

CODEMOTION MILAN - SPECIAL EDITION
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{codemotion}

{ Combining React and WebSocket to build a real time web application: a case study

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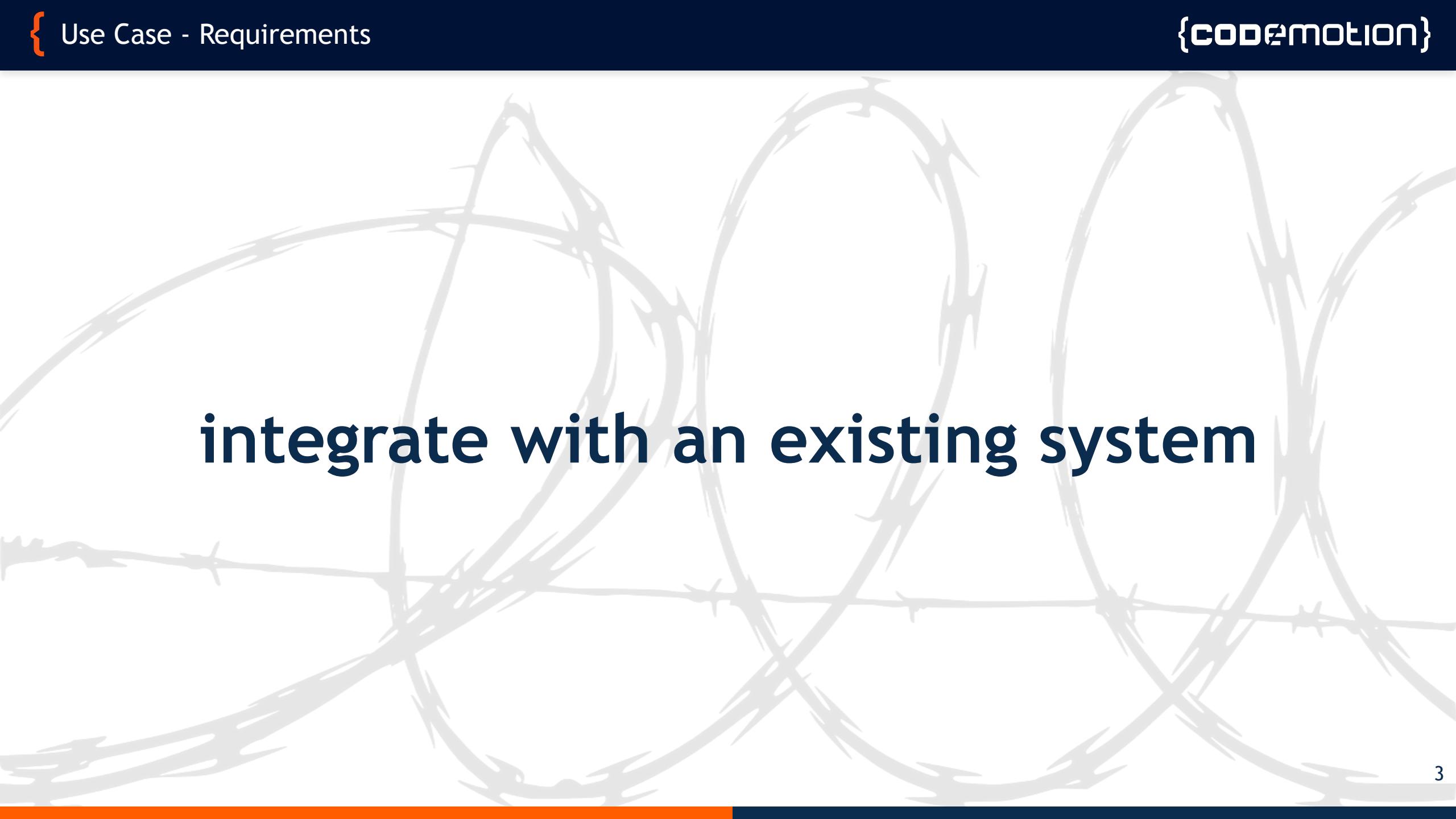
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integrate with an existing system



