



Telepathy

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Maemo Summit 2009
Amsterdam

Collabora 

The logo for Collabora consists of the word "Collabora" in a bold, white, sans-serif font. To the right of the text is a blue icon composed of several circles of varying sizes connected by thin lines, resembling a molecular structure or a network diagram.

The Unix Way

Do one thing and do it well

Instant Messaging

The Unix Way

two

Do ~~one~~ thing and do it well

User Interface

Protocol

The Unix Way

six

Do ~~one~~ thing and do it well

Contact
List

Chat

Logging

AIM

MSN

XMPP

The Unix Way

twelve

Do ~~one~~ thing and do it well ?

Contact
List

Chat

Logging

File
Transfer

Voice
Call

Tubes

AIM

MSN

XMPP

SIP

ICQ

IRC

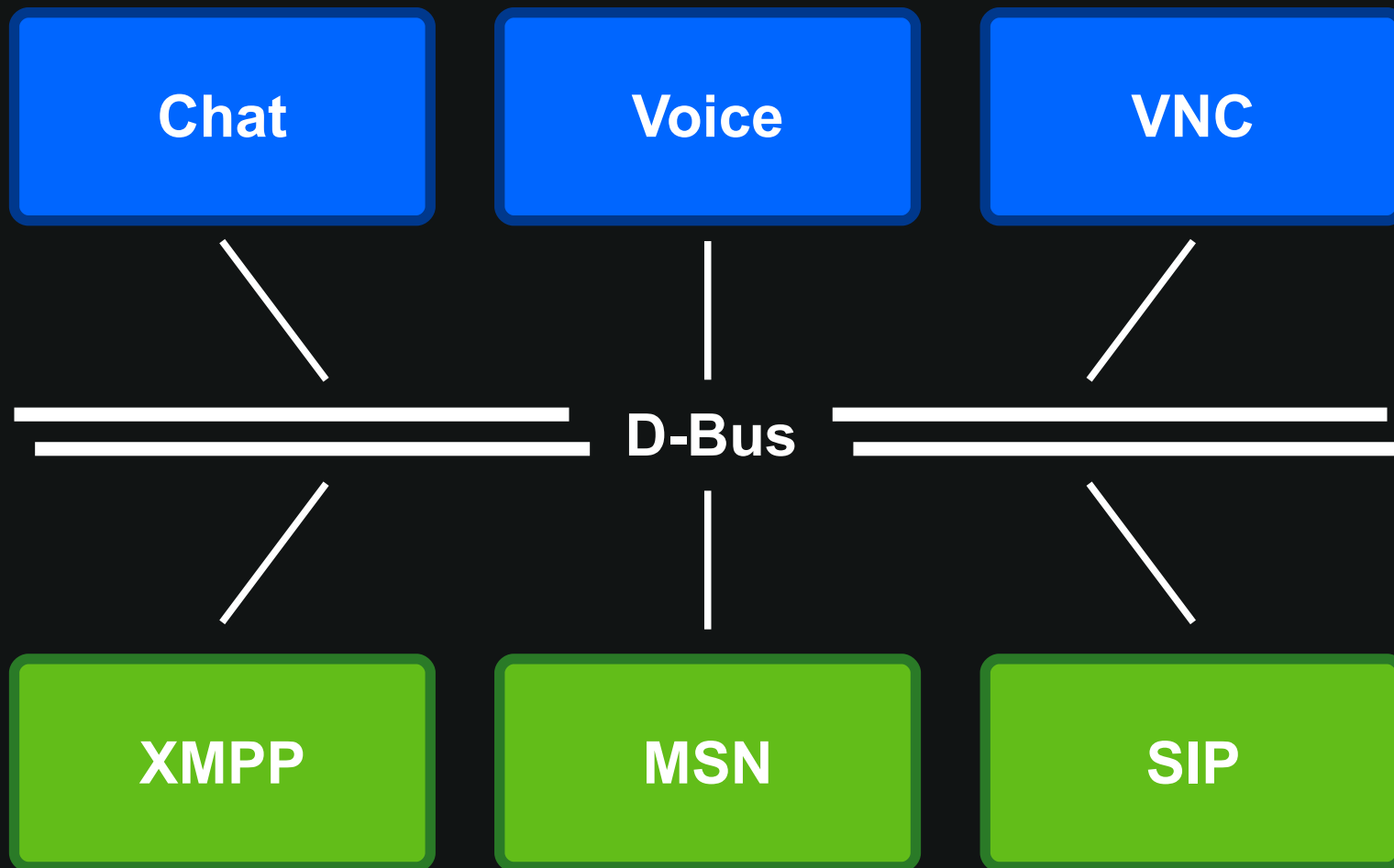


Telepathy

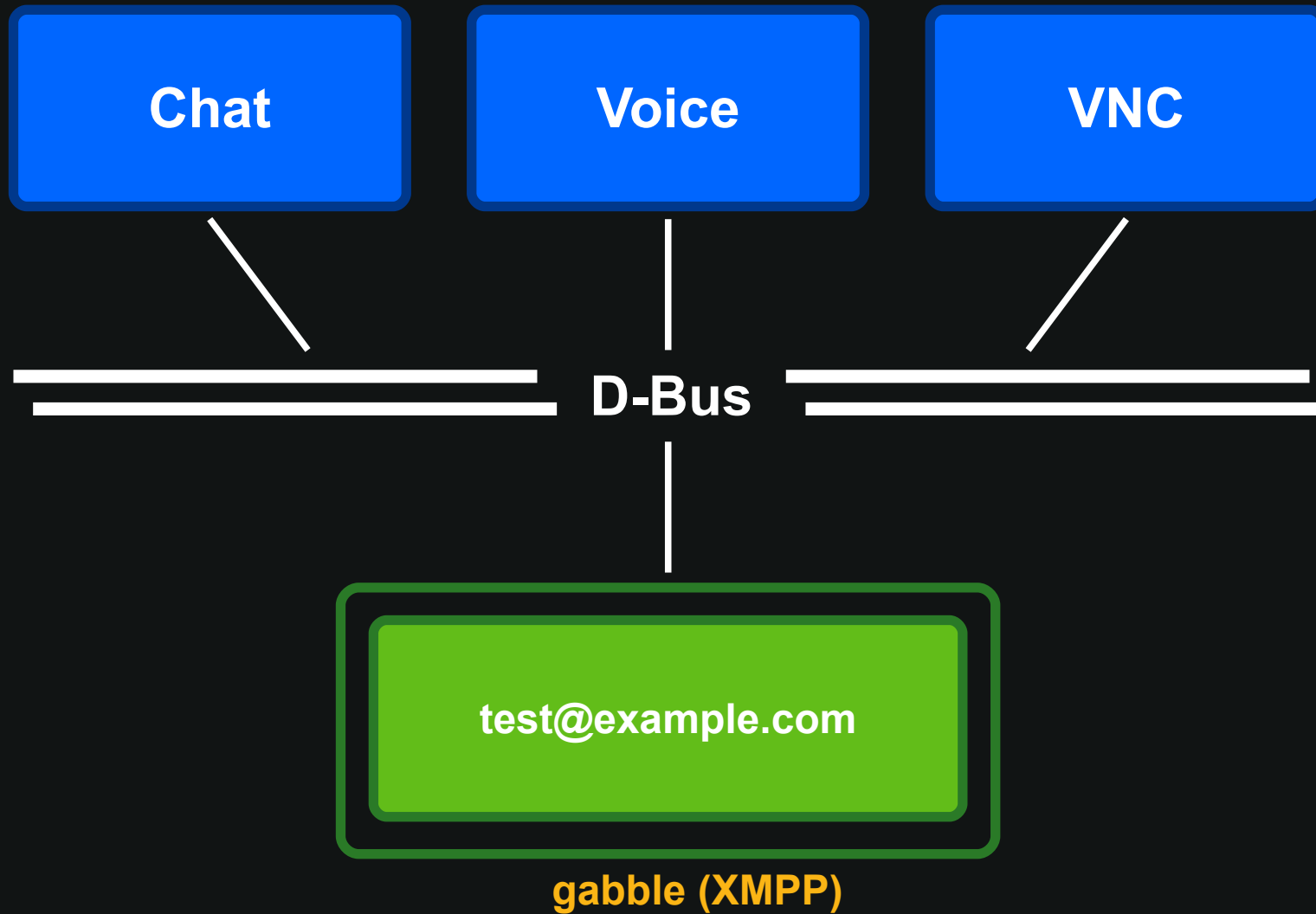
The Big Idea

- Move away from the monolithic client
- Split stuff into separate processes
- Run protocols as services
- Create a standard API for clients to use presence, messaging, media, etc...

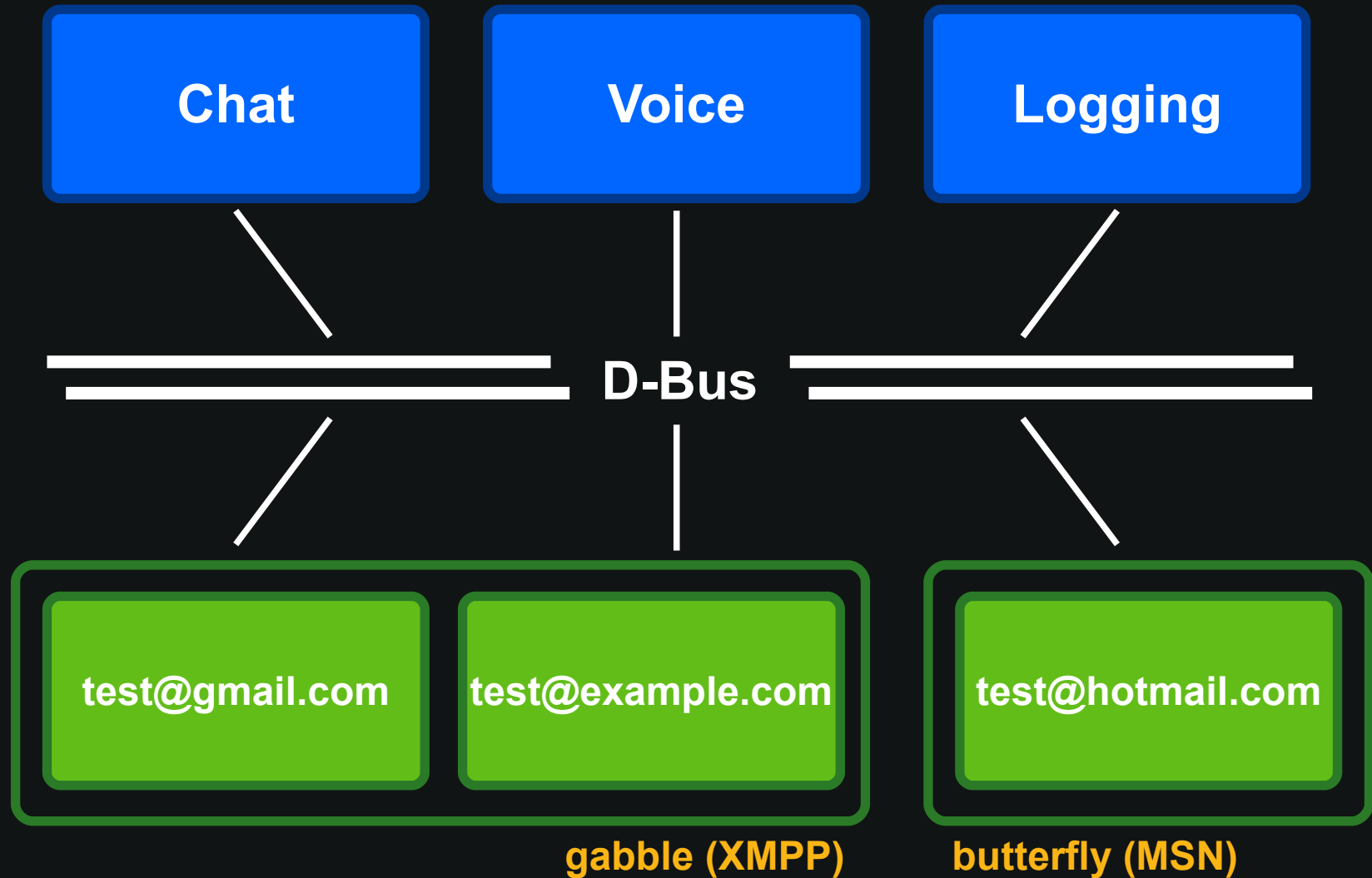
Architecture



Connections



One connection per account



Connections

- Have interfaces
 - Presence (available, away, busy, ...)
 - Aliases
 - Avatars
- Give you channel objects

Channels

- Have a type
 - Text, VOIP, etc.
- Methods and signals
 - `Channel.Type.Text.Send()`
 - `Channel.Type.Text.Received()`

Why?

What are the benefits?

