KDE4

Decibel – You are not alone!
http://decibel.kde.org/

Dipl.-Technoinform.
Tobias Hunger
basysKom GmbH
What is the fuss about?

What do we want to do?
Defining Decibel

Decibel will be a real time communications framework

What is real time communication

• Instant Messaging
• VoIP/Video conferencing
• Computer Telephone Integration (CTI)

Why a framework?

• communication is one of the fundamental use cases of computers
• integrated communication is a prerequisite of collaboration
Which technologies exist?
Technologies: Telepathy

Telepathy is a RT communications infrastructure

• Defines DBus interfaces to access RT communication services
  • desktop independent specification
  • low level API

• hosted at freedesktop.org

• Implementation of jabber protocol is available, used in existing products.

• Gnome seems to be heading into this direction

URL: http://telepathy.freedesktop.org/wiki/
Technologies: Telepathy II

Connection Manager:
• Implements protocol(s)

Connection:
• Represents one connection to one server using one of the protocols supported by the Connection Manager

Channel:
• Represents one class of information transmitted over a connection
Technologies: Tapioca

Tapioca used to be a infrastructure competing with Telepathy. Today they implement the Telepathy specification.

- Qt Bindings for Telepathy (QtTelepathy) with raw DBus bindings
- “Convenience wrapper” QtTapioca hiding some of the messier details

URL: http://tapioca-voip.sourceforge.net/wiki/index.php/Tapioca
Why Decibel?

What will Decibel offer in addition to all that?
Decibel: Houston

- Provides desktop independent DBus interfaces to high level RT communication features.
- Persistently stores user data (accounts, preferences, etc.)
- Starts/stops Connection Managers as required
- Starts/stops desktop dependent components as required.
The AccountManager persistently stores the user's account data in one central place including:

- Connectivity information (account is online/offline)
- Visibility information (hidden, free to chat, etc.)
- Privacy information (invisible to user X, etc.)
- etc.
ProtocolManager encapsulates Telepathy's Connection Managers:

- Holds a list of Connection Managers installed with supported protocols

- Selects Connection Manager to use for a protocol

- Persistently stores preferred Connection Managers

- Uses the data stored in the AccountManager to bring up Connection Managers as requested.
The ComponentManager

• is a registry for components.

• stores the user's preferences on which component is supposed to handle which kind of channel

• is notified on New Channel events

• decides what to do with a new channel by deciding on which component to use to handle it.
Specialized applications started by Houston
• Desktop specific!
• Handle one specific task well
• Work in concert with Houston and other components
Where is the code?
Status

We are behind schedule :-(
   • Mostly due to HR issues

But we got some things done already:
   • Qt bindings to Telepathy were missing [done]
   • QtTapioca was launched to make writing applications like Houston easier [in progress]
   • Houston implementation [started]
   • KDE specific components

Your help is welcome!
PS:


BoF Session

Please consider participating in the BoF Session

“Realtime Communication & Collaboration”

on

Tuesday, September 26th, 6pm to 7pm, LB04