

# Telepathy Meeting FOSEM 2006

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#### Outline

- Current State (Presentation Robert)
- About Us, Our Motivation
- What is Missing (my view)
- Free Discussion



**About Us** 

**Our Motivation** 



## basysKom GmbH

- GmbH since 2004
- Strong open source roots
  - Eva is president of KDE e.V.
  - Involved in various opensource projects
- Providing services and products based on Qt/Qtopia



#### Vision: Freedom of Choice

- What does the user care for?
  - Workflow
    - Usability specialized for the task
    - Access to data
  - Communication
    - Interoperable protocols, codecs, etc..
    - Availability

#### The user should be able to use

- the best application for his workflow
- without caring for technology!



#### **Our Motivation:**

Linux needs a standard infrastructure for realtime communication

Current solutions are not satisfying the needs of users

DBUS is a great chance to work together (KDE, GNOME, ...) and remove useless architectural differences

There already exist great applications, advanced protocol and codec implementations.

We want them to work together!



## basysKom Project (Codename OpenCDI)

- Donated by Stichting NLnet
- Start in March 2006
- Aim:
  - Integrate CTI functionality into Linux
    - Support PSTN hardware (1<sup>st</sup> party control)
    - Support Softphones (1<sup>st</sup> party control)
    - Support PBX systems (3<sup>rd</sup> party control)
  - Establish a service architecture for multimedia based communication
    - Desktop and platform independent!
    - Reliable and robust implementation
  - Create or strengthen an open source community process
    - "Get the right people for the work"



What is Missing



#### **Mission Control**

- Launches connection managers and desktop apps/services
- Provides information about
  - presence of remote users
  - connection states, active connection managers, ...
- Handles my presence
- Informs desktop handlers about changes
  - Created/removed channels
  - Presence of remote users
  - Remote connection requests
- Reacts on connection requests and activate/choose of the appropriate connection manager

• ...



#### What we have to discuss:

- Common service manager vs. desktop service
- Overview of common services between KDE, Gnome and ...
  - What do desktop applications and services expect/need?
  - What do connection managers need?
- Thinking of some kind of intelligence:
  - Handling conflict situations
  - Allocating most satisfying configuration automatically
  - Automatic allocation of low level ressources (audio/video)
  - Automatic stream format conversion
- D-BUS Spec.
- Example implementation



## **Connection Managers**

- Support PBX-Systems
  - Asterisk
  - other telephony hardware (Gigaset Series, ...)
- Audio Codecs
  - G.711a
  - Speex
- Video-Codecs

- ...

Anything real important missing?



## D-BUS/Telepathy Binding

- Interface description exists as XML (libtelepathy).
- IDL Compiler?
  - CIDL by David A. Wheeler: Just a test. Generates XML file from Corba IDL description.
  - gengobj.phy: Generates C-Skeleton from XML file
    - Hard to manage/regenerate.
    - Other languages? C++, Java, ...
- "moc" like solutions
  - Qt + KDE 2,3: dcopidl, dcopidl2cpp
  - Qt 4 + KDE 4: D-BUS will be integrated directly into moc

### Just easy integration will attract developers!



## Misc.: Documentation, Community

- Sequence charts or similiar descriptions of the protocol behavior
- Community ressources:
  - Web presentation for
    - users
      - How to install and use
    - developers
      - How it works, tools, protocol descriptions, backend interface, ...
      - Everything at one place
  - SVN
  - Bugtracker



Free Discussion



## Agenda

- Missing components
  - Mission Control
    - Protocol spec.
    - Commonly needed services
    - Ressource handling
    - Conflict management
  - Connection managers
    - Which are essential and missing?
- Bindings
  - Automatic code generation (wrappers, etc.)
  - Supported languages?
- Community process
- ...



Btw.: We are hiring!