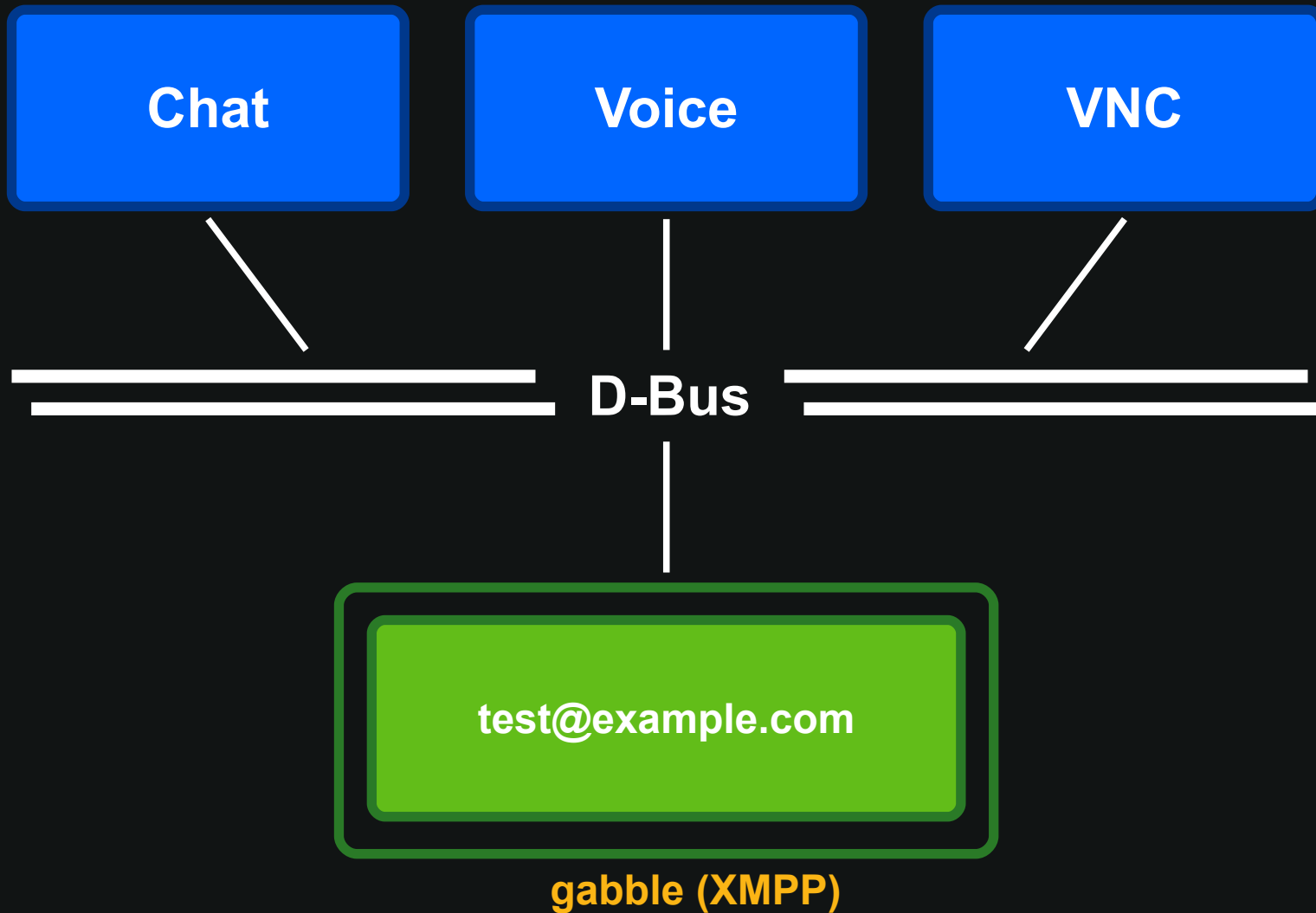
Split the tasks

- Different components **can** do only one thing
 - On Maemo the address book is separate from the messaging application
- Do one thing and do it well

Re-usable components

- Same connection managers on GNOME, KDE, Maemo
 - And they fit well in environment
- Interchangeable user interfaces

Connections are shared



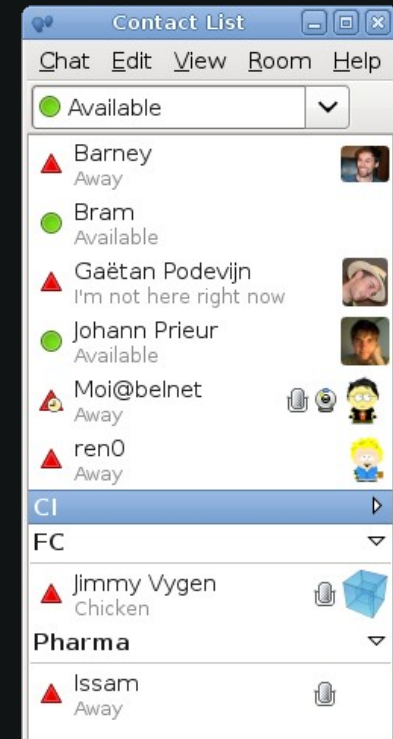
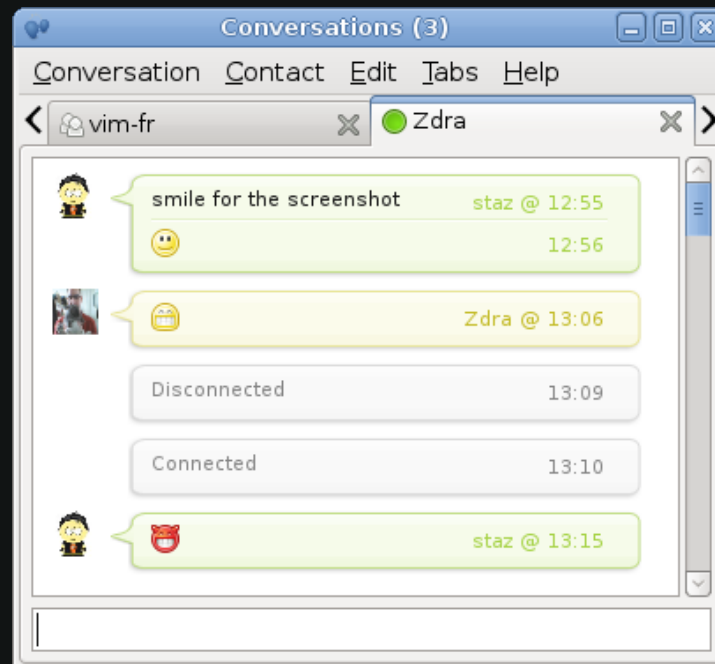
Component independence

- Different languages
 - telepathy-gabble (XMPP) is in C
 - telepathy-butterfly (MSN) is in Python
- Different licenses
 - telepathy-spirit (Skype) is proprietary
 - telepathy-gabble (XMPP) is GPL

On the desktop

Empathy

<http://live.gnome.org/Empathy>



On the desktop



XMPP



On the desktop



XMPP



SIP



MSN



IRC



On the desktop



XMPP



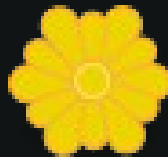
SIP



MSN



IRC



ICQ

Sametime



Gadu Gadu



Groupwise



AIM



Facebook chat

Yahoo



QQ



Telepathy

Collabora

On Maemo



XMPP



SIP



Pre-installed, open source

On Maemo



XMPP



SIP

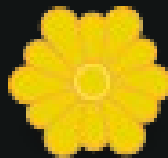
maemo extras devel



MSN



IRC



ICQ

Sametime



Gadu Gadu



Groupwise



AIM



Facebook chat

Yahoo



QQ



Telepathy

Collabora



On Maemo

Nokia



XMPP



SIP



Skype



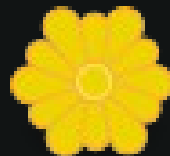
MSN



Phone / SMS



IRC



ICQ

Sametime



Gadu Gadu



Groupwise



AIM



Facebook chat

Yahoo



QQ



On Maemo



XMPP



SIP



Skype



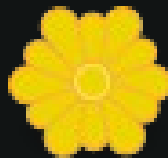
MSN



Phone / SMS



IRC



ICQ

Sametime



Gadu Gadu



Groupwise



AIM



Facebook chat

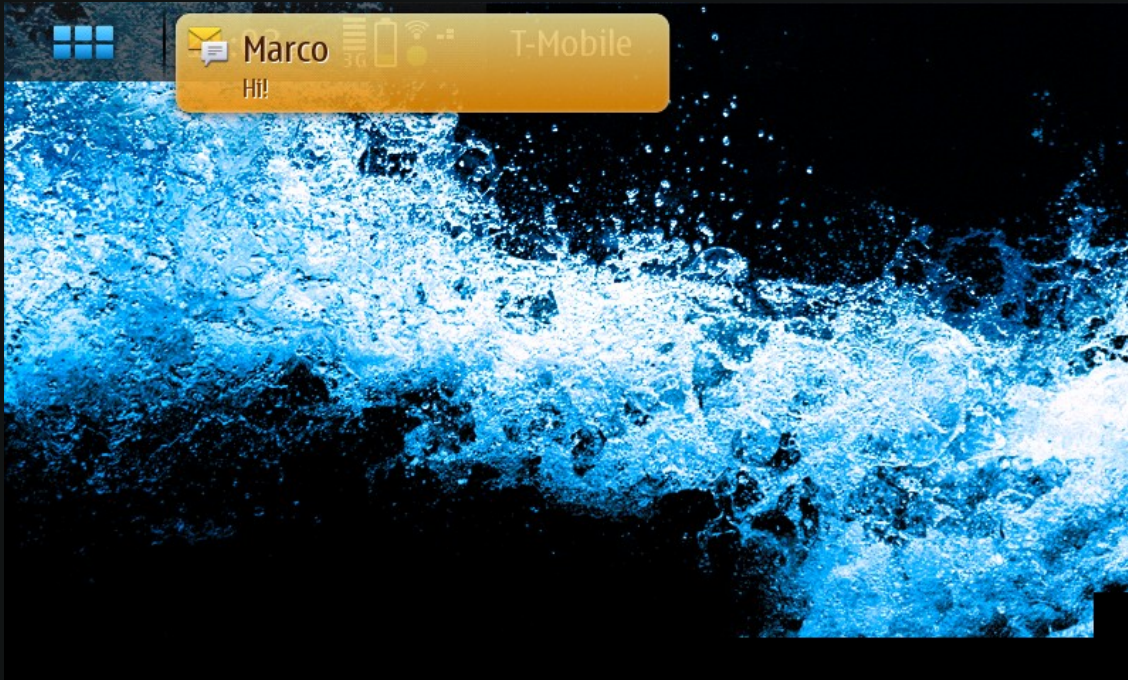
Yahoo



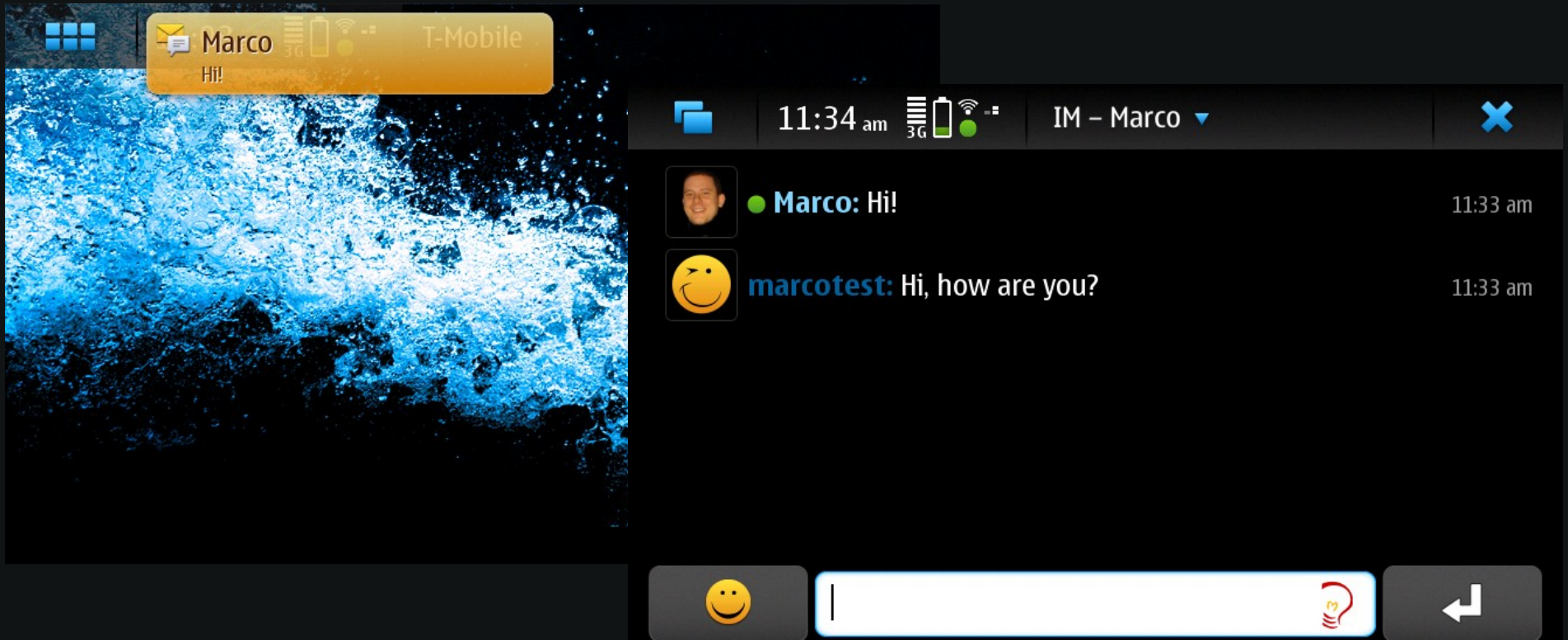
QQ



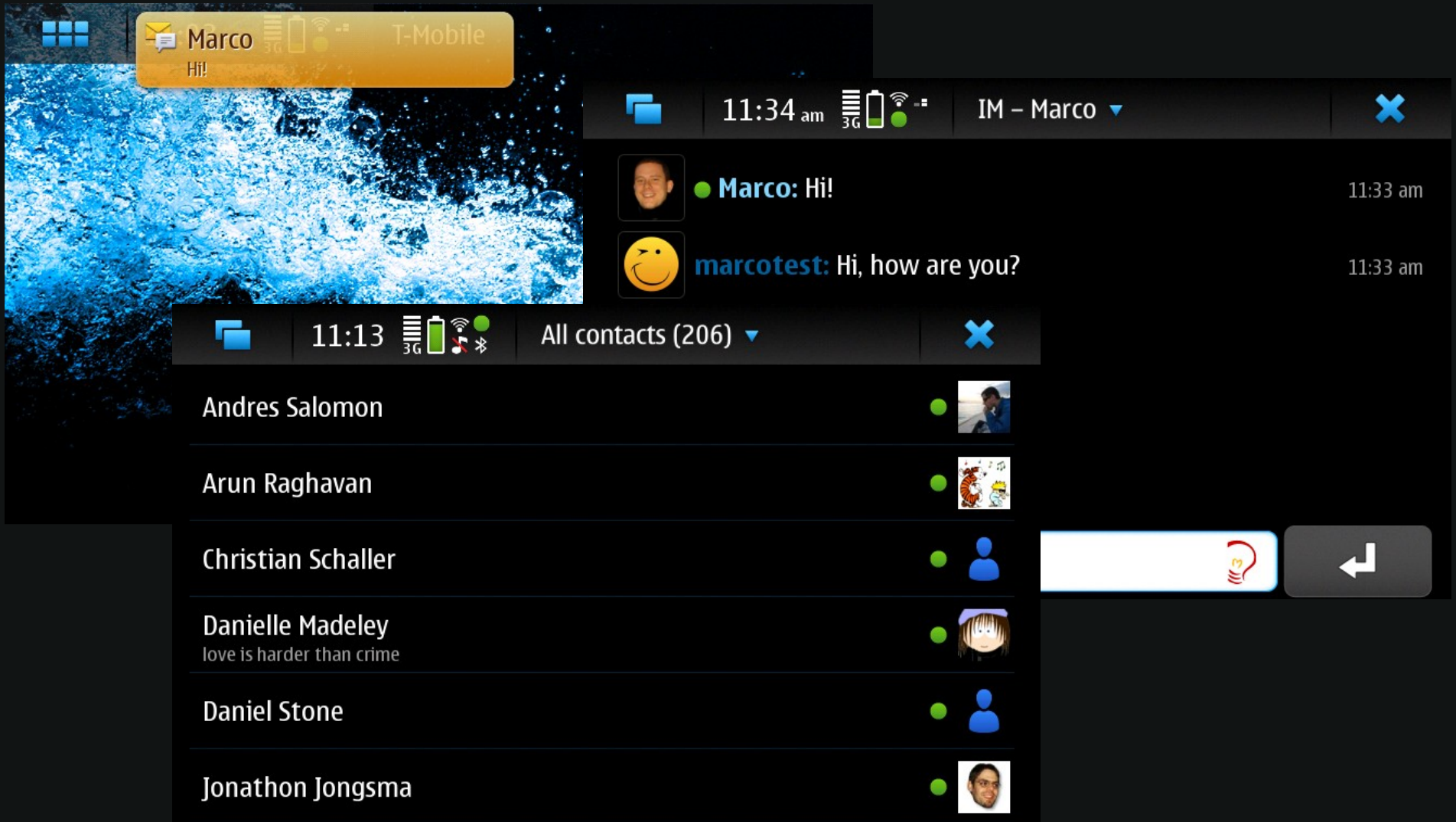
On Maemo



On Maemo



On Maemo



Who handles the accounts?

