# Beating the sneakernet with Fipes
# FOSDEM 2013

I LIKE HOW WE'VE HAD THE INTERNET FOR DECADES, YET "SENDING FILES" IS SOMETHING EARLY ADOPTERS ARE STILL FIGURING OUT HOW TO DO.

« Every time you email a file to yourself so you can pull it up on your friend's laptop, Tim Berners-Lee sheds a single tear. »

# Sneakers!

/snee´ker·net/, n.

Term used (generally with ironic intent) for transfer of electronic information by physically carrying tape, disks, or some other media from one machine to another.

The Jargon File

# Features

- High throughput
- **Privacy friendly**
- Easy to use
- Easy to understand
- **High Latency**

# What do we need to beat the sneakernet?

We need a privacy friendly open source web application that doesn't ask me for an account and doesn't keep any data about me or my files.

# Fipes

## FIPES IS AN **EASY** WAY TO SHARE FILES WITH YOUR **FRIENDS**

DRAG'N DROP YOUR FILES HERE!

⬆ or browse your files
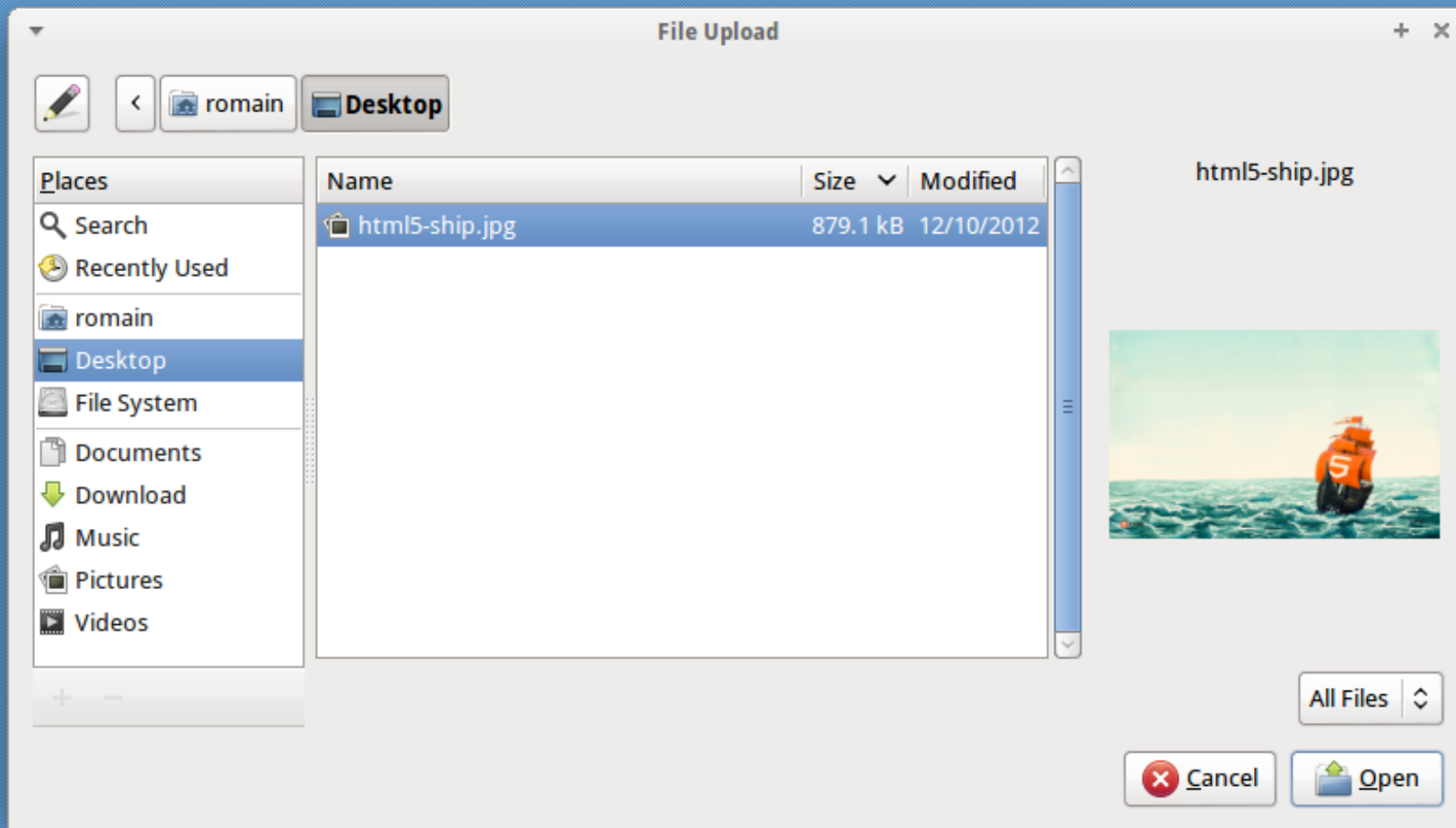
DELIVERED **601.3 MB** SO FAR!

