional interests: innovation, social networking, social and collaboration tools, enterprise information architecture, knowledge management, strategy

My Connections

Education: State University of New York at Buffalo, Industrial Engineering/Human Computer Interaction, PhD, MS

About me

I am presently the Chief Information Architect in CI&T, working on social networking and media, defining the strategy for our next intranet, collaboration, and knowledge management processes and tools. I am currently deploying a social networking prototype to support cross-organizational collaboration and the capture of MITRE staff's professional relationships. I have been employed at MITRE for over 20 years. I worked in the MITRE Air Force Center for 12 years before joining MITRE's information technology organization.



Re:

Pat, Handshake is based on open source code so we can build, enhance, or add any funtionality we want to it, such as image files where



My Connections

Groups provide a forum for collaboration

All Things Agile

Edit group Leave group

Add new members

- Group discussion
- Group files
- Group pages
- Group blog
- Group albums

Subscribe to feed 诸 Bookmark to Handshake Report potentially inappropriate content



See all members (69 total)

Message board

Post



Owner(s): Donna Cuomo Matt F Bill C

Description:

For project development teams interested in using and sharing knowledge of agile development methodologies. A currently "hot" agile development topic is the Scrum agile software development framework which many teams at MITRE are exploring. The use of this development framework plus other agile methodologies are appropriate for sharing through this group.

My Groups

Interests: program management, Scrum, agile development, Software Development

Website: http://en.wikipedia.org/wiki/Scrum (development)

all Handshake members 🧰

Latest discussion

Group discussion | Add a topic



Agile with Remote Team Members Apr 21, 2010 by Matt F



What does a Manager do in Scrum or any Agile process 🖬 (4) Apr 16, 2010 by Bill E



Is it "Agile" or "agile" ?!?! 💼 (8) Mar 26, 2010 by Carlton ' - -

Waterfall Manifesto - April Fools! (3) Apr 1, 2010 by Kathleen Marine d

Group blog

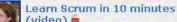
Group blog | Write a group blog post

1 2 Next »



Thu, Apr 8th Bedford: One-Hour Experiential Introduction to Agile (1)

Mar 19, 2010 by David 🗆 🚞



Group activity

- Patrick member of All Things Agile (Apr 21, 2010)
- 🚲 James 🔙 has posted a new comment on a discussion topic titled Agile with Remote Team Members (Apr 21, 2010)
- A James E has posted a new comment on a discussion topic titled Agile with Remote Team Members (Apr 21, 2010)
- & Ryan Image has posted a new comment on a discussion topic titled Agile with Remote Team Members (Apr 21, 2010)
- 🐼 Rick 🤇 posted a comment on a file Simple High level Tracking for Agile Teams (Apr 21, 2010)
- 🚵 Matt 🖂 has posted a new comment on a discussion topic titled Agile with Remote Team Members (Apr 21, 2010)