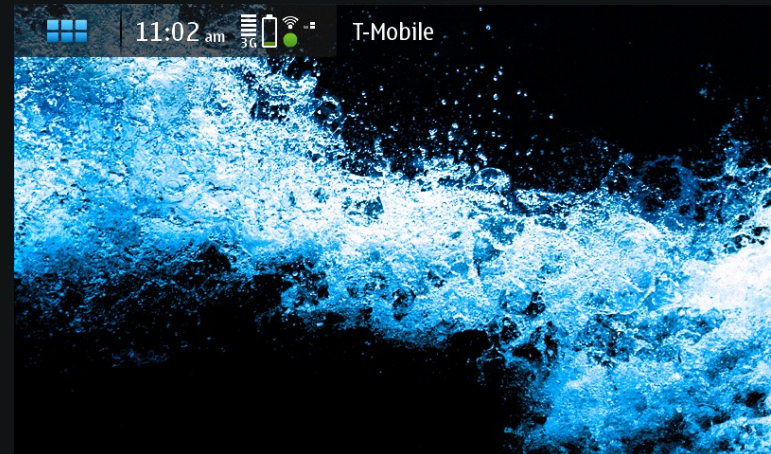
Who activate the various
components?

Mission Control

- User accounts management
- Synchronising presence and connection status across accounts
- Requesting telepathy channels
- Activating the channel handlers

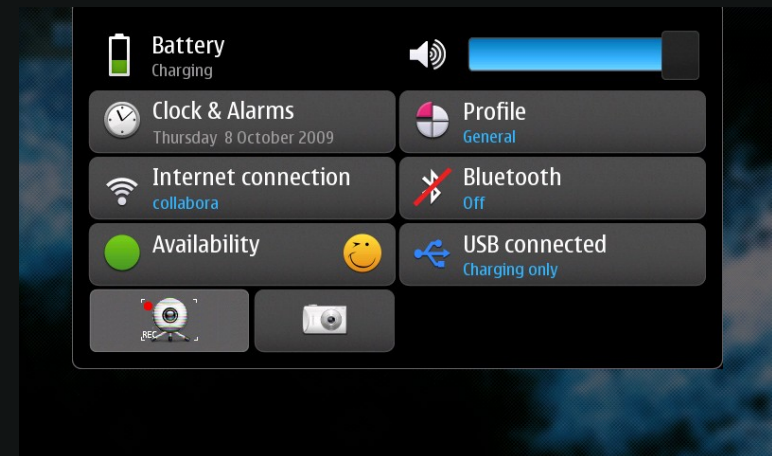
Component interaction

Presence
Icon

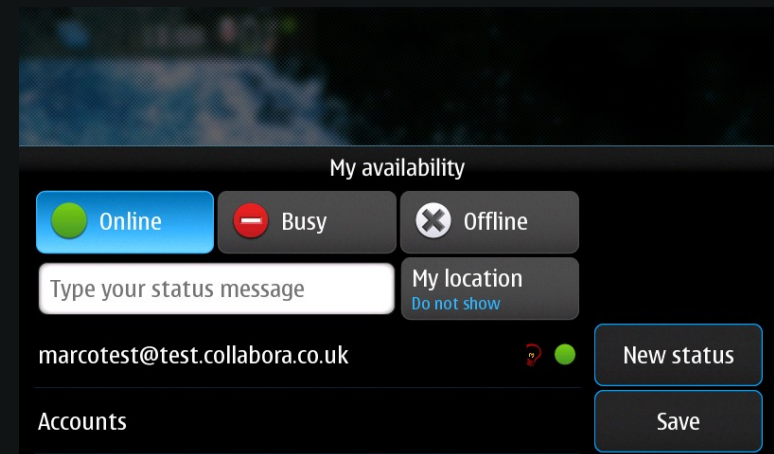
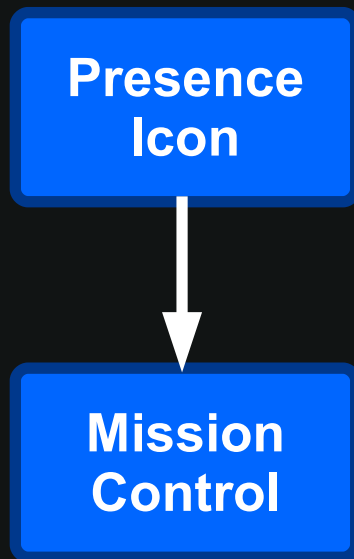


Component interaction

Presence
Icon



Component interaction

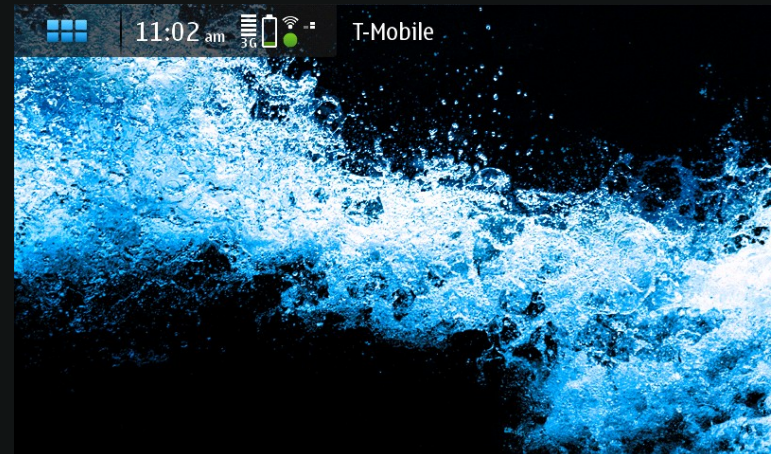


Component interaction

Presence
Icon

Mission
Control

Connection
Manager

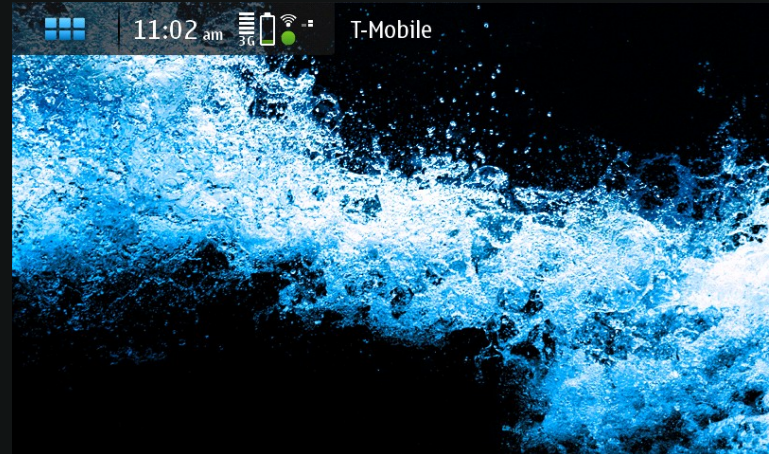


Component interaction

**Presence
Icon**

**Mission
Control**

**Connection
Manager**



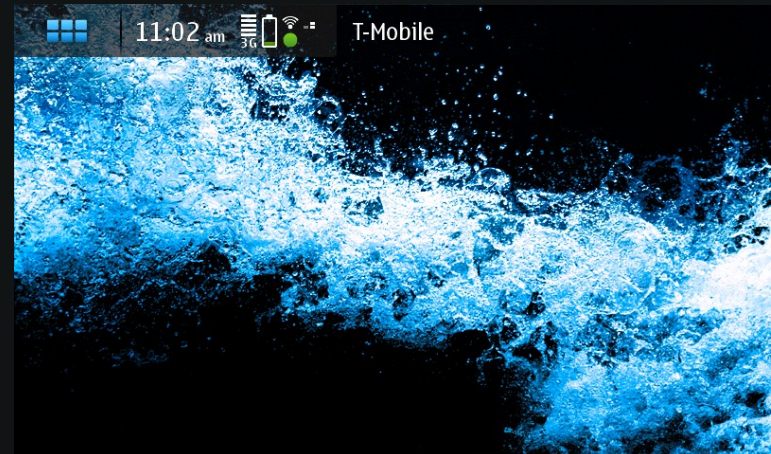
Component interaction

Presence
Icon

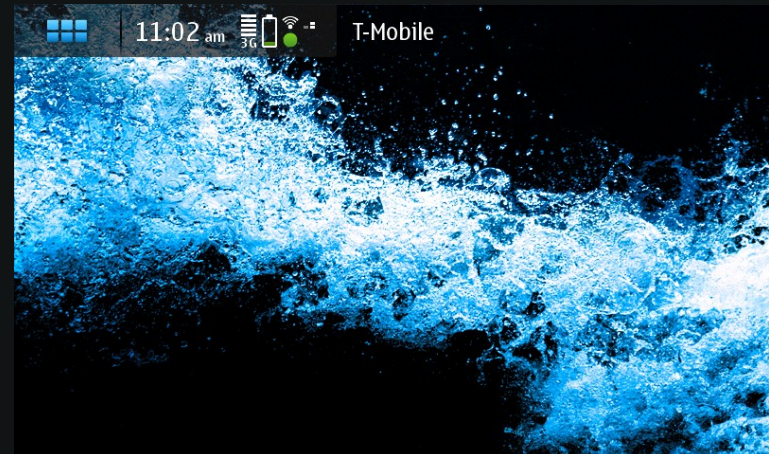
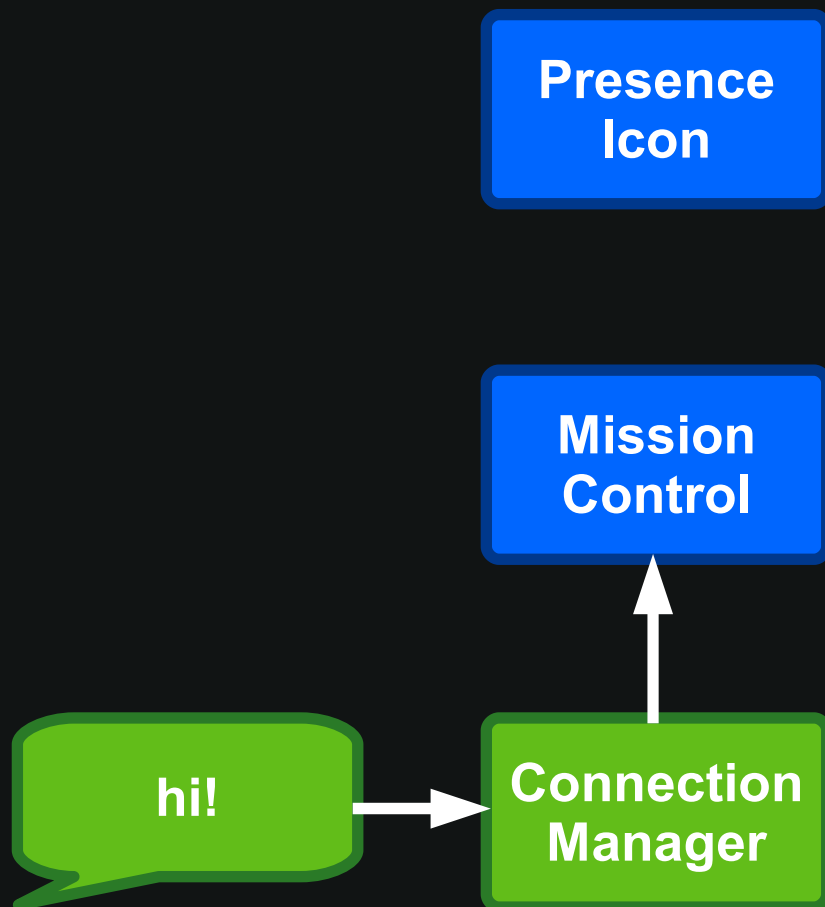
Mission
Control

hi!

