Opentalk

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OpenTalk

Video Conferencing Secure and GDPR Compliant

Wolfgang Silbermayr and Stefan Sydow

OpenTalk Company

- Since 2021 in Berlin but mostly remote

- Spin-Off from Heinlein Group:
  Consulting and Training for Linux and Mail Operations,
  Hosting and Provider of `mailbox.org`

- ~ 20 employees

Who are we?

- Wolfgang Silbermayr
  - Joined September 2022, Backend team tech expert since July 2023
  - Master's degree in Embedded Systems Design
  - Rust since 2015, still in honeymoon phase
  - `https://valug.at/` co-founder and organizer since 2001
  - Fediverse: `https://chaos.social/@silwol` (German and English)

- Stefan Sydow
  - Joined June 2021, Media team tech expert since July 2023
  - Research and Teaching on Safe Parallel Programming
  - Master's degree in Computer Engineering
    on Software Defined Radio and ADS-B

OpenTalk Project

- Frontend: TypeScript

- Backend: Rust

- Free Software under EUPL-1.2
  `https://gitlab.opencode.de/opentalk/`

- Documentation: `https://docs.opentalk.eu/`
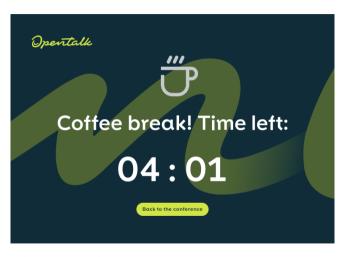
User Interface

Features

- Loobby with mic and camera check
- Moderation tools
  coffee break, timer, mute, poll, breakout rooms
- Screen share
- Speaker view
- Call in via SIP
- Integrations for shared editor and whiteboard
- Invitation mail with ICS calendar appointment
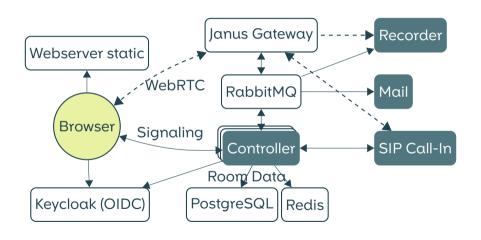- (WIP) Recording and Streaming

Coffee Break
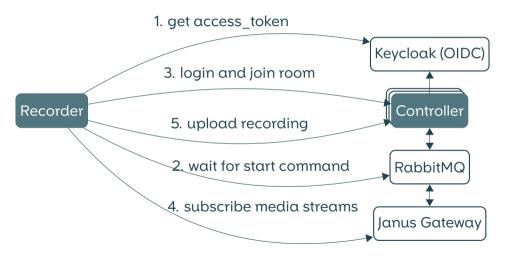
Shared Folder

System Overview

Rust client library example (WIP)

```rust
// Login process will be slightly more involved in real-world code
let url = Url::parse("https://opentalk.example.com/")?;
let (client, auth_token) = connect_client(url)?;

// Create an event
let event = client
    .create_event(&auth_token)
    .title("Example meeting")
    .send().await?;

// Invite a user
let email_address = EmailAddress::parse("alice@example.com")?;
client.invite_user_to_event(&auth_token, event.id)
    .identifier(email_address)
    .role(InviteRole::User)
    .send().await?;
```

Extending with a Media Service

1. get access_token → Keycloak (OIDC)

Recorder

3. login and join room → Controller

5. upload recording → Controller

2. wait for start command → RabbitMQ

4. subscribe media streams → Janus Gateway

Integrations

- UCS via Keycloak / OpenID Connect

- Innovaphone myApps

- mgm (A12)

- Outlook Plug-In

Q & A

Thanks for your attention!