**24** FILES HAVE BEEN EXCHANGED WITH AN AVERAGE SIZE OF **8.8 MB** AND A TOTAL AMOUNT OF **53** UPLOADS.

# Files + Pipes = Fipes

- A small web application
- Easy to install, easy to launch, easy to use
- Does not keep any data about you or your files
- Free as in Freedom

# Fipes

## FIPES IS AN **EASY** WAY TO SHARE FILES WITH YOUR **FRIENDS**

### File Upload

romain   Desktop

**Places**

- Search
- Recently Used
- romain
- Desktop
- File System
- Documents
- Download
- Music
- Pictures
- Videos

| Name | Size | Modified |
|------|------|----------|
| html5-ship.jpg | 879.1 kB | 12/10/2012 |

html5-ship.jpg

All Files

Cancel     Open

24 FILES HAVE BEEN EXCHANGED WITH AN AVERAGE SIZE OF **8.8 MB** AND A TOTAL AMOUNT OF **53** UPLOADS.

# DRAG'N DROP YOUR FILES HERE!

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DELIVERED **601.3 MB** SO FAR!

**25** FILES HAVE BEEN EXCHANGED WITH AN AVERAGE SIZE OF **8.8 MB**
AND A TOTAL AMOUNT OF **53** UPLOADS.

| 🔗 | **html5-ship.jpg** | 858.5 KB |
|---|---|---|
| | https://fipelines.org/fipes/3b57adced85c2228c12a/files/7 | |