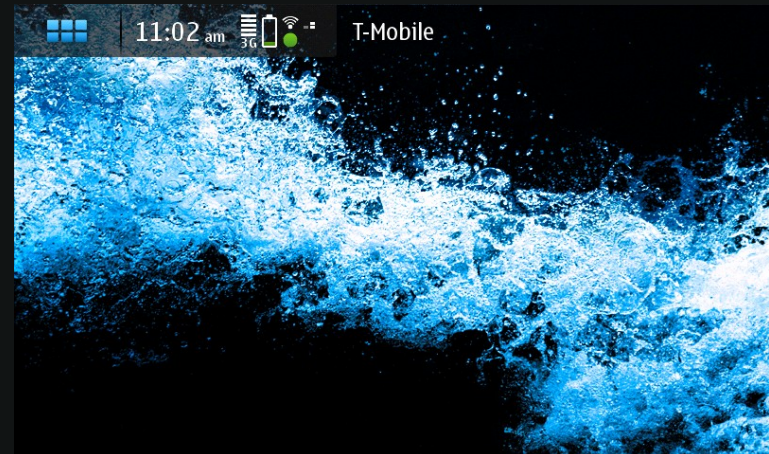
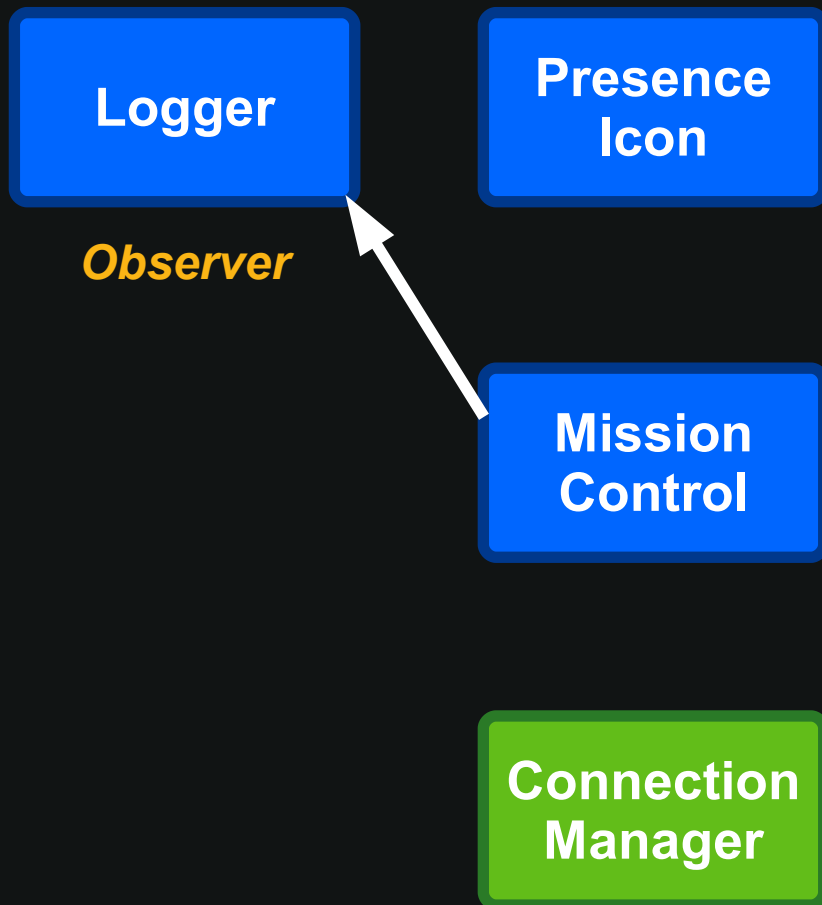
Connection
Manager



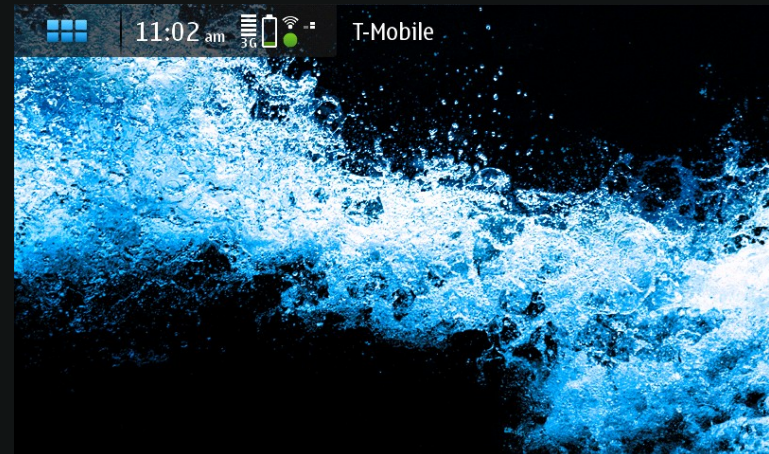
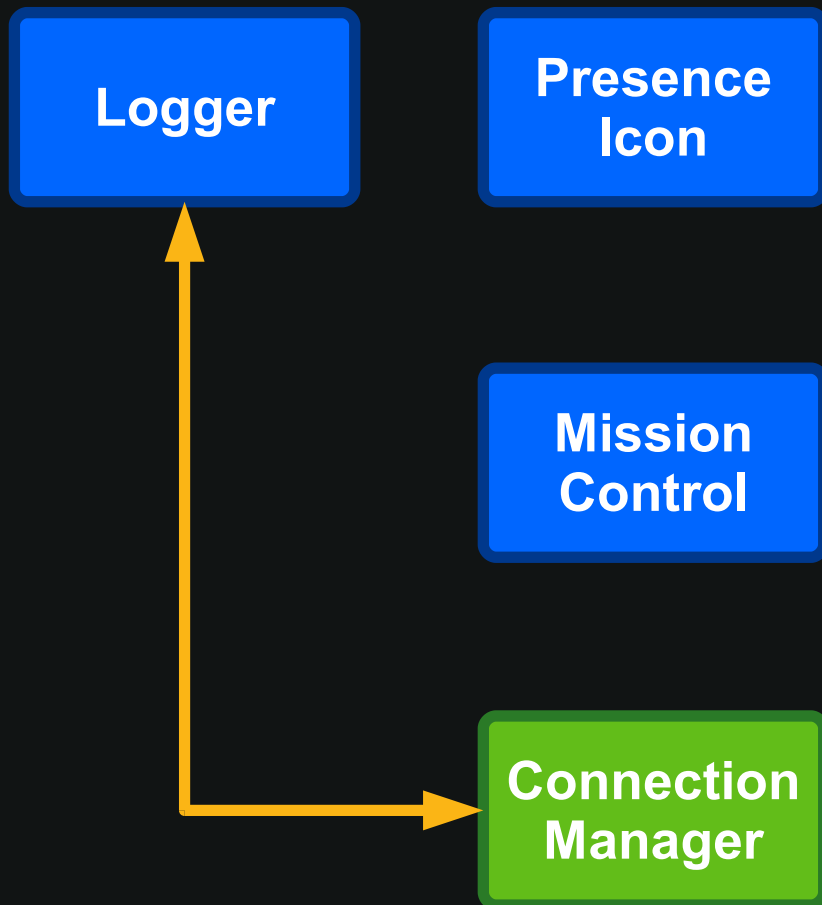
Component interaction



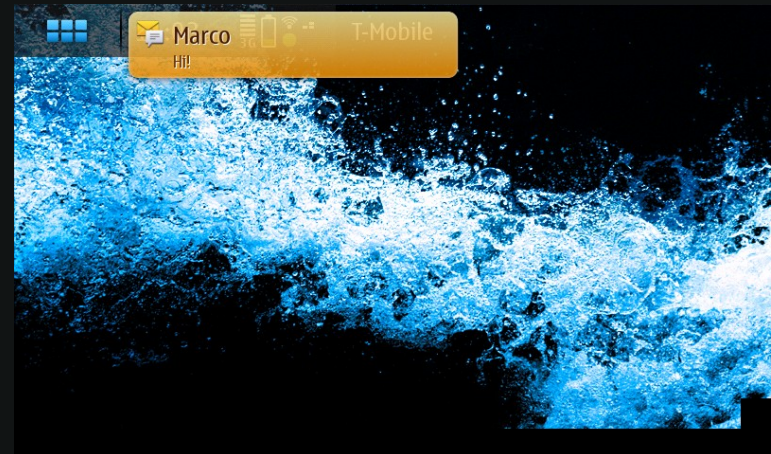
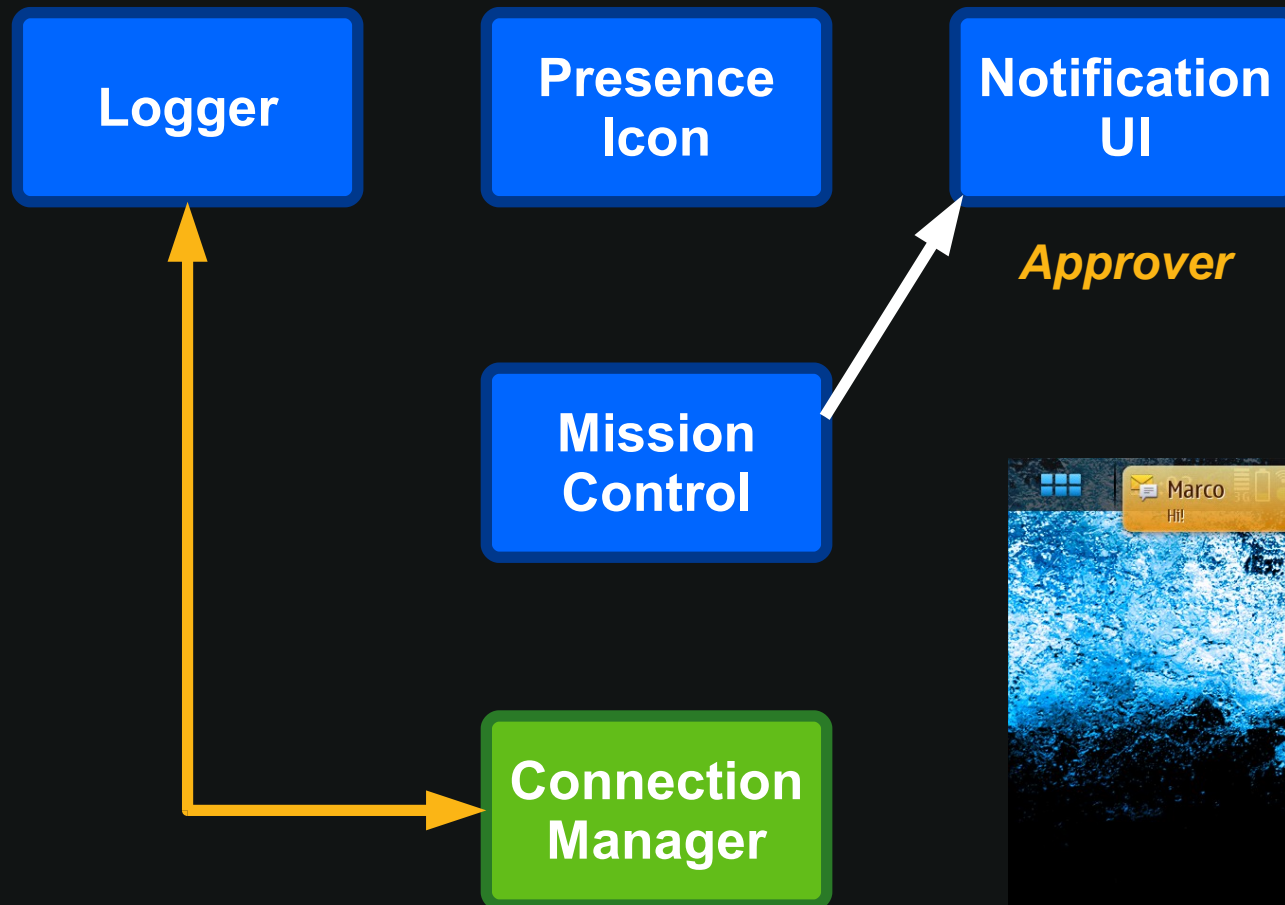
Component interaction



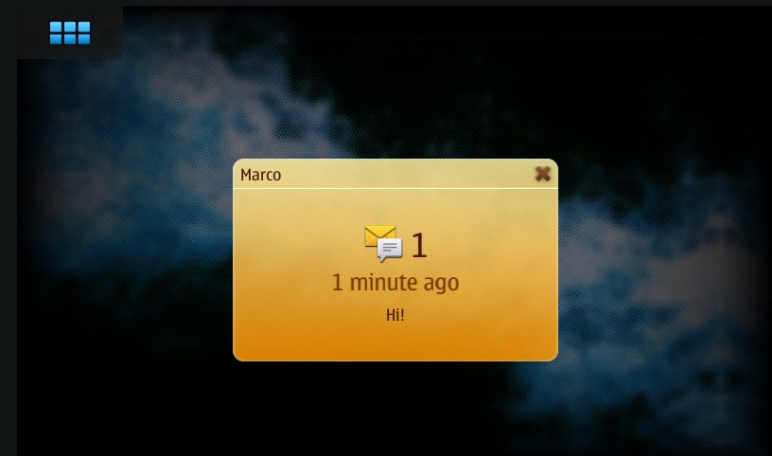
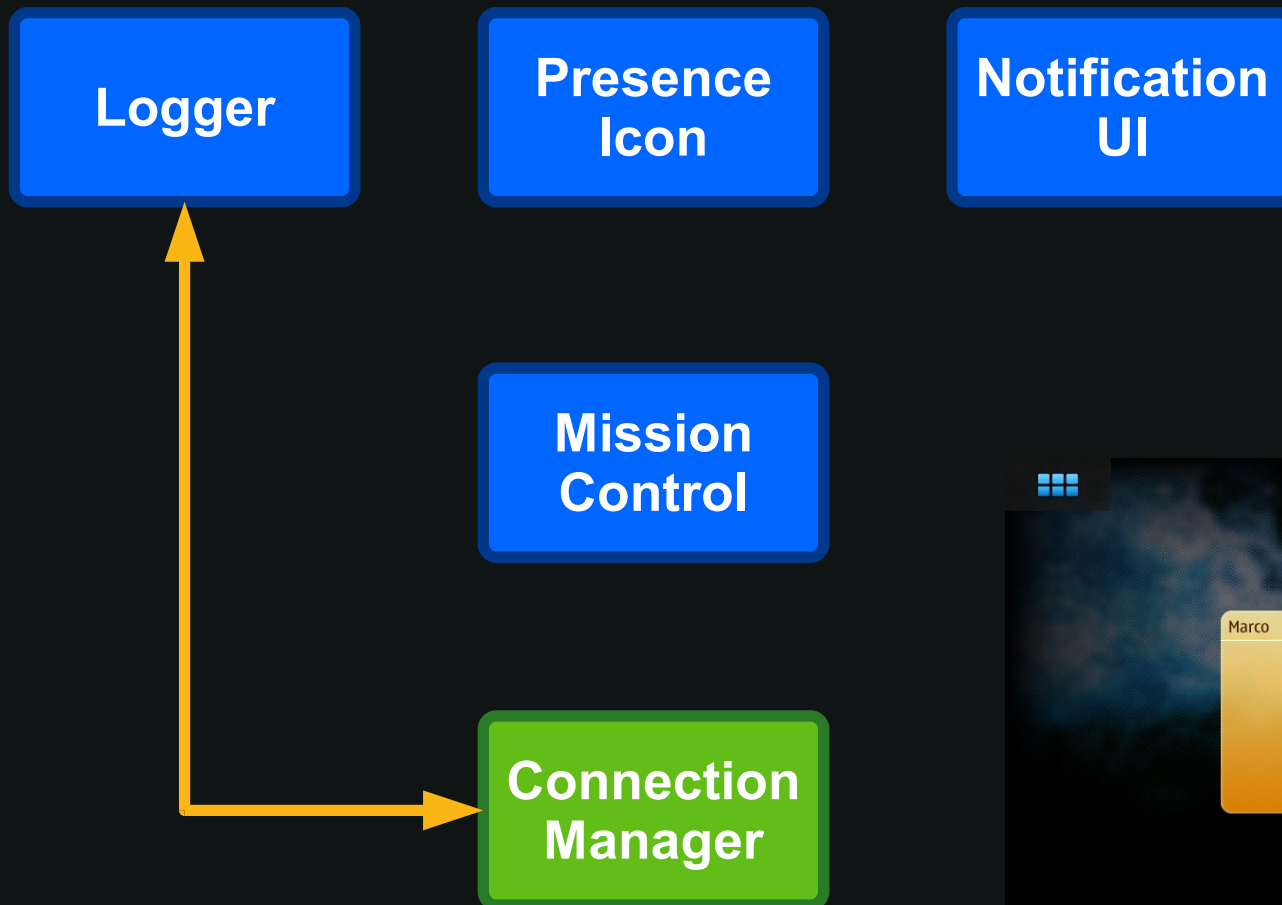
Component interaction