Group files

Group files | Upload a file

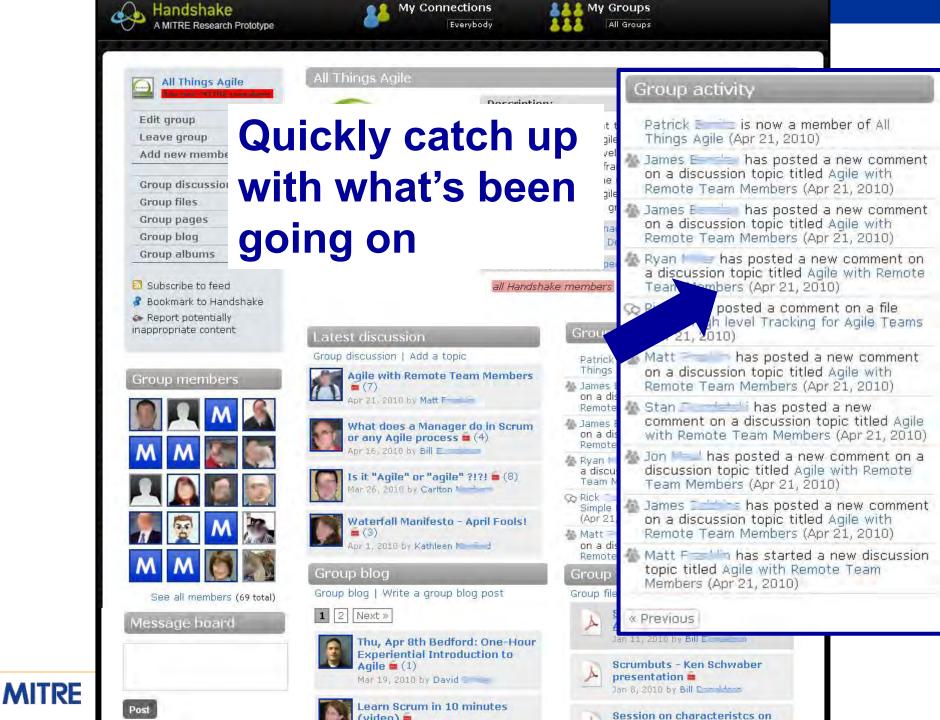


Simple High level Tracking for Agile Teams = (2) Jan 11, 2010 by Bill E





Edit



Handshake

Group files

MITRE

Post

Engage in discussions, share resources, collaborate on wiki pages, post to blogs...



Limitations

Description:

My Connections

My Groups All Groups

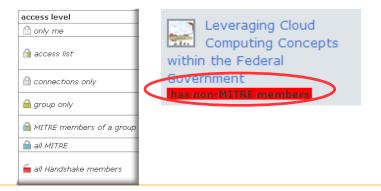
For project development teams interested in using and

MITRE Customizations: Permissions & Trust

MITRE identity model with single sign on



- Authenticated email-based invitation model for inviting participants
 - Each external partner must be hosted by a MITRE individual
- "Box Model" for group permissions
 - Restricts contents to group permission level ceiling
 - Ensures that information is not inadvertently exposed
- Visualized permissions & access
 - Every group
 - Each piece of content
 - Customized access levels



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MITRE Customizations: Awareness

Created group activity river

- Scrollable access to activity history
- Enhanced email notifications to activity
 - Clearer subject headings
 - Cleaner formatting
 - Hyperlinks to content, sender's profile
 - Daily email digests
 - Full email integration *in progress*

Released to open source community

Group activity Donna | has posted a new comment on a discussion topic titled User guidance for when it is OK to edit a wiki page (19 hours ago) & Jack has posted a new comment on a discussion topic titled User guidance for when it is OK to edit a wiki page (19 hours ago) has started a new discussion A Donna topic titled user guidance for when it is OK to edit a wiki page (21 hours ago) wrote a new page titled User E Donna Guidance for when you should edit a wiki page (21 hours ago) Patricia : wrote a new group blog post titled The Four (or 5?) SMs (vesterday) Gavle 1 wrote a new group blog post titled Social Media: Measure, Monitor and Mean IT: The Global Social Media Check-up (Mar 24, 2010) is now a member of Social leanne Media (Mar 16, 2010) is now a member of Social Media Reni (Mar 16, 2010) Brock wrote a new group blog post titled Does a Netflix Movie Recomendation hold the Secret to the Value of Social Networking? (Mar 15, 2010) « Previous Next »

MITRE

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MITRE Customizations: Groups

- Ability to restore accidentally deleted groups
- Ability to "remove" group members
- New group widgets
 - Group activity widget
 - Group Information widget: HTML form for lists, hyperlinks, images

