

# Real-time Conflict Awareness in Distributed Version Control Systems

Mid-term Presentation

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# CloudStudio

- Web-based IDE
- **Awareness**  
What are other developers working on?
- **Conflicts**  
Are there going to be merge conflicts?

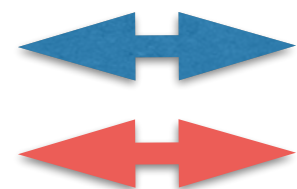
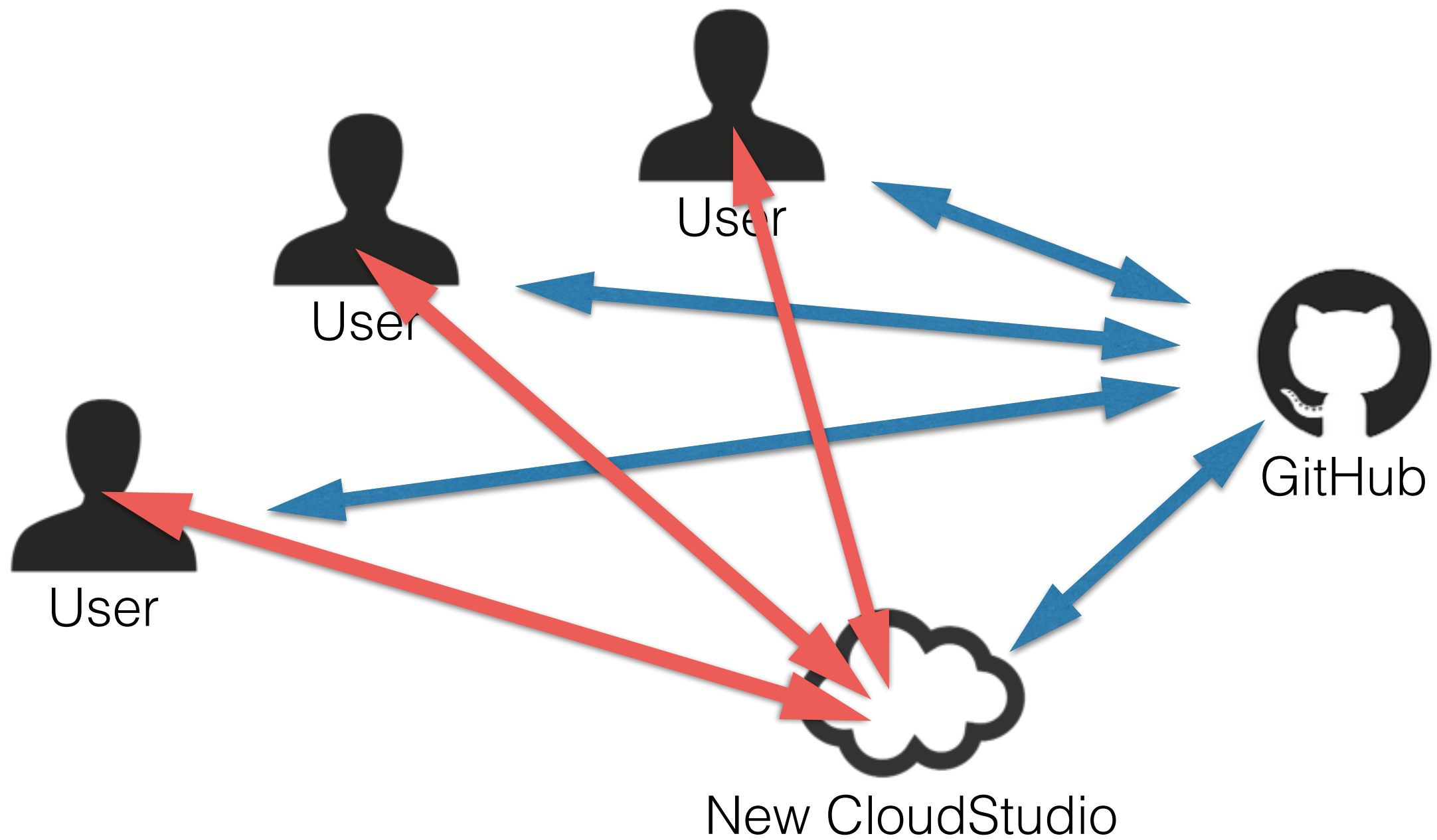
# Motivation

- CloudStudio now:
  - Closed system: all users must use CloudStudio in the web. No custom IDEs or ways to interact with the version control system.
  - Cannot use with existing projects. Cannot use a different repository host, e.g. GitHub.
  - Cannot decouple or extract conflict and awareness information.

# What are the improvements

- Can use with existing git projects. Awareness is separate from the VCS.
- Still functional if not everyone in a team uses it.
- Views and filters that help you get the information you need.
- Elegant web interface still provides easy access for all users.
- Provides an API that allows this information to be integrated into IDEs at a later point.

# Setup



Git protocol

Custom JSON over HTTP API

# Demonstration

- Let's go!

# Future Work

- “Line conflicts”
- More filters
- Testing
- Integrate into IDEs (plugins)