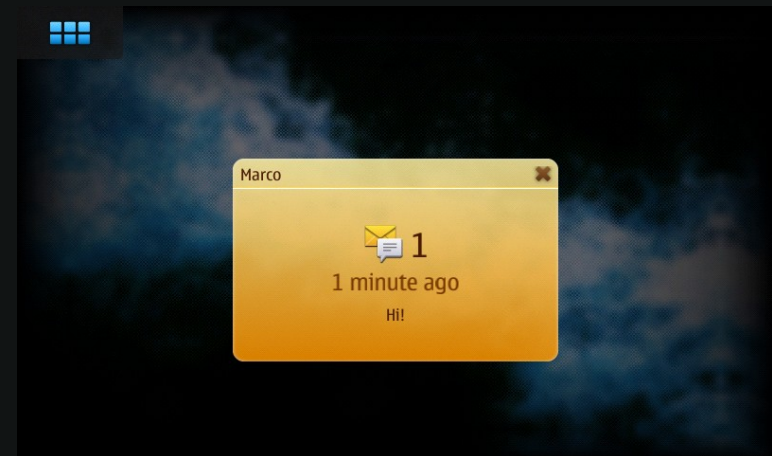
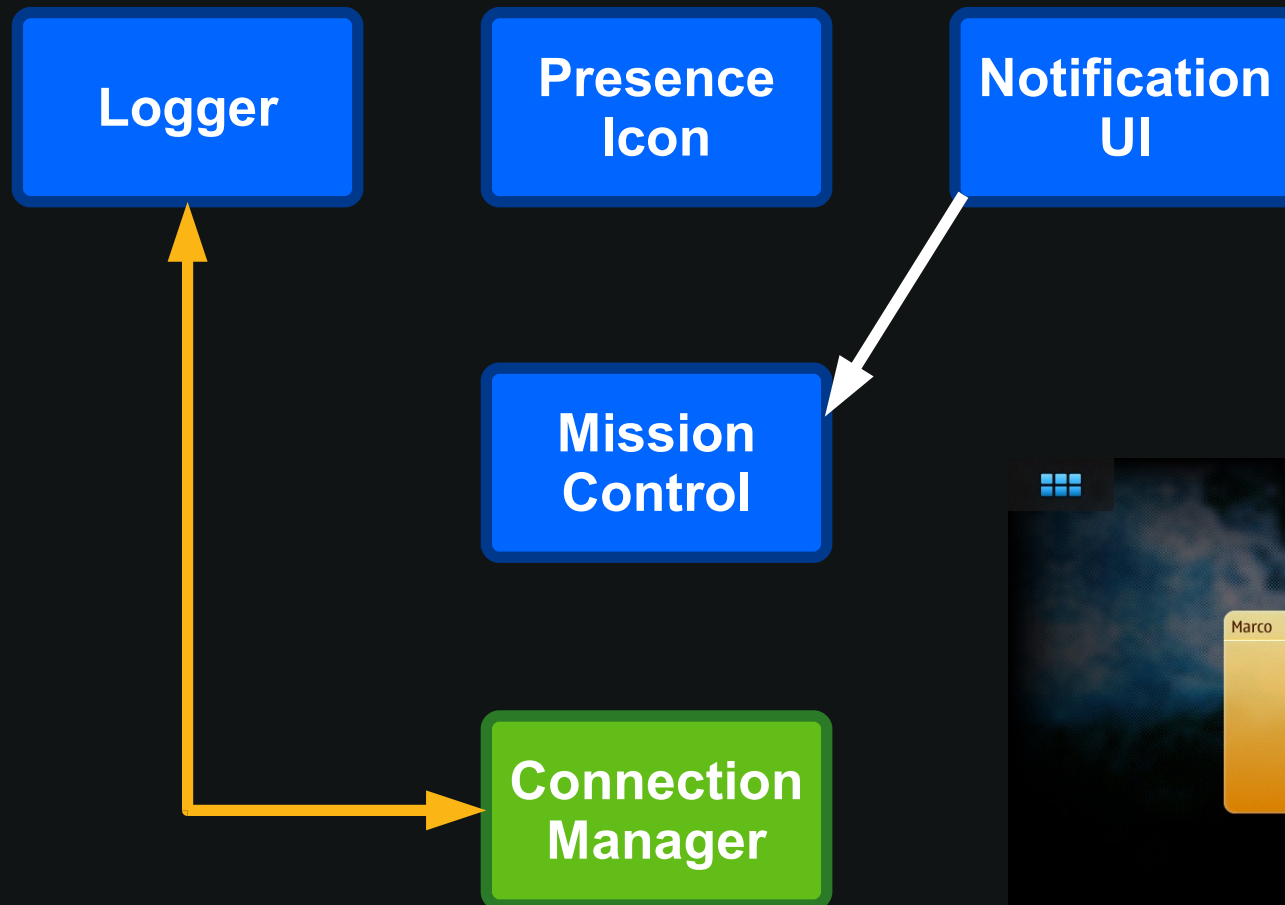
Component interaction