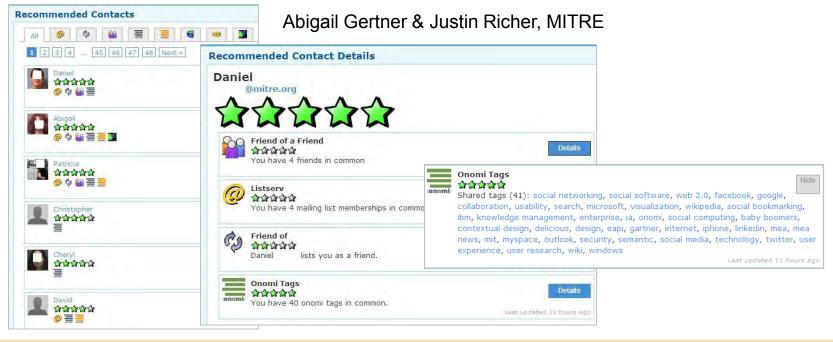


MITRE Customizations: End User Experience

Improved, full text search

Released to open source community, incorporated into 1.7 release

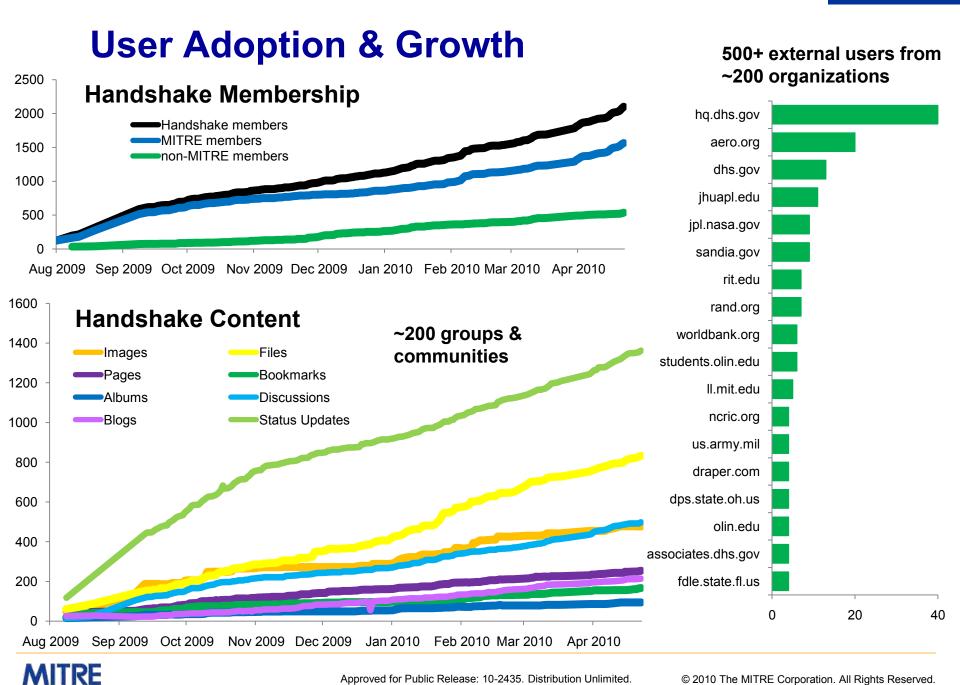
- Streamlined navigation
- Activity logging & data visualization for end users in progress
- Affiliated organizations model in progress
- Connections recommender based on digital footprint



MITRE

Evaluation Plans

- Framework for evaluating social media: Anklam, Holtzblatt, Cuomo, Gertner, Damianos
- Early Handshake user interviews: Holtzblatt, Damianos, Weiss
 - Contextual interviews on Handshake usage & perceived benefits
- Joint research proposal: Cuomo, High
 - Longitudinal evaluation of business value of social networking.
 Experiment with adoption, motivation, incentives, facilitation
- Handshake instrumentation
 - Track activities & analyze logs
 - Explore visualization techniques



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User Feedback

It's a very lightweight way to **share information** with my project team and department. It's frictionless and effective.

Handshake provides the only way we can collaborate with our sponsor and our sponsors' stakeholders – other than email and phone.

The stakeholders talk to each other in Handshake. We listen and we learn. It's an informed facilitation. I had to transition what I was doing with my sponsor and lost connection with all these people. Now I have a way to keep in contact with them, and it's been great.

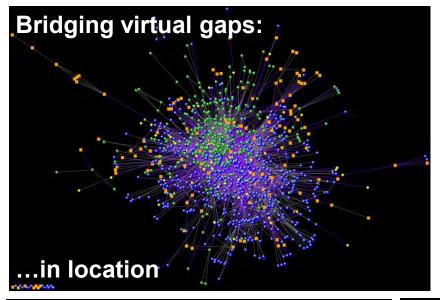
> People come up to me and say, "Hey, I've seen you on Handshake." Handshake has been useful for growing my cross-center network.

