Advanced Interactions

Thierry Sans

Long Polling

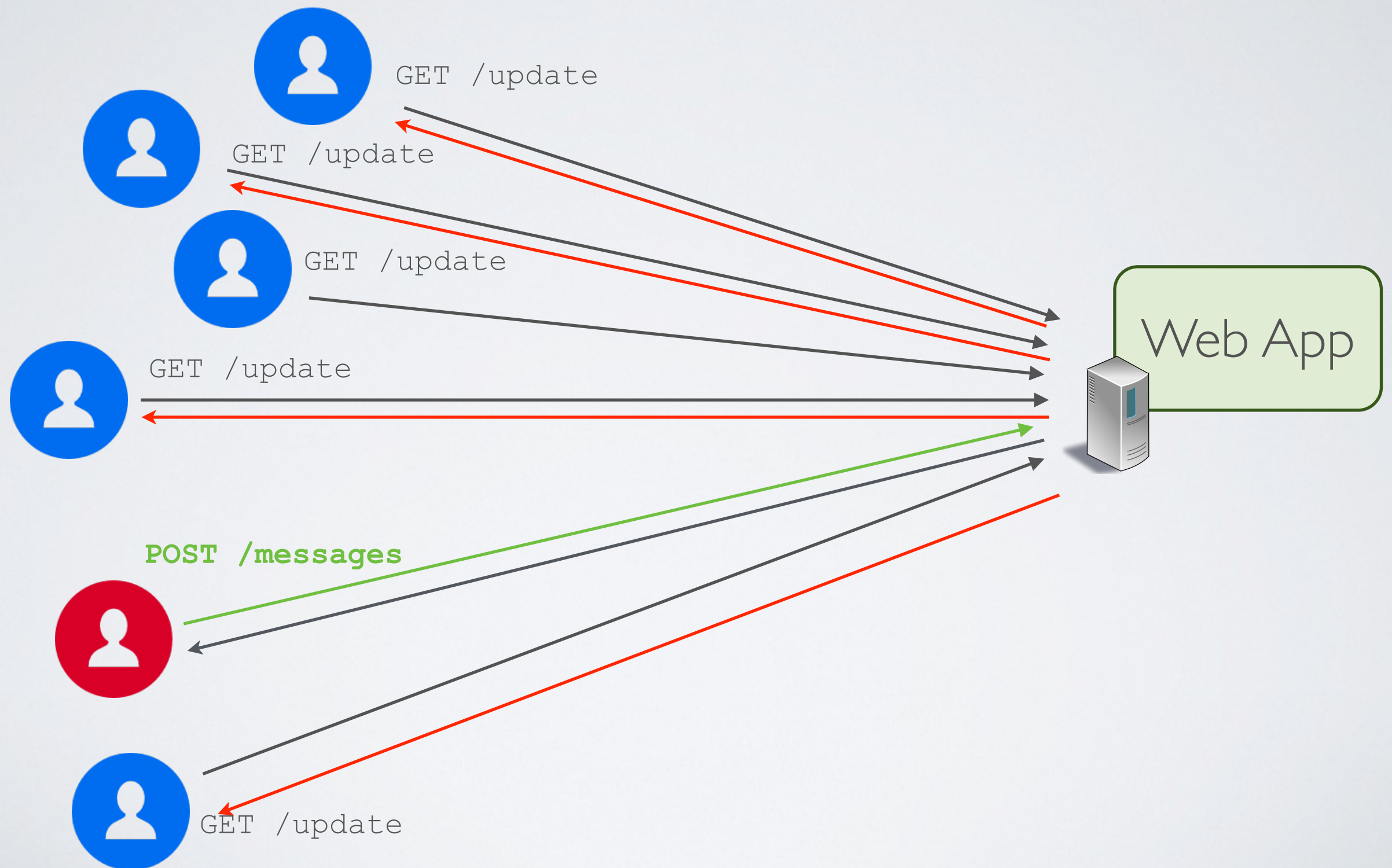# Short Polling vs Long Polling

Short Polling

- The frontend request an update from the backend every few seconds

- The backend replies right away regardless if there is an update or not

- ◉ Many request/responses are wasted

Long Polling

- The frontend request an update from the backend and wait for the response

- The backend replies to the update request only when there is an update

- ✓ No request/response wasted

- ✓ Updates are processed as soon as they arrived

Long Polling

GET /update

GET /update

GET /update

GET /update

Web App

POST /messages

GET /update

Web Sockets

The idea

➡ Full-duplex client-server communication

• Similar to low-level POSIX sockets

• Does not rely on HTTP at all (except for initialization)

Web RTC

Real-time communication for the web

The idea

➡ Full-duplex communication between clients (browsers)

• P2P communications, perfect for sending text, video, audio without going through the server ...

• ... except for initialization and signalling that go through the server (usually using Web Sockets)