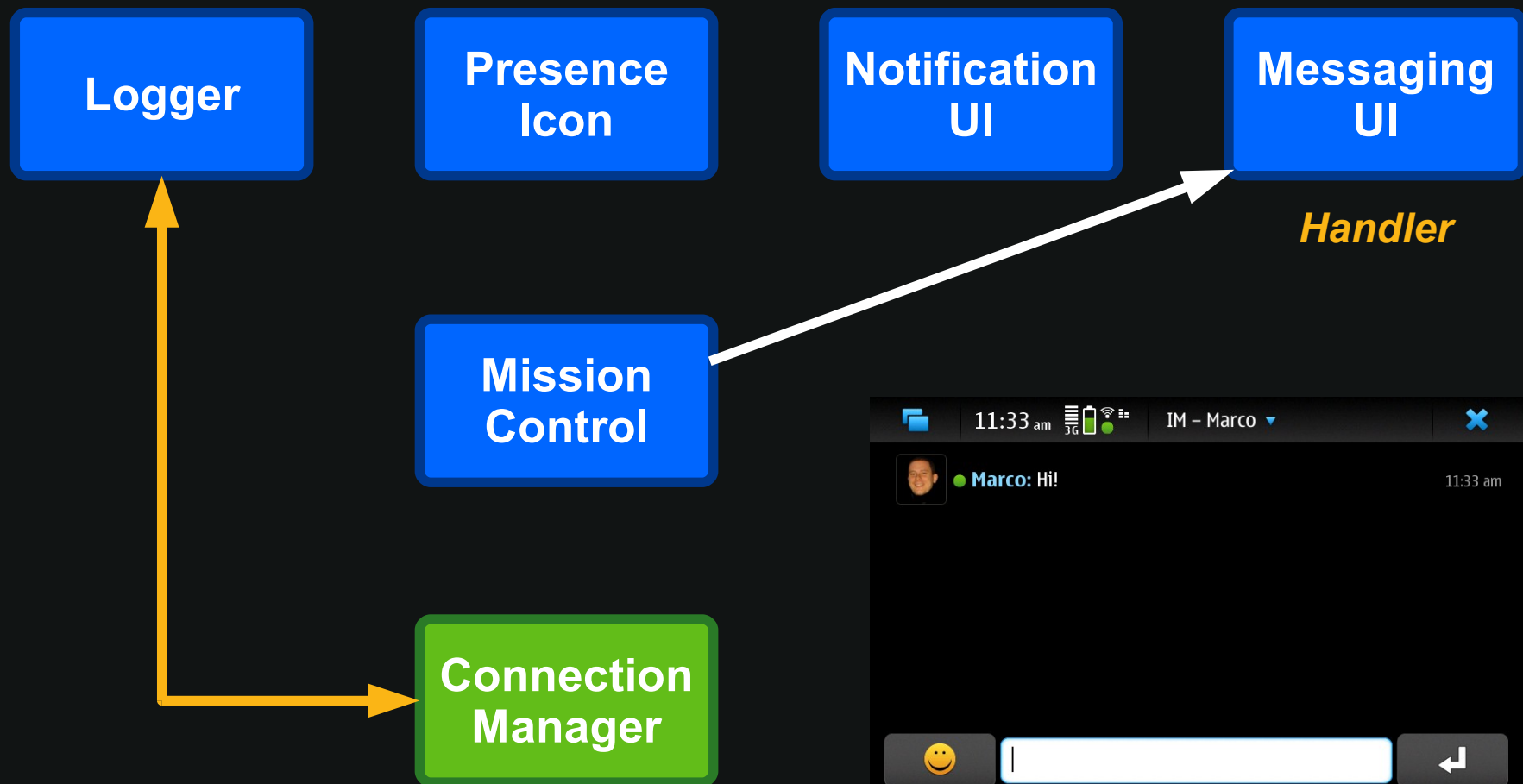
Component interaction



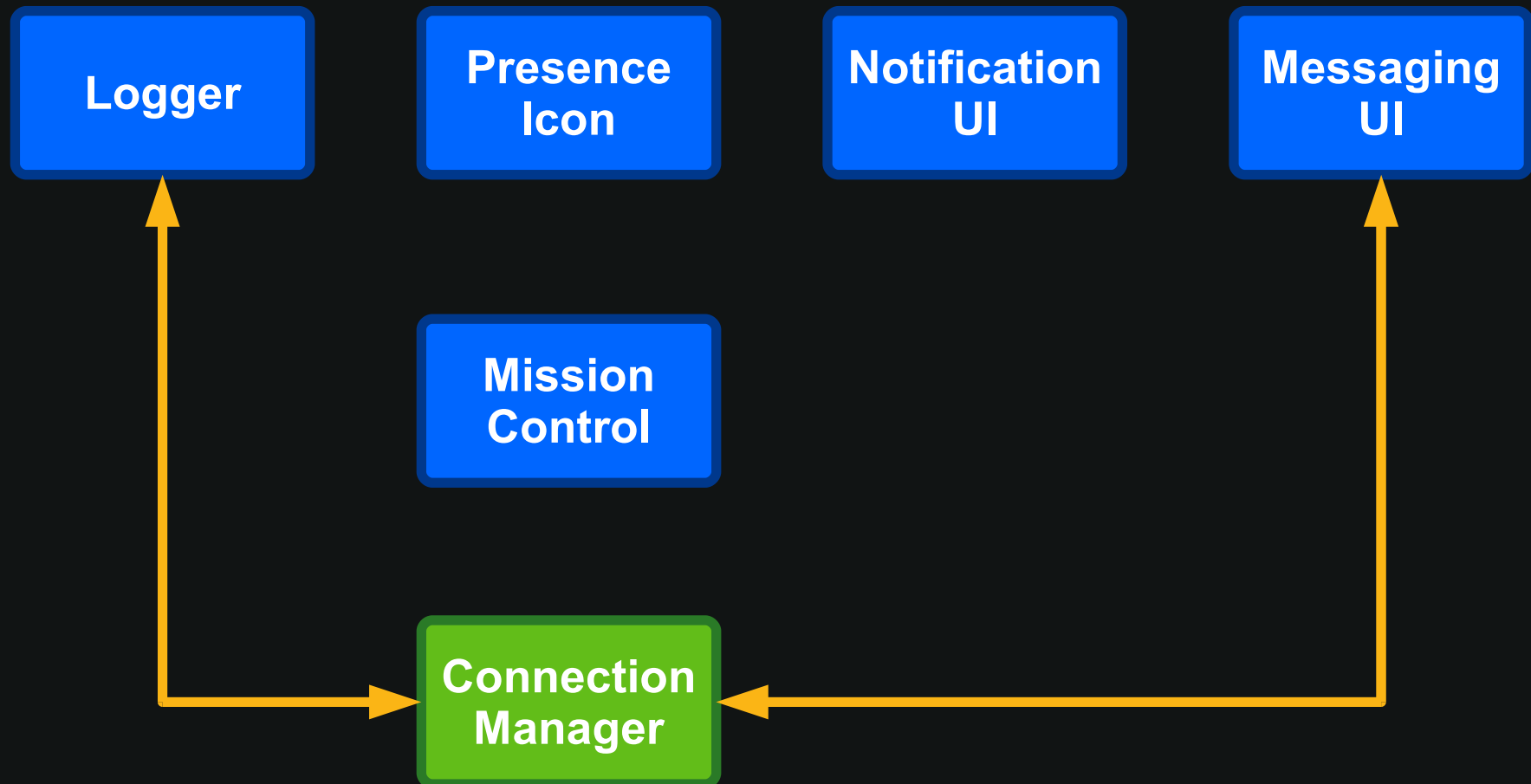
Component interaction



Component interaction



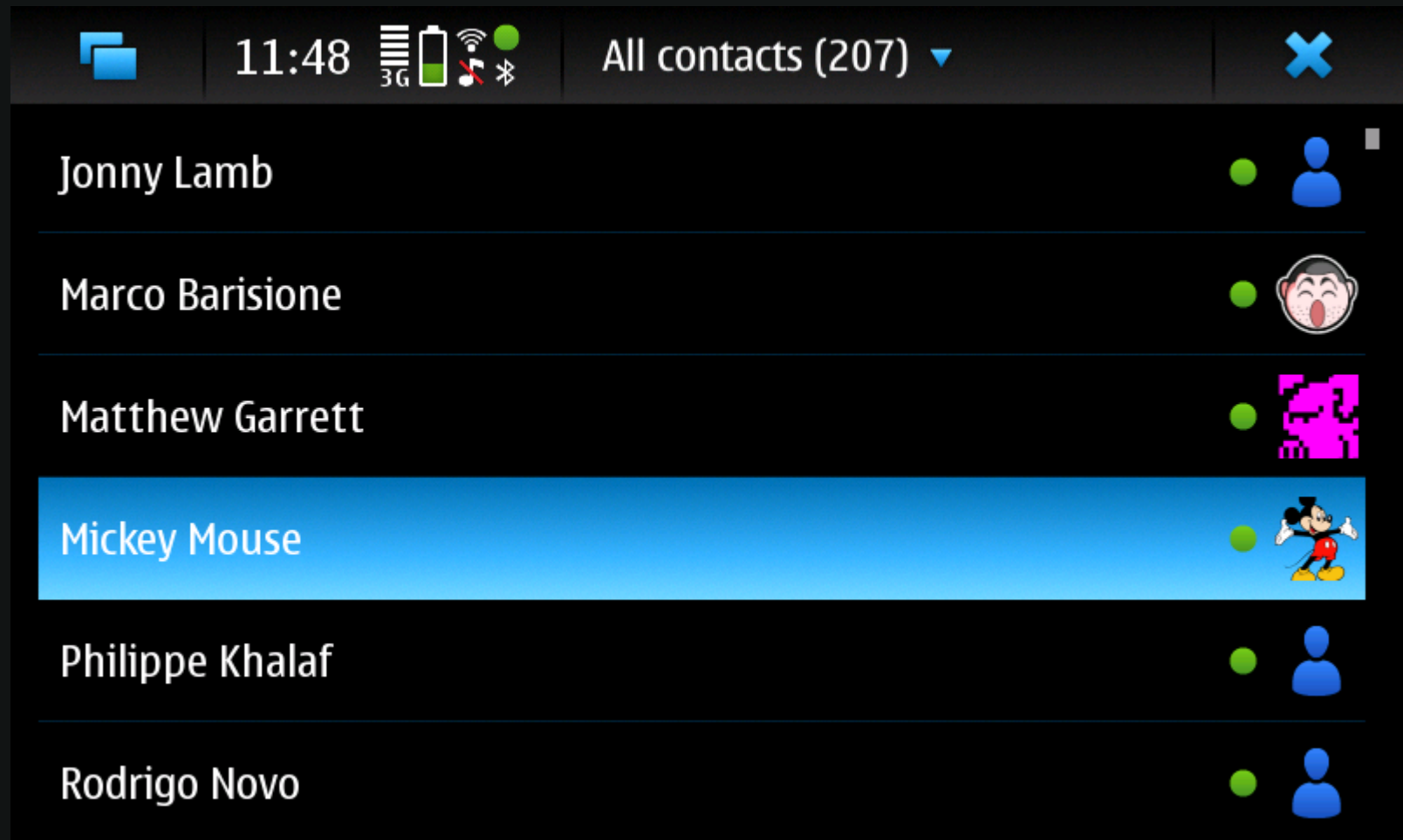
Component interaction

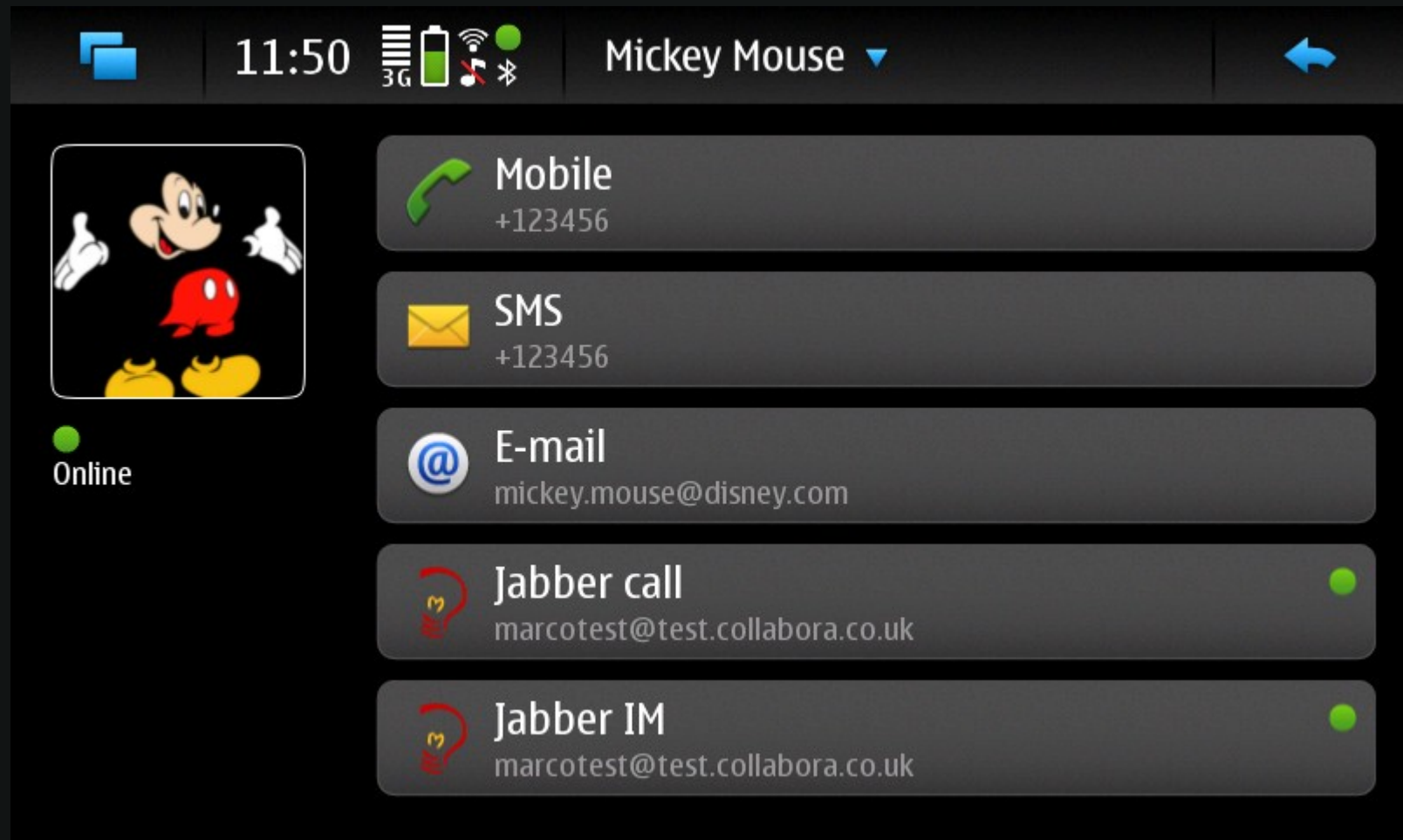


What is needed for contacts?

- Store “normal” local contacts
- Show IM contacts
- Merge contacts
- Add and remove IM contacts while offline

	11:48    	All contacts (207) 	
Jonny Lamb			
Marco Barisione			
Matthew Garrett			
Mickey Mouse			
Philippe Khalaf			
Rodrigo Novo			