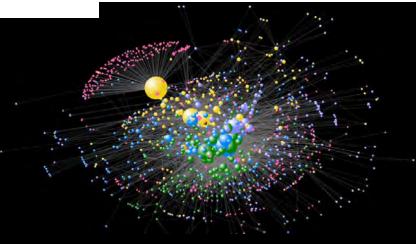
> > What is critical to me is staying on the cutting edge - what is the next wave... I cannot do that if I stay behind a brick wall.

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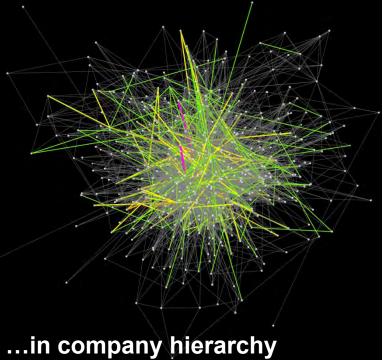
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Exploration of Social Graph Data





Examining interactions across organizations



Hypothesized Value Propositions

Value Proposition	Yesterday	Today	Tomorrow
Situation awareness			
Information sharing			
Collaboration			3 40 3
People tracking		-bmiglue	ente
Answer finding		techinare bi	
Increasing weak ties	- denti	whese wh	3lu
Trust & familiarity	Will raise if	N technicules these are br these and whe	?
Discovery & recommendations	assessal	12.601	
Leveraging networks	or Leon		?
Tech stature			?
Community position			?
Power to the edge			
Socialized biz acquisition process			?

MITRE

Groups & Communities







NCES



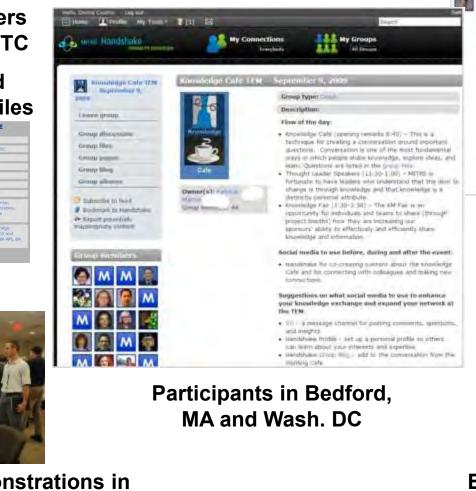


Distributed Knowledge Café using Social Tools

Morning speakers broadcast via VTC

Speakers had Handshake profiles





Face-to-face demonstrations in afternoon on both sides



Conversation 10: How will web 2.0 impact our sponsors?

Q10. Technings and social change are increasing at an even faster rate, famile of the leng decisions, that MITRE is tening even if is articipate in with our spreace reveals around the use of 2.0 technicipes which are transformative. Here will be lengt or an experime?

Bettind detroit:

- Web 2-8 Revise goods from the participants who regist otherwise net have true in the need to built out reminipances reference in allow way, but have append for new mode to account (6.9, 2nd 34).
- "Nee" tools have large subtence, as not suicide for confidential, vendras can provide controlled environments
- N2's about the many westing power from the few and helping me anyther for solding?
- 4 technology for profit; warning rengentil (intampole & psychological)
- MTRE is instrumy company reads to have a fastary for conjutant, gain customers final institution of their read the alread sudmap, pair what is clear in the future in restar to more furnishing.
- Maybe (b) the case that got) structures are anotherized to functions there see technologies provide. Qui anne of these regarizations need to flat' to that they can exclusify holds that MTRE has evolved by addressing new proteins (e.g. who secure)).
- "Inday's solution) because parameters provident", convention systems sequentizing has benefit as its attack are are [do to 0]. (The agree wild be trush from Wat 2.3: Thesis milliptors will make headerthis for the prevention befored in.
- the point that the government mount skinle is an understatement, but MIT48 multibe sharende.