notify multiple distributed clients

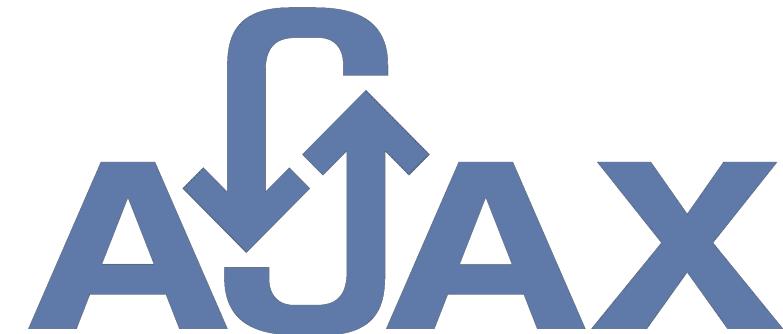
**the number of clients
can change anytime**



*“The real-time web is a network web using **practices** and **technologies** that enable users to receive information **as soon as it is published** by its authors, rather than requiring that they or their software check a source periodically for updates.”*

WIKIPEDIA

*... a network web using **practices** ...*



Polling

**Long
Polling**

**HTTP
Streaming**

... and technologies ...

PROPRIETARY



STANDARD





KEY BENEFITS

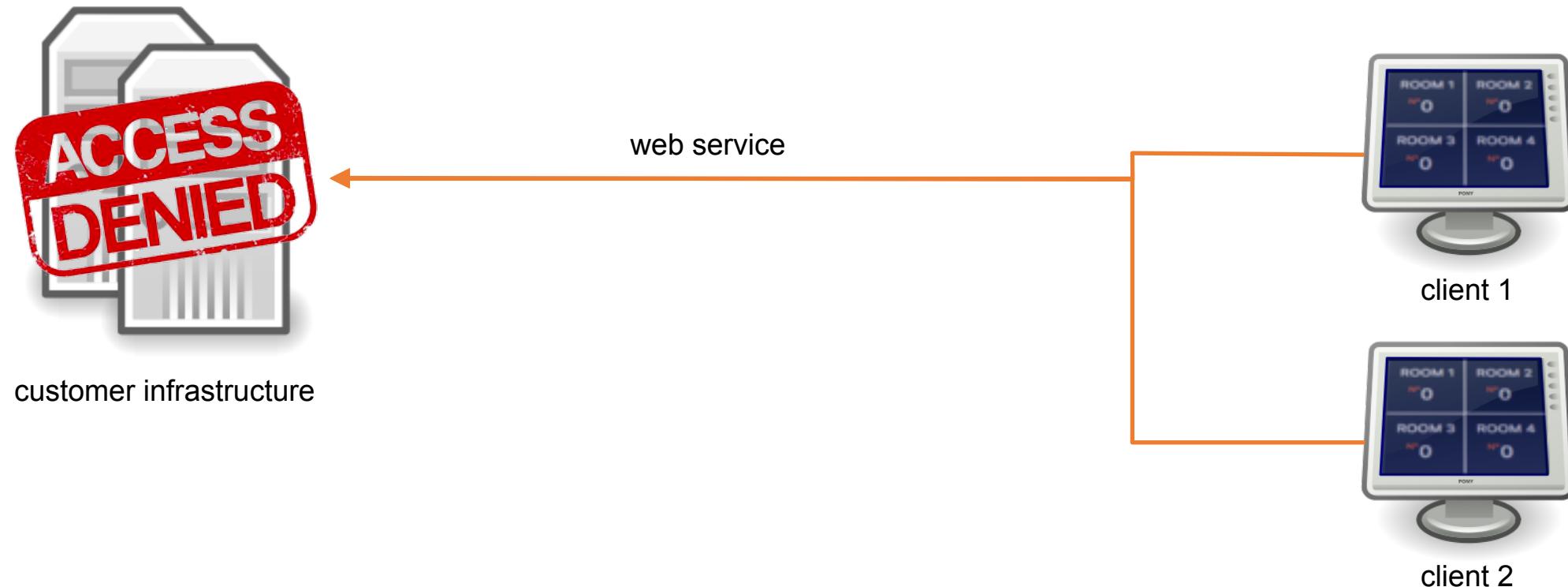
Standard Protocol (IETF)