Address Book Components

Contacts application

osso-addressbook

osso-abook-home-applet

libosso-abook

Evolution Data Server

libebook

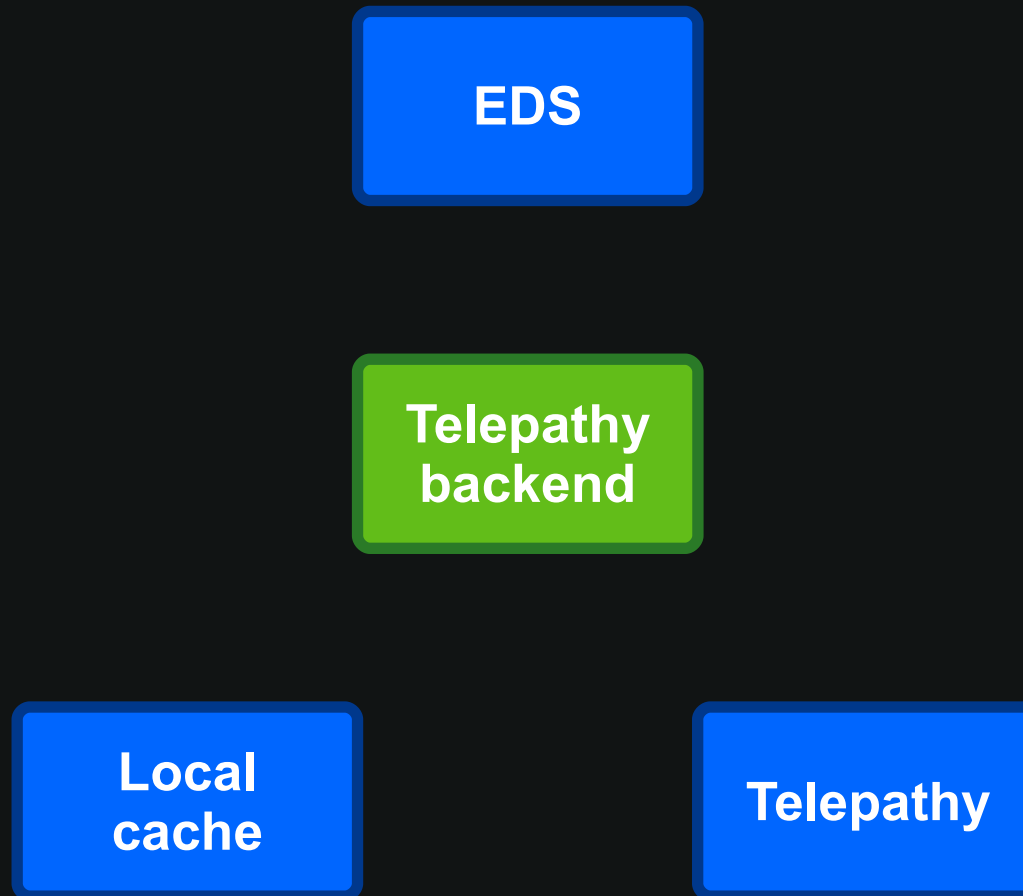
Contact Storage

Local Database

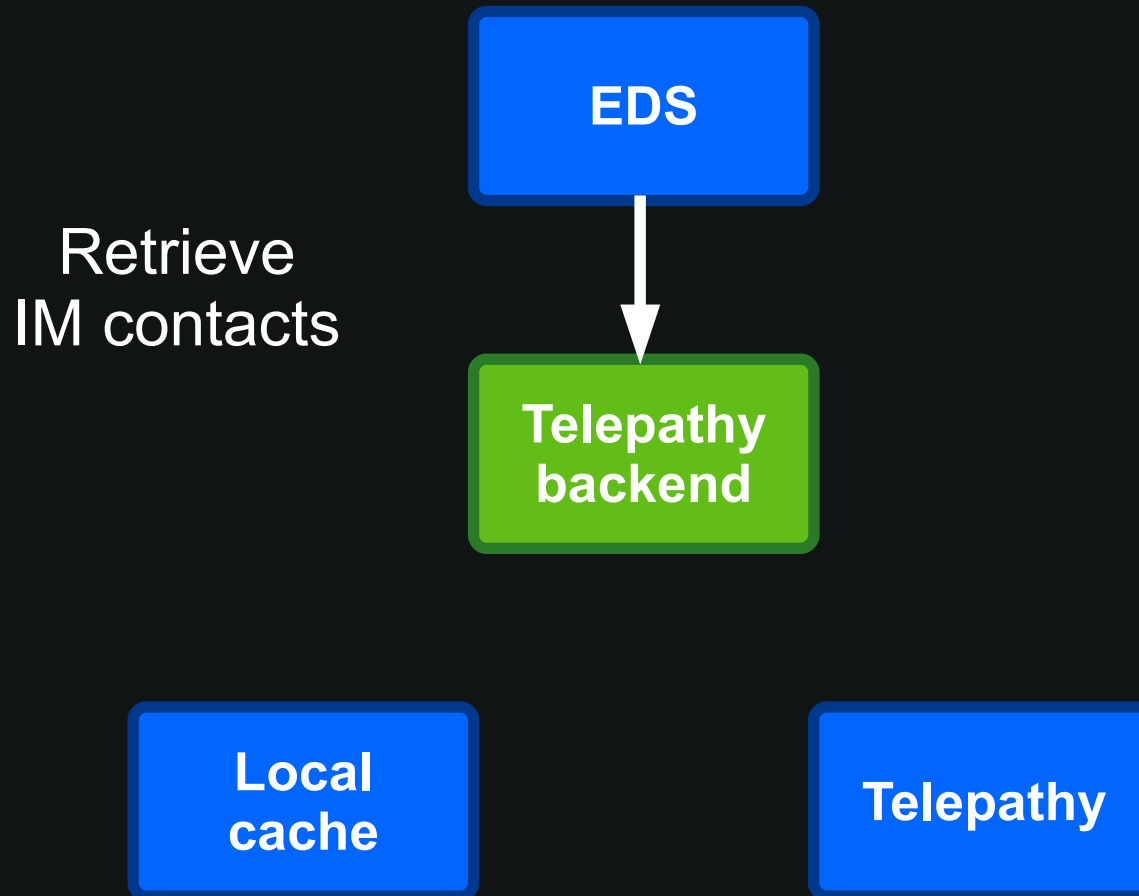
SIM Hardware

Telepathy

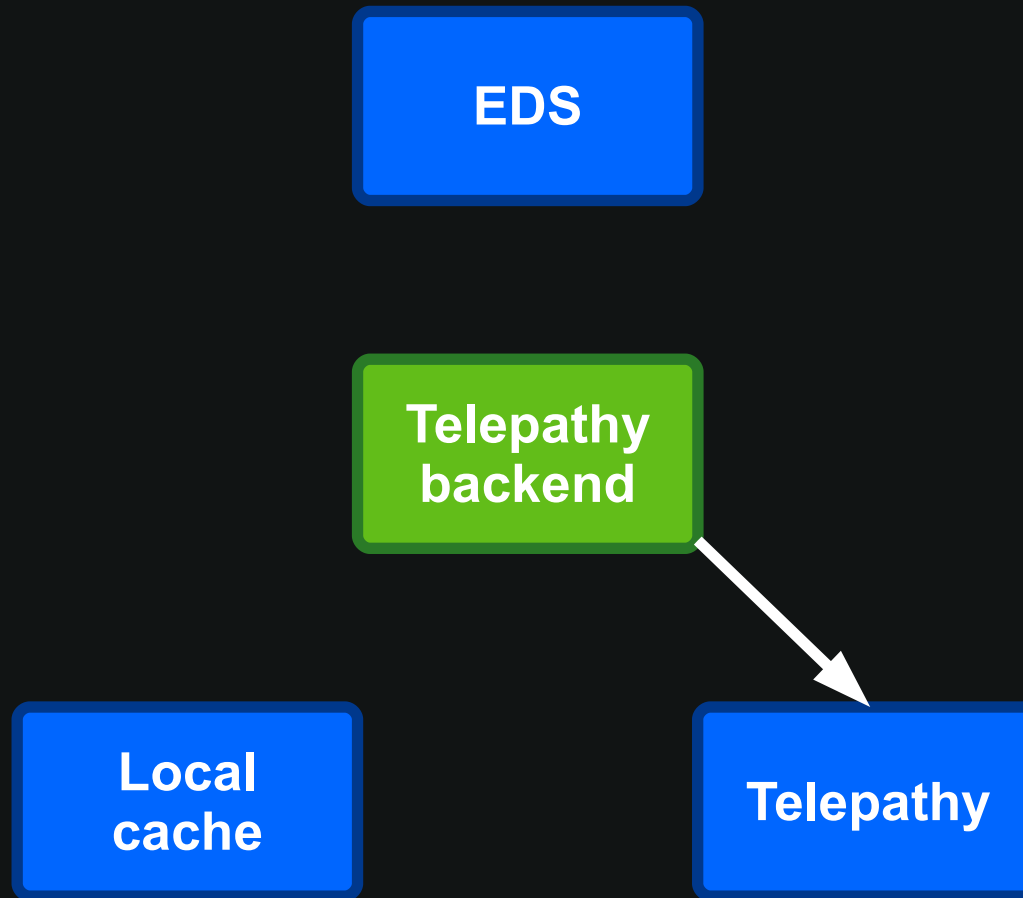
EDS Telepathy backend



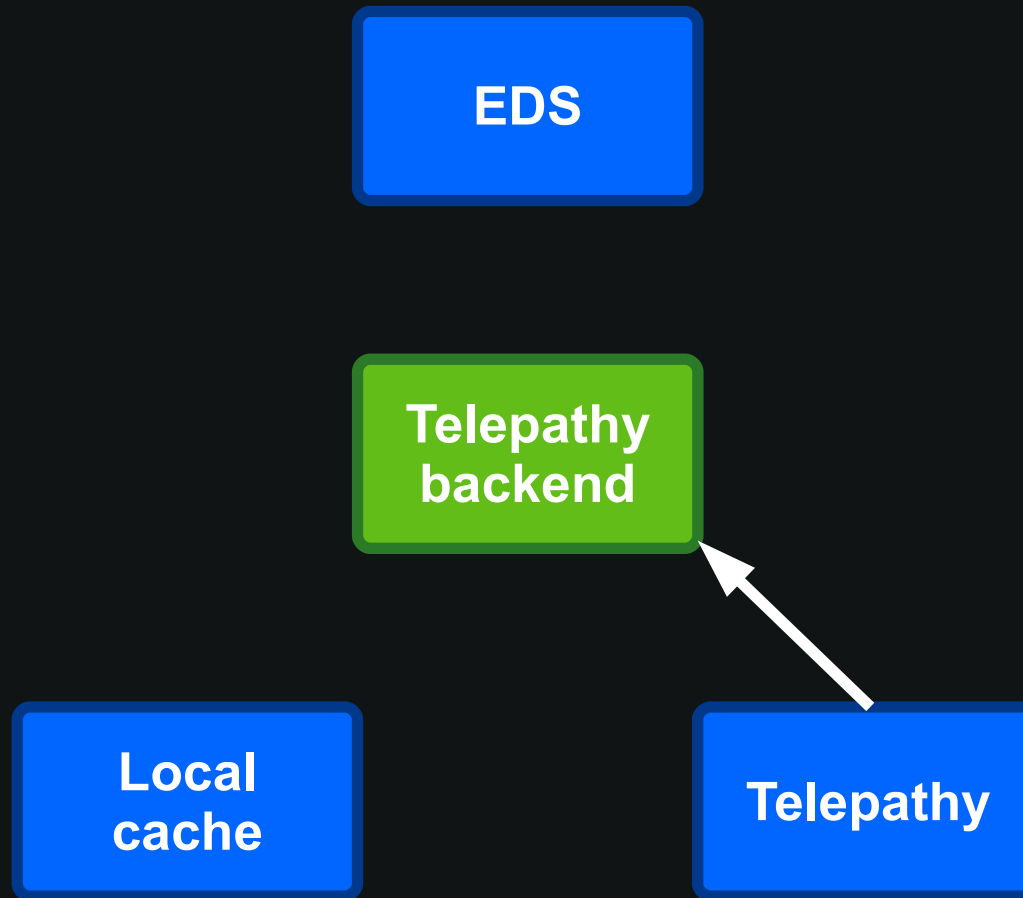
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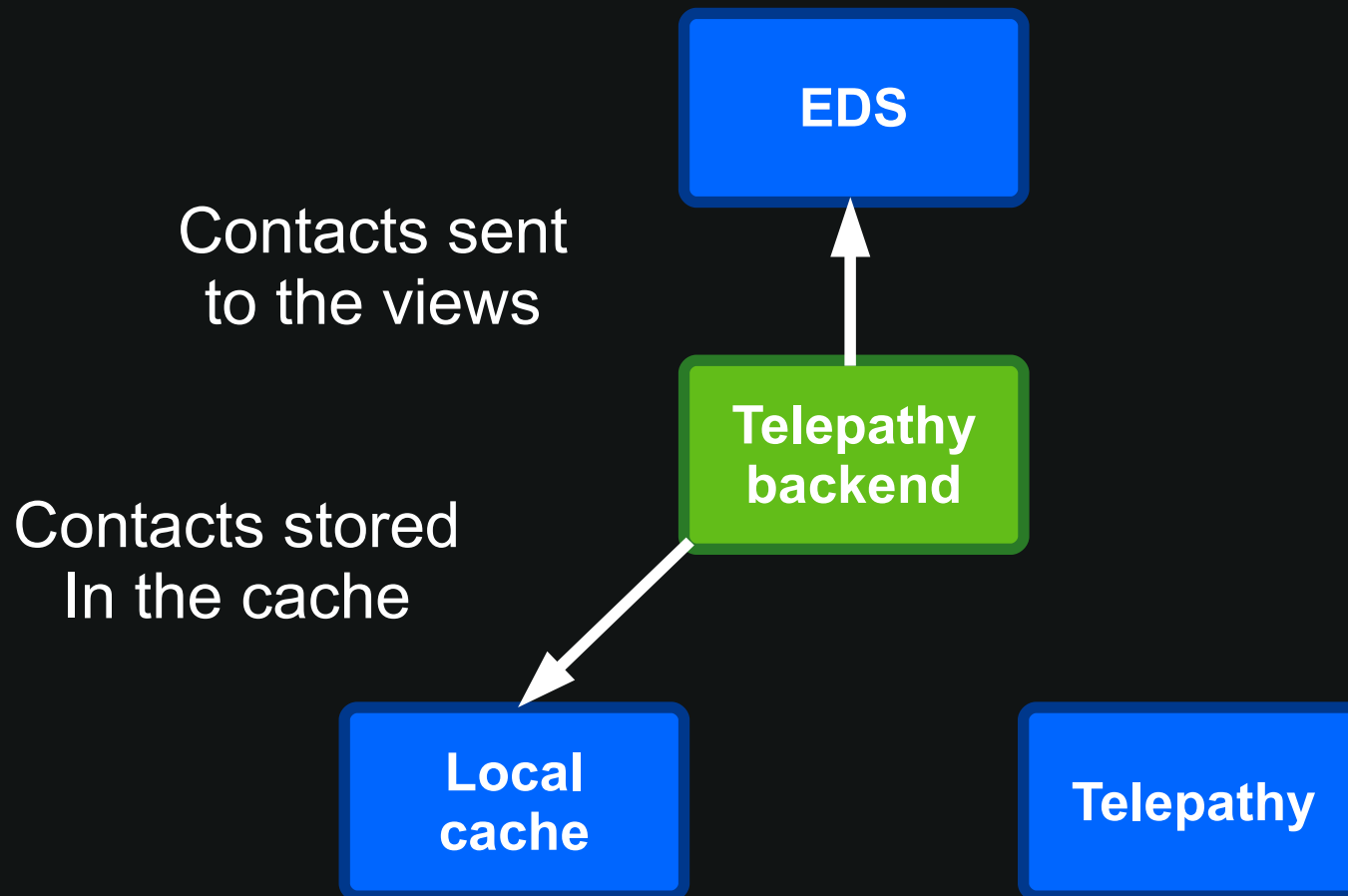
EDS Telepathy backend



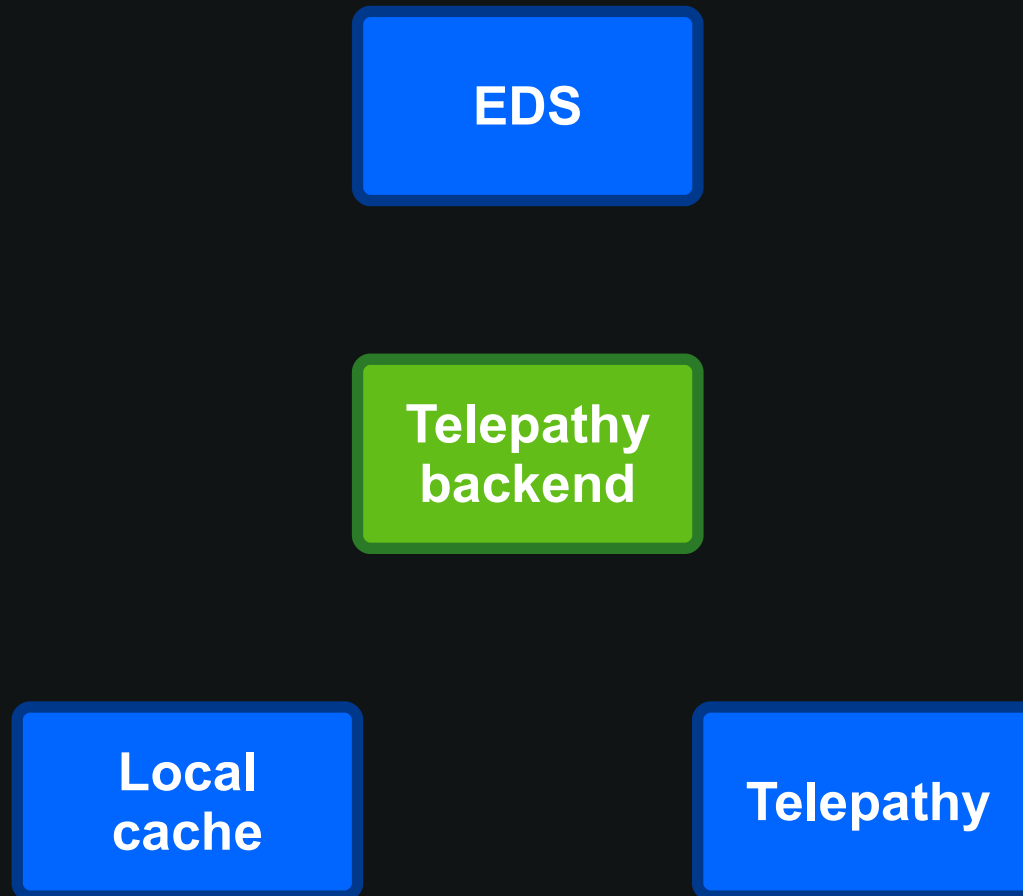
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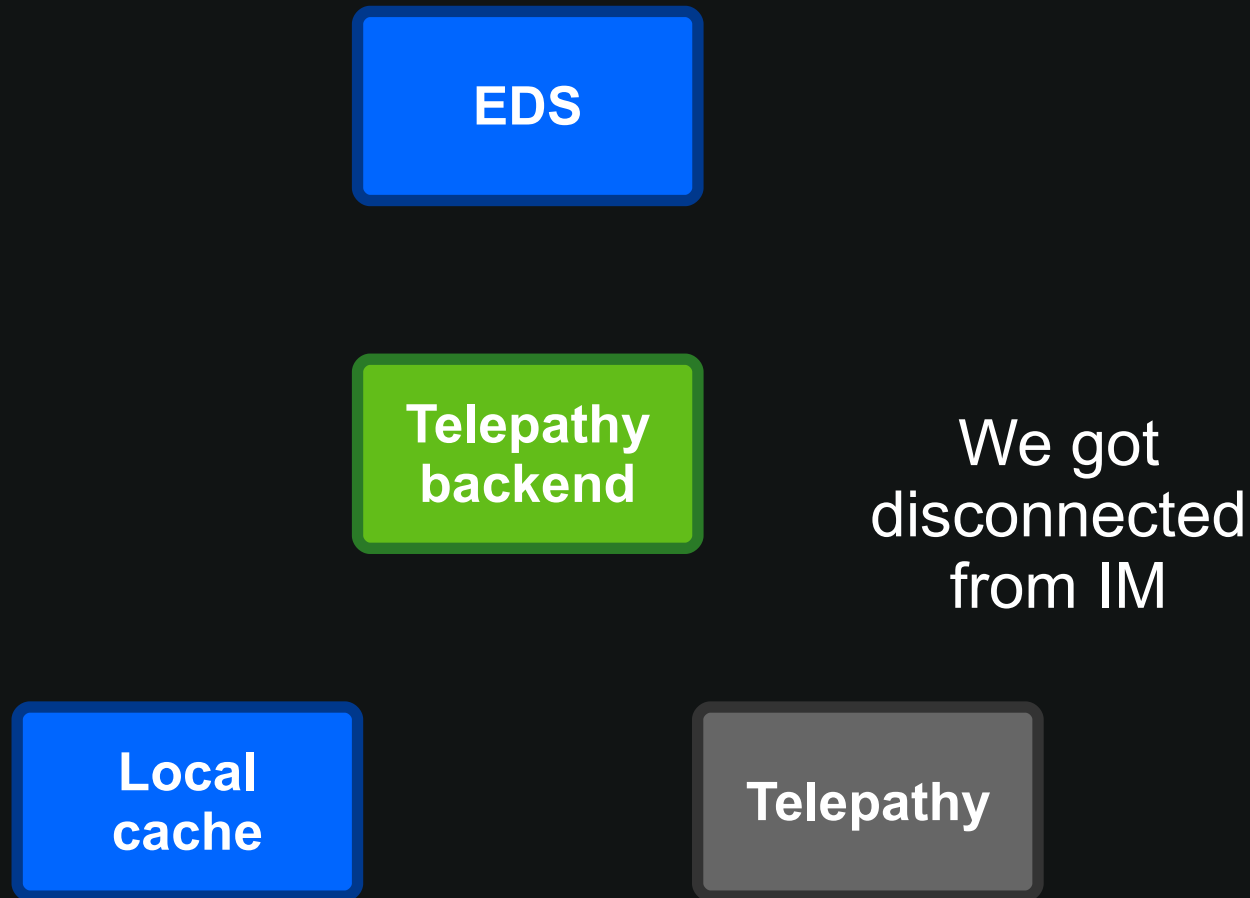
EDS Telepathy backend