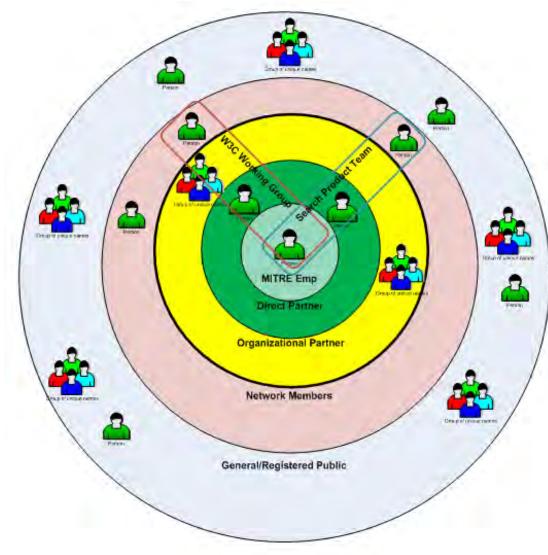
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Next Steps: Features, Integration & Partnerships

Features

- Email integration
- Improved browsing/searching/filtering for users & groups
- Pulse of Handshake what's new, what's happening, what's big
- Extended permissions model
- User & identity management
- Integration
 - "Introductions" plug-in Olin project
 - Connections recommender Gertner & Richer
 - Handshake for mobile devices IT team
 - Socializing the intranet
- Federated partnerships
 - Help desk support
 - MITRE Information Intranet team

Identity, Privilege and Access Model - in Progress

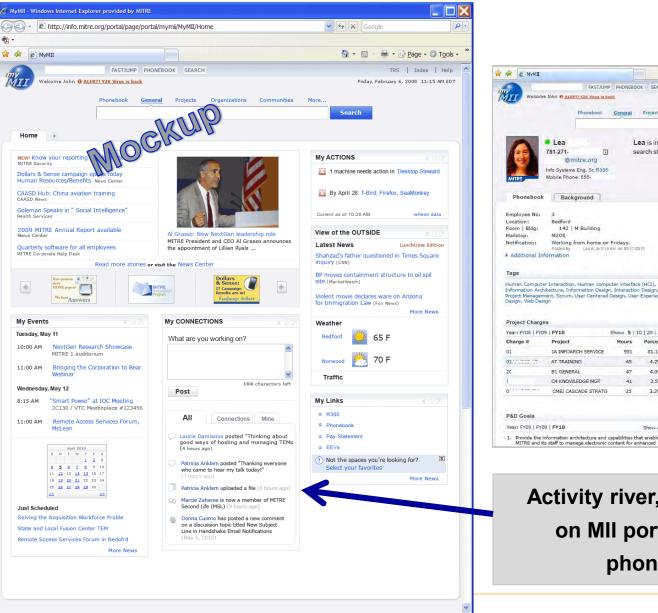


Organizational partners are users from established partner organizations.

Organizational partners can "self join" – invitation from MITRE employee not required.

Direct partner (explicitly granted to individuals) – can be co-group owners, invite others from their own organization.

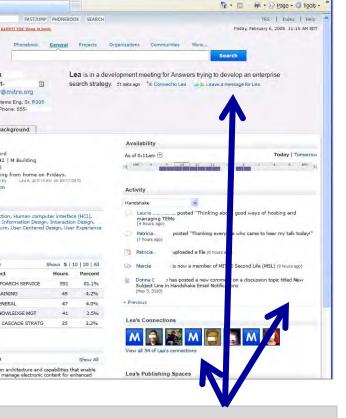
Socialize the Intranet



/ Trusted sites

₹ 100% -

Distribution Unlimited.



Activity river, status, connections on MII portal homepage, and phonebook pages

BACK UP SLIDES



Team-Community-Network-Public Continuum



Teams: Product responsibility	Communities: Influencers & Participants	Networks: Relationships ar Knowledge Poo		Public			
Worker Productiv	ity Leveraging B	roadly "Colleag	ues" E	Ingagement			
Project Support	Enable Participation	Enable Conne	cting	Awareness			
Essential Capabilities: Document management, access control, work flow and calendar support, Collaborative authoring and interaction	Essential Capabilities: Self serve, access control, identity management, Collaborative interaction, Social validation	Essential Capabilities: Relationship management; Profile management	Inforr and cus	ntial Capabilities: mation awareness d presentation; stomized view; uiting interaction			
Collaborative	Work and Activity						
Information Availability & Delivery through Unified Business Portal							
Bringing the Network Expertise to Bear							
Infrastructure Enablers: Trusted Capability and Information Access by Identity and Affiliation							

MITRE A National Resource Working in the Public Interest

*Adapted from Gartner, Drakos, 2009