# DRAG'N DROP YOUR FILES HERE!

⬆ or browse your files

## DELIVERED **601.3 MB** SO FAR!

**25** FILES HAVE BEEN EXCHANGED WITH AN AVERAGE SIZE OF **8.5 MB**
AND A TOTAL AMOUNT OF **54** UPLOADS.

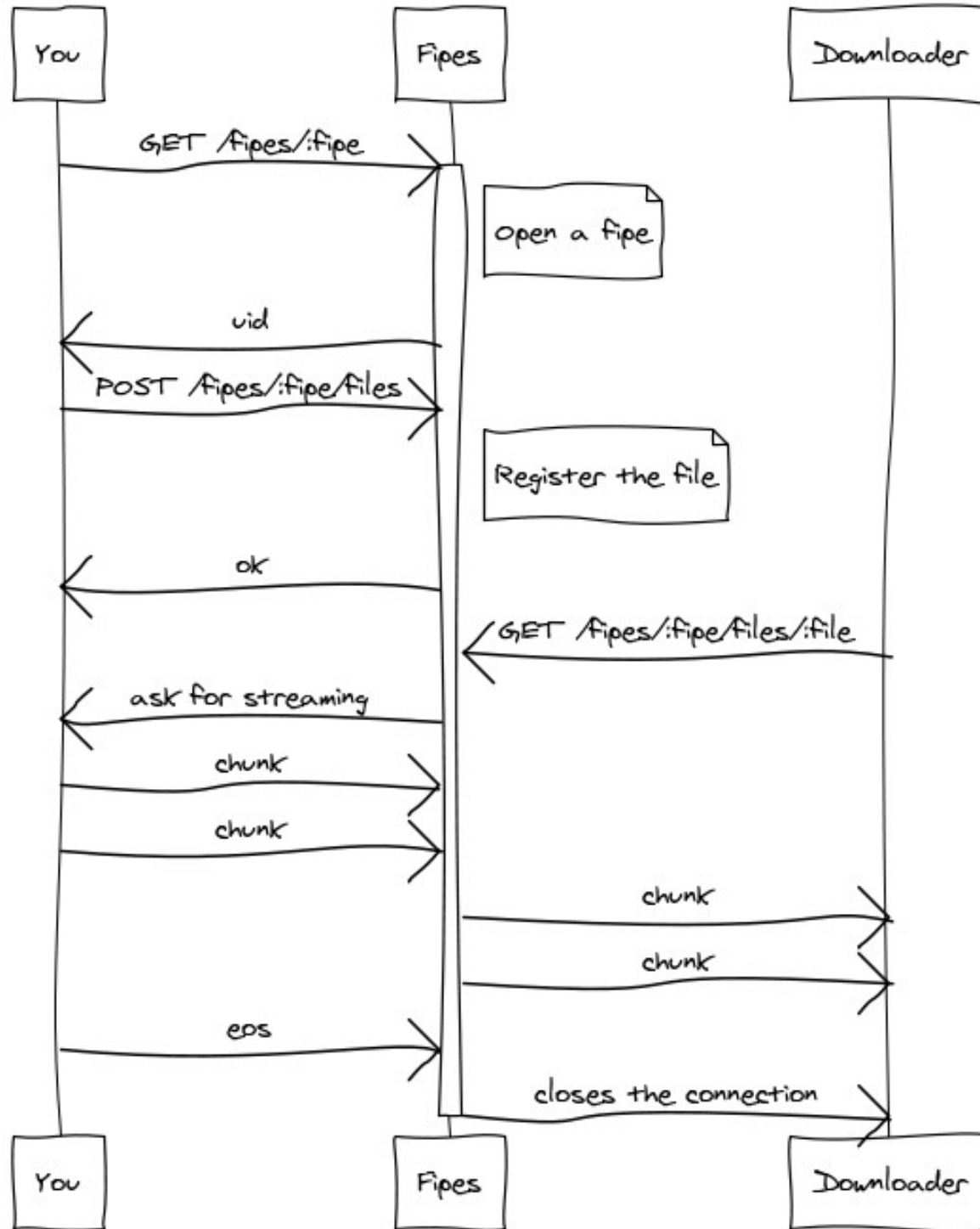| 🔗 | **html5-ship.jpg** | 858.5 KB |
|---|---|---|
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So, you just delete files after a certain time, right?

So, you just delete files after a certain time, right?

No, I don't.
I don't need to because **I don't store any data on the server**.

# Fipes workflow



**You** → **Fipes**: GET /fipes/:fipe

Note over Fipes: Open a fipe

**Fipes** → **You**: uid

**You** → **Fipes**: POST /fipes/:fipe/files

Note over Fipes: Register the file

**Fipes** → **You**: ok

**Downloader** → **Fipes**: GET /fipes/:fipe/files/:file

**Fipes** → **You**: ask for streaming

**You** → **Fipes**: chunk

**You** → **Fipes**: chunk

**Fipes** → **Downloader**: chunk

**Fipes** → **Downloader**: chunk

**You** → **Fipes**: eos

**Fipes** → **Downloader**: closes the connection

# The future

- Binary everywhere
  - XHR2?
  - **WebRTC**

# Questions?

Code: https://github.com/tOkeshu/fipes
(GNU AGPLv3)

Try it online: https://fipelines.org

@fipelines