

# Telepathy Skykit

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# Instant Messaging in Linux

# Instant Messaging in Linux **SUCKS**

# Facebook Web UI

The screenshot displays the Facebook web interface with several key components:

- Message Inbox:** A central window showing a list of messages. The most recent message is from "Christian" with the text "TOASTTTTTT" and a timestamp of "4:33pm". Other messages include "shweet" (4:32pm) and "makin me toast" (4:32pm).
- Online Friends:** A sidebar on the right titled "Online Friends" with a search bar and a list of 16 online users, each with a profile picture and a snippet of their activity.
- Left Sidebar:** A vertical list of user avatars and names, including "Ed Michnacki" and "t Chaldekas".
- Message Preview:** A small preview window at the top of the message list shows a message from "Christian" with the text "this instant message/staker wetdream on facebook gets old fast. 2 hours ago".

# Facebook Web UI



- ▶ no audio
- ▶ no video
- ▶ no groups
- ▶ facebook accounts only

# Google Talk Web UI

The screenshot displays the Google Talk Web UI interface. At the top, there is a search bar with a magnifying glass icon, the name "ALI BaBa RKR", a notification count of "0", and a "Share" button with a profile picture. Below the search bar is a settings gear icon. The main content area is divided into two columns. The left column contains a "DING ON GOOGLE+" section with a search bar and a list of users: licki Minaj, newgoogleplus, he Hunger Games, ritney Spears, and whitespace. Below this is a "MAY KNOW" section with a list of users: Mohammad Asid (ALI (Asid Learning Int)), Amir Nasiruddin S... (Arpatech Pvt Ltd), and yasir hussain (Jinnah college). Each user has an "Add" button. The right column features a "Start a hangout" button and a list of users: ALI baba, Abdul Wahab Kath, Ahmed Altakroui, Haris Nadeem, HuMaYuN BaBaR, Kaan Karaca, Kamal Faridi, Muhammad Adnan, Sameer Nisar, Shayan Haq, Shoukat Dharani, Xhahbaz Khan, and John Selby. A chat window is open for "Shayan Haq" (Jinnah college), showing a message: "You are now off the record. [Learn more](#)". Below the message, it says "This is your first chat with Shayan Haq. Control who can chat with you. [Adjust settings](#)".

# Google Talk Web UI

The screenshot shows the Google Talk Web UI interface. At the top, there is a search bar with a magnifying glass icon, the name "ALI BaBa RKR", a notification count of "0", and a "Share" button with a profile picture. Below this is a "Start a hangout" button. The main content area is divided into two columns. The left column contains sections for "DING ON GOOGLE+", "MAY KNOW", and "MIGHT LIKE". The right column shows a list of contacts for "ALI baba".

**DING ON GOOGLE+**

- licki Minaj
- newgoogleplus
- he Hunger Games
- ritney Spears
- whitespace

**MAY KNOW**

- Mohammad Asid (ALI (Asid Learning Int))
- Amir Nasiruddin S... (Arpatech Pvt Ltd)
- yasir hussain (Jinnah college)  Shayan Haq

**MIGHT LIKE**

- ThinkGeek
- YouTube

**ALI baba**

Chat with...

- Abdul Wahab Kath
- Ahmed Altakroui
- Haris Nadeem
- HuMaYuN BaBaR
- Kaan Karaca
- Kamal Faridi
- Muhammad Adnan
- Sameer Nisar
- Shayan Haq
- Shoukat Dharani
- Xhahbaz Khan
- John Selby

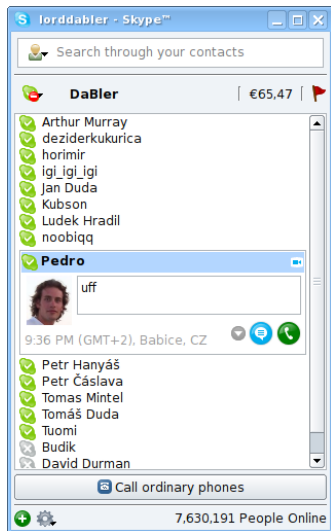
**Chat with Shayan Haq**

You are now off the record [Learn more](#)

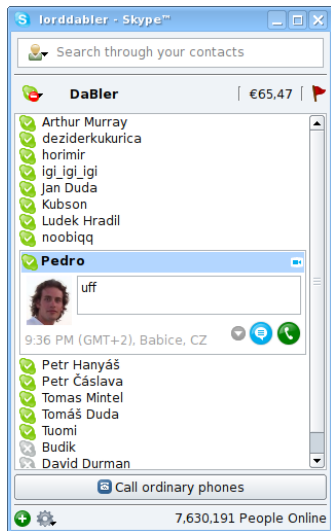
This is your first chat with Shayan Haq. Control who can chat with you. [Adjust settings](#)

► Google accounts only

# Skype

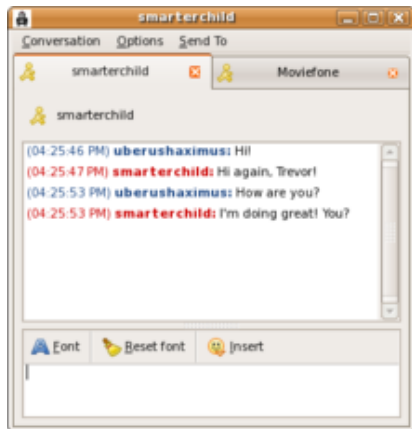




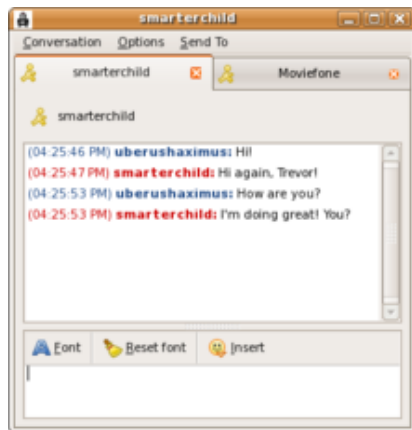


- ▶ awful L&F
- ▶ no PIM/DE integration
- ▶ x86-desktop only on Linux

# Pidgin



# Pidgin



- ▶ no audio
- ▶ no video
- ▶ no PIM/DE integration

## Cool Example:

- ▶ audio
- ▶ video
- ▶ PIM/DE integration
- ▶ multiple protocols
- ▶ touch interface

## Cool Example: n900



- ▶ audio
- ▶ video
- ▶ PIM/DE integration
- ▶ multiple protocols
- ▶ touch interface



# The Unix Way

Do one thing and do it well

- ▶ Instant Messaging

# The Unix Way

Do two things and do it well

▶ User Interface

▶ Protocol



# The Unix Way

Do six things and do it well

- ▶ Contact List
- ▶ Chat
- ▶ Logging
- ▶ AIM
- ▶ MSN
- ▶ XMPP

# The Unix Way

Do twelve things and do it well?

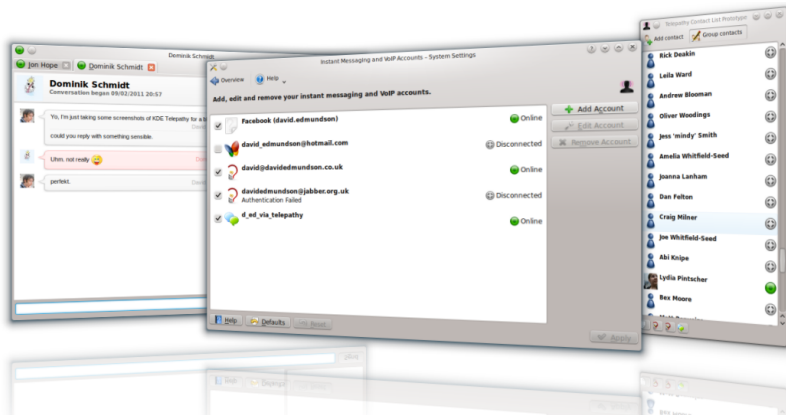
- ▶ Contact List
- ▶ Chat
- ▶ Logging
- ▶ File Transfer
- ▶ Voice Call
- ▶ Tubes
- ▶ AIM
- ▶ MSN
- ▶ XMPP
- ▶ SIP
- ▶ ICQ
- ▶ IRC