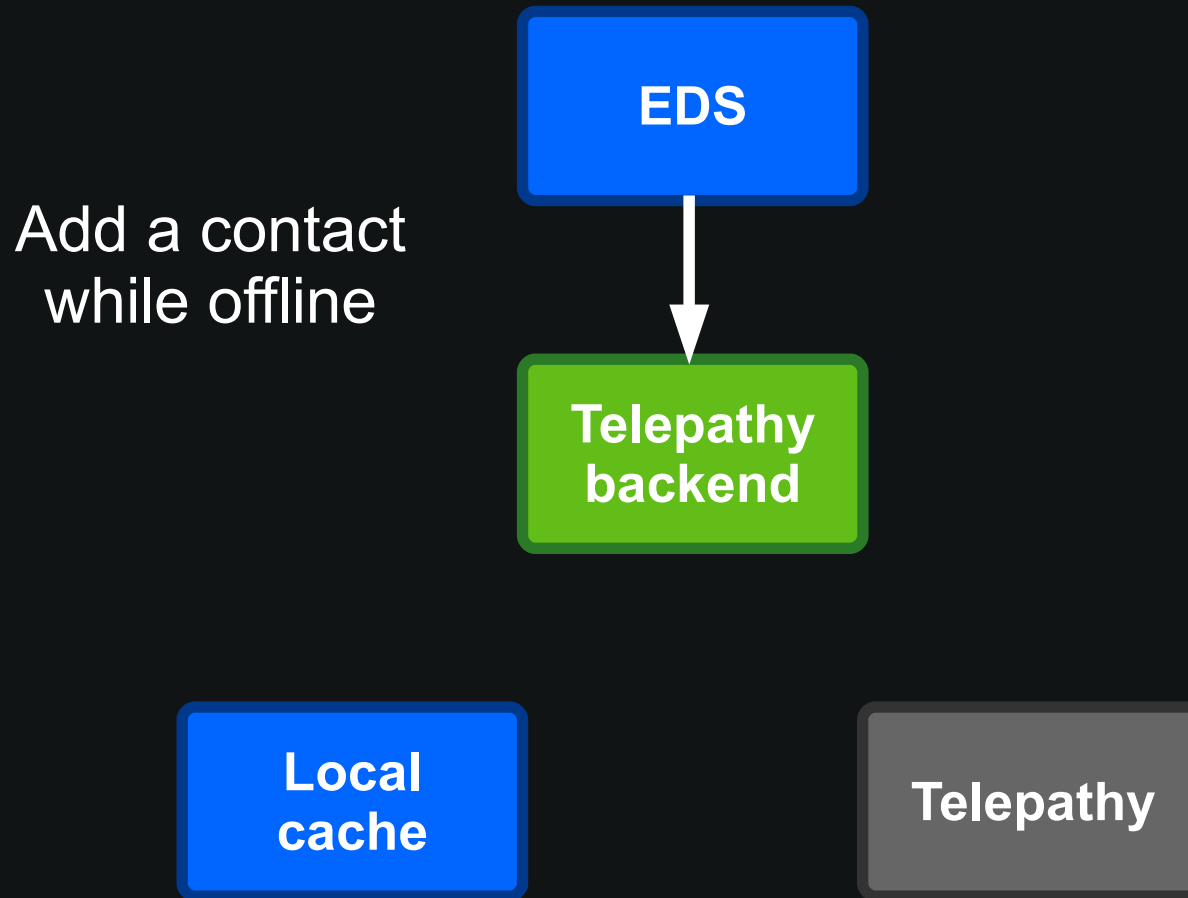
EDS Telepathy backend



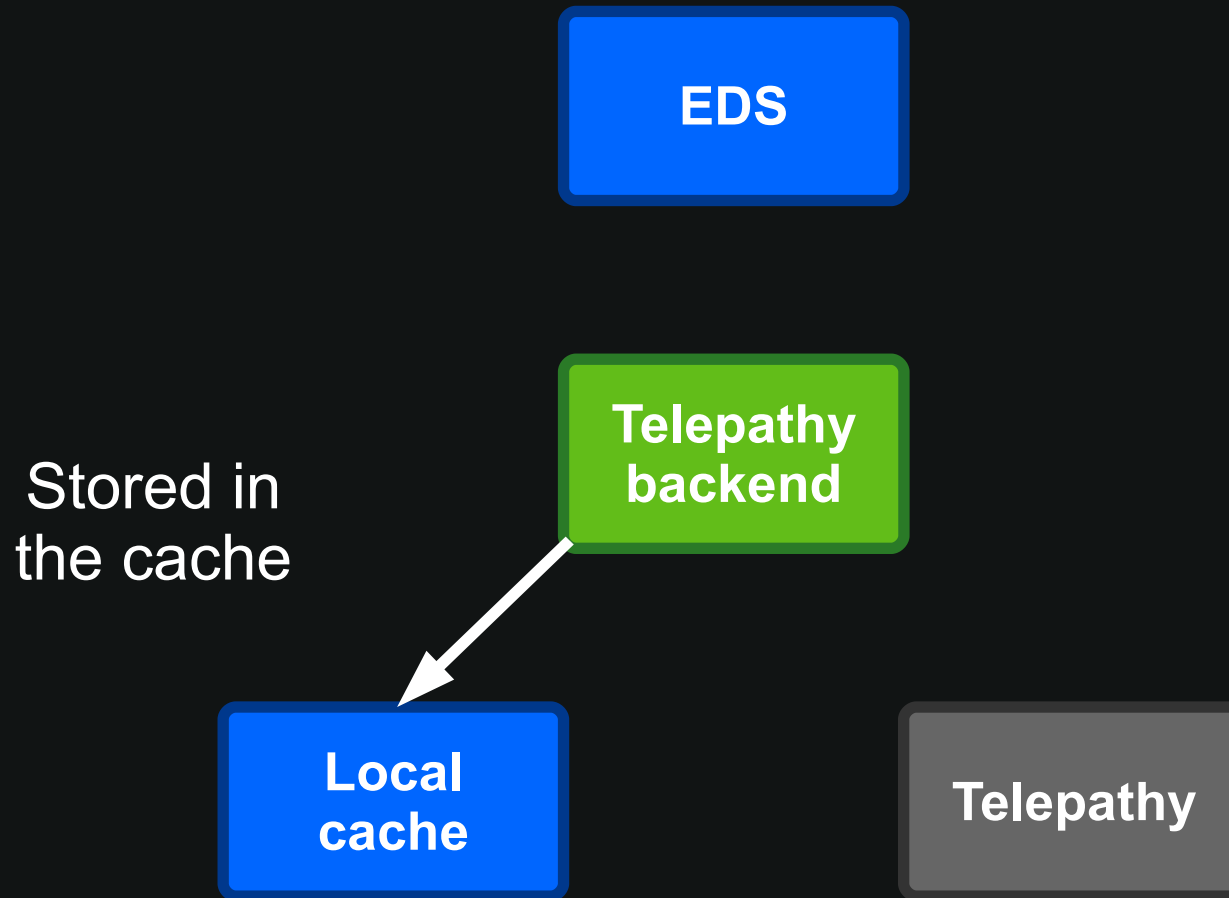
EDS Telepathy backend



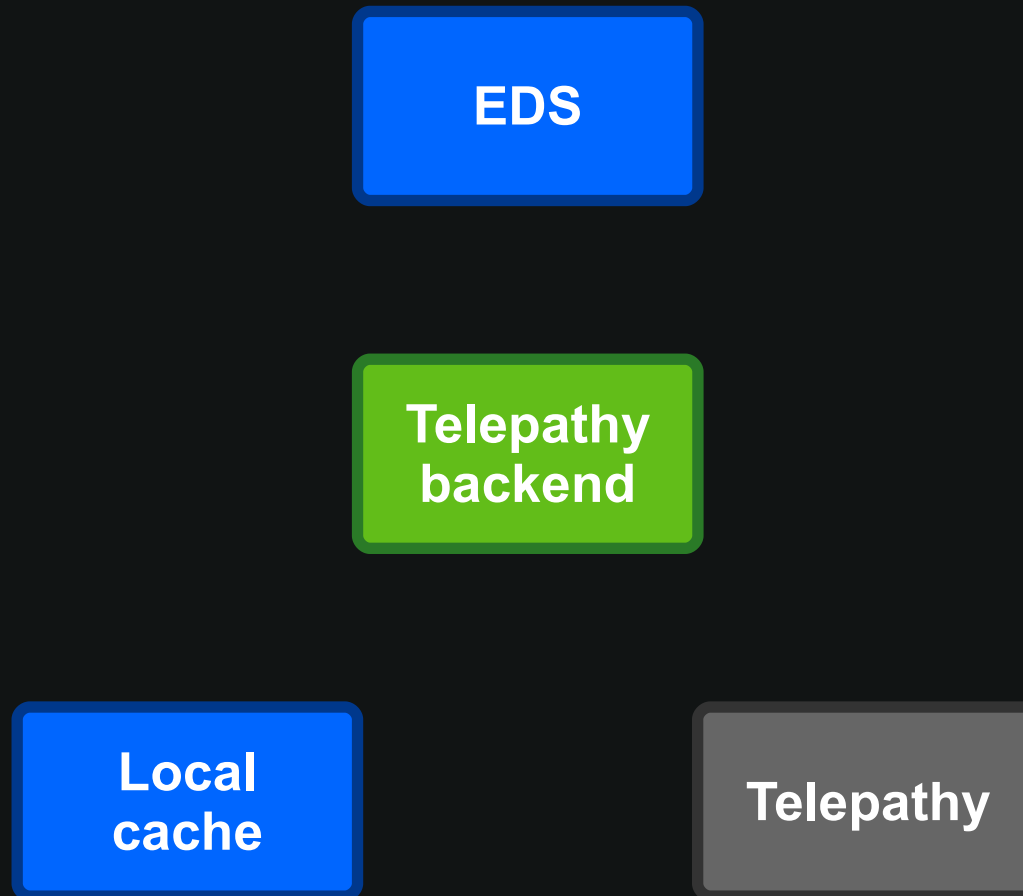
EDS Telepathy backend



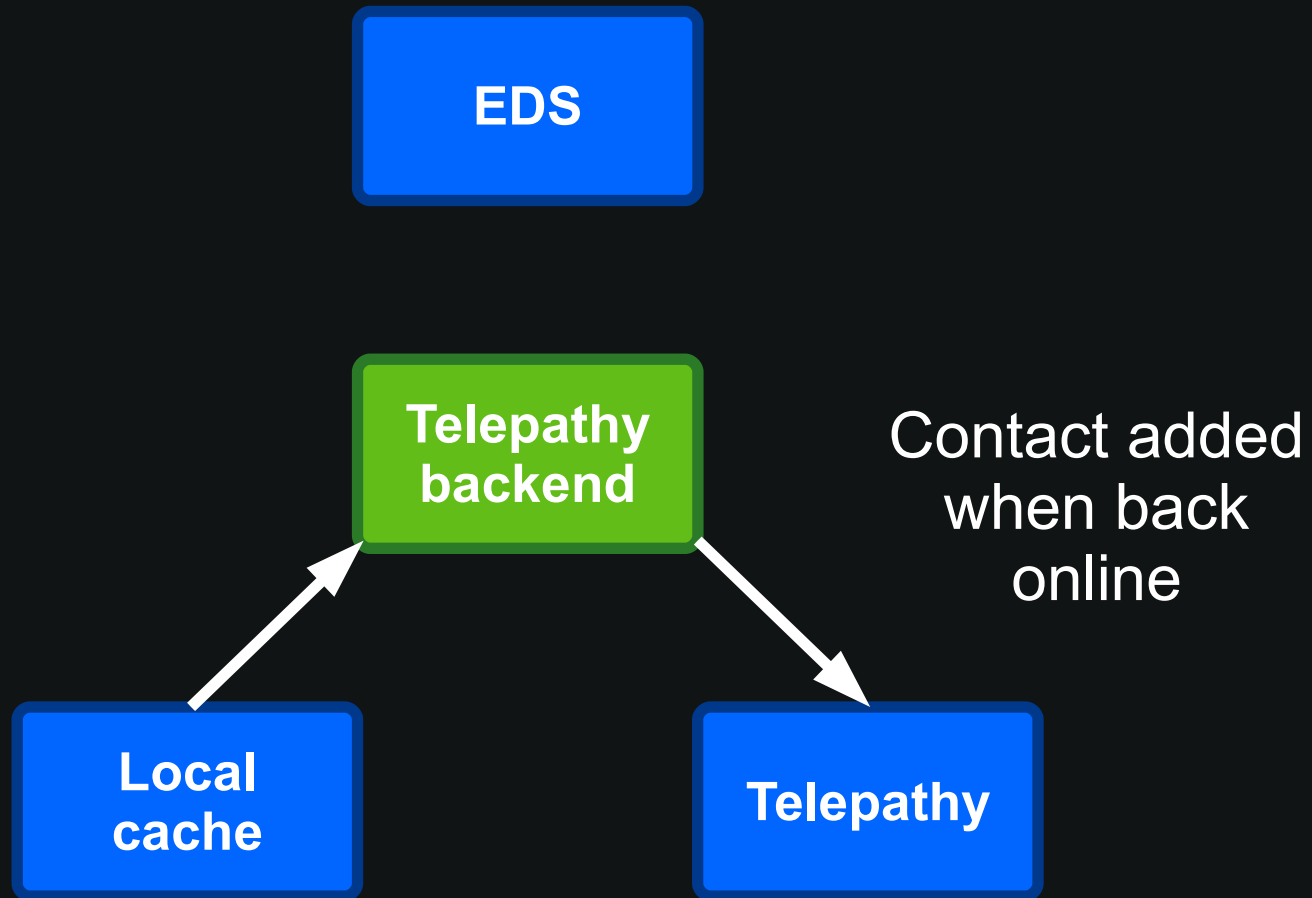
EDS Telepathy backend



EDS Telepathy backend



EDS Telepathy backend



Where to start?

- Telepathy book
 - <http://people.collabora.co.uk/~danni/telepathy-book/>
- Telepathy specification
 - <http://telepathy.freedesktop.org/spec/>

Where to start?

- C/GLib library
 - <http://telepathy.freedesktop.org/doc/telepathy-glib/>
- Maemo addresss book integration
 - <http://bit.ly/481KX1>



Telepathy