Jami and how it empowers users

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What is Jami?
Jami is free software for universal communication that respects the freedom and privacy of its users.
Jami is developed by Savoir-faire Linux® based in Montréal, Canada. Savoir-faire Linux is a team of free software consultants providing training, consulting, development, and support services for free software technologies.
• one-on-one conversations
• file sharing
• audio/video calls & conferences
• screen sharing in video calls & conferences
• recording & sending audio/video messages
• SIP phone software functionality
• cross-platform communication framework
Architecture overview
Architecture & components of Jami
Jami is an end-to-end encrypted secure and distributed voice, video, and chat communication platform that requires no central server and leaves the power of privacy and freedom in the hands of users.
OpenDHT

- lightweight and scalable, designed for large networks and small devices
- high resilience to network disruption
- IPv4 and IPv6 support
- clean and powerful C++14 map API
- C, Rust, and Python 3 bindings
- public key crypto layer providing optional data signing and encryption (using GnuTLS)
- REST API with optional HTTP client+server and push notification support
SRTP
SIP
TLS
ICE

 alice ➔ bob

✓
Development news
- many connectivity improvements
- automatic video bitrate adjustment
- detached host rendezvous points
- notification improvements
- bidi text in the chat view
- video renderer improvements
- conference call moderation
- improved error handling
- object copy reductions
- plugin API overhaul
- ... and more!
Rendezvous points
Plugins
AutoAnswer
GreenScreen
discover more Jami plugins
jami.net/plugins

learn more about the plugins SDK
jami.net/plugins-sdk
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JAMS
Jami account & device management

- Alice
  - device1
  - device2
  - device3
Jami account & device management (with JAMS)
jami-qt client
jami-qm — main window
Missed incoming call
Missed incoming call

en: Hello World from the AutoAnswer plugin :)

fa: امتحان می‌کنیم
نور، سه
و اینکه نقطه.
jamii-qt - settings view (account)
jamii-qt - settings view (general)
Moderation
jami-qt — moderation
Swarm chat
characteristic features of swarm chats:

- split and merge based on connectivity
- message history synchronization
- no central authority or server
- non-repudiation: each device must be able to verify validity of old messages and replay the whole history
- PFS during transport
- device-local storage
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four modes for swarm chats:

- **1-to-1** (conversation with another Jami user)
- **admin-invite-only** (e.g. a class where the teacher can invite people, but not students)
- **invite-only** (a private group of friends)
- **public** (a public chat forum)
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maintain a synchronized Merkle tree of messages

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Reasons for using Git include:

- Need to synchronize and order messages
- Git is distributed by nature
- Widely used and popular
- Can verify commits using hooks and cryptographic signatures
- Can be stored in a database if needed
- Conflicts arising from splits/merges are much better handled by using commit messages rather than files
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demo time!
download jami-qt
jami.net/download
Community
• jami.net
  • forum.jami.net
  • jami@gnu.org
  • #jami on freenode
  • git.jami.net
  • review.jami.net
  • docs.jami.net
  • write and share your own plugins
  • help translate Jami to your language(s)
  • package Jami in your GNU/Linux distribution
  • use Jami and help spread the word <3
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Thanks!

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bndl.org/talks/jami-empowers-users
(GPLv3+)