# Telepathy Architecture

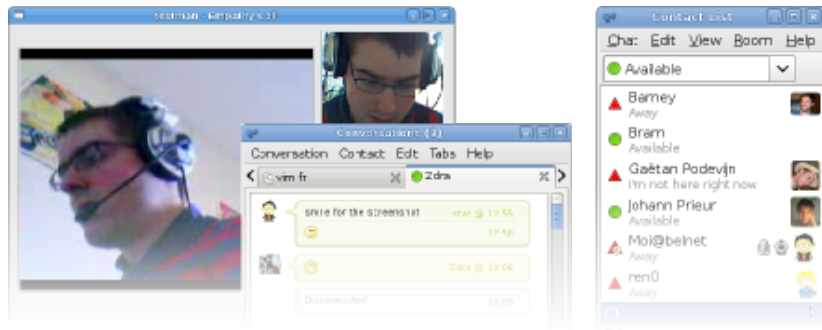
- ▶ move away from the monolithic client
- ▶ split stuff into separate processes
- ▶ run protocols as services
- ▶ create a standard DBUS API



# KDE Telepathy



# Empathy



Skype

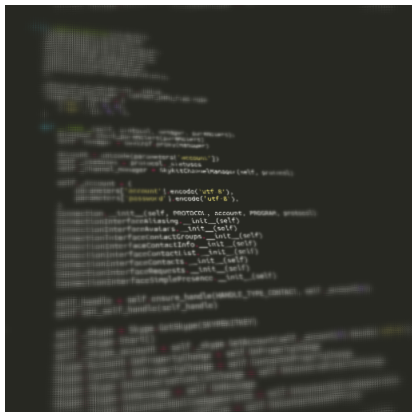
# Skypekit



- ▶ headless version of Skype
- ▶ different OS
- ▶ different arches for Linux
- ▶ audio, video, ...
- ▶ not free (\$5 for developer license)



# Telepathy Skykit



```
class ProtocolService:
    def __init__(self, protocol, account, program, protocol):
        self.protocol = protocol
        self.account = account
        self.program = program
        self.protocol = protocol

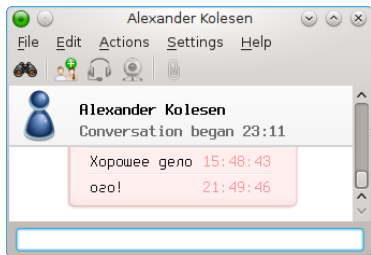
class ConnectionManager:
    def __init__(self, protocol, account, program, protocol):
        self.protocol = protocol
        self.account = account
        self.program = program
        self.protocol = protocol

class TelepathyBasedService:
    def __init__(self, protocol, account, program, protocol):
        self.protocol = protocol
        self.account = account
        self.program = program
        self.protocol = protocol

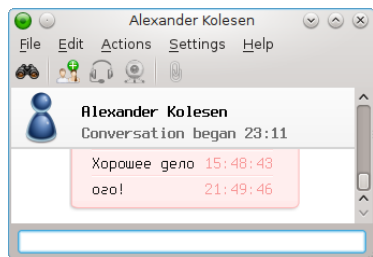
class SkypeKitBasedService:
    def __init__(self, protocol, account, program, protocol):
        self.protocol = protocol
        self.account = account
        self.program = program
        self.protocol = protocol
```

- ▶ protocol service
- ▶ connection manager
- ▶ telepathy based
- ▶ skypekit based
- ▶ python
- ▶ telepathy-python
- ▶ open source
- ▶ no license (now)

# Telepathy Skykit



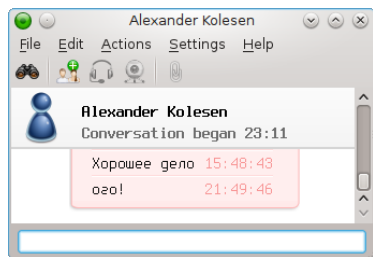
# Telepathy Skykit



## Supports

- ▶ presence
- ▶ contact list
- ▶ 1:1 chat
- ▶ avatar
- ▶ vcard

# Telepathy Skykit



## Supports

- ▶ presence
- ▶ contact list
- ▶ 1:1 chat
- ▶ avatar
- ▶ vcard

## Future plans

- ▶ MUC
- ▶ file transfer
- ▶ audio
- ▶ video
- ▶ ...

## More Info

- ▶ Maksim Melnikau (max\_posedon)
- ▶ email: maxposedon@gmail.com
- ▶ <https://github.com/max-posedon/telepathy-skykit>
- ▶ <https://github.com/max-posedon/telepathy-python>
- ▶ <http://telepathy.freedesktop.org/wiki/>
- ▶ <https://dev.skype.com/skypekit>
- ▶ <https://github.com/max-posedon/talk-telepathy-skykit>