Ericsson Research
Converged Community Toolkit
<Pick new name!>

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- Ericsson Research...
- ...and we're here because of...
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Ericsson R&D Worldwide
- 450 researchers, 8 countries, 12 sites
- 35% of holds a PhD, the rest a M.Sc.
- Announcement to recruit 500 new research engineers

Ericsson Research – Areas

Converged Community Toolkit
the Why
People move in groups – whether it's in the playgroup or the weekly drink with retired friends.

Companionship is a key factor of human life. While in earlier times communities were bound by the limitations of time and space, these restrictions have been resolved by the global communication possibilities offered by the internet.

Here, as in the real world, like-minded people organize themselves into communities – 'virtual communities'.

What people think

“I update my home page with new pictures and backgrounds about once every other day. I leave messages on my friends’ guest boards and check my own guest board every day.”

– Female, 20

“Communities are a perfect way of finding friends who have the same interests, same background and who are the same age as yourself.”

– Male, 28

“I spend several hours doing stuff with my mini-home page every week. It is fun and a perfect way of showing what you have done and how you feel.”

– Female, 17

“I do not have to look the person in the eye or care about my looks when I am in front of the computer.”

– Female, 25

Mobile communications are:

- Organized around known social networks
  - People call and message people they already know, most often those already in your address book.
- Accessible anywhere, anytime, are always on
  - The internet is no longer tied to the desktop computer but has evolved into a free-floating wireless data cloud.
- Text-based evolving to text + sound and graphics-based communications.
  - Customized ringtones and cute graphics for SMS messages are just the beginning. Cameras and telephones are merging.

Some example "community" services today

The Web

The mobile network

New Technologies - new opportunities

The Web

Powerful terminals
Browsers
JavaME
Pretty good bitrate (up to several Megabits per second)

Converged Community Toolkit

the What
Converged Community Toolkit

Social networking in communities play an important role in everyday life of many people. There are several services available to use, such as Blogger, for instance, where mobile and PC access has started, as seen in Sony Ericsson phones supporting upload of images to Blogger.

From a user perspective, this project is about the creation of mobile communities extending the reach of Web communities into mobiles.

From a technology perspective, the project is about enhancing technologies for social networking, centered around a community blog which can be accessed using both laptops with broadband and mobile phones.

The solution should use available, open source components, applicable, extending these where necessary and otherwise integrating an overall solution.

CCT User Scenario

Dave, Lisa, Monique and Li are friends. Lisa is a tech freak and into all kinds of new stuff. They keep in touch almost all the time using the net, and like sharing fun stuff they come across in everyday life.

They have this shared blog on the net where they upload photos and comments. These often trigger them to chat a little extra since both Dave and Li are quite good at finding those make-you-laugh situations in everyday life. Monique, the artist, prefers making some nice video clips.

All are eager to get to know when someone has uploaded something and therefore subscribes to changes.

CCT use cases

1. Finding and registering in the blog...
2. Laptop User upload image making blog entry.
3. Notification about updated blog sent to those subscribing to it, either via IM or Buddy List.
4. Mobile User browse to blog, looking at new entry.
5. Mobile User chats with peer on laptop about image in chat entry.

Some Challenges

1. Learn about Web and Mobile communities.
2. Learn to pick, use and contribute to open source.
3. More media to the blogs from more devices.
4. Transparent browsing.
5. Application level interworking:
   1. IM/Chat and presence
   2. Blog
6. Software:
   1. Java EE technologies (HTTP servlets and SIP servlets).
   2. Java ME
7. Mobile JME client design, implementation and deployment.
8. Protocol interworking
   1. SIP/XMPP
Implementation guidelines

1. Use open source and be part of it. Use the development communities.

2. One mobile client, one laptop.

3. Different rendering in browser for laptop and mobile Mobile Front Controller (open source).

4. Pick a blog that is easy to extend (programming language and software architecture).

Some practical stuff

Some code and tools to use

- Jabber XMPP presence client and server.
- Mobile front controller- a JavaEE component for building laptop as well as mobile web pages.
- Jain SIP- Java SE SIP stack for the laptop client.
- Ericsson Java EE SIP Container with a development environment SDS.

Information

- Contacts:  
  - goran.ap.eriksson@ericsson.com  
  - leonid.mokrushin@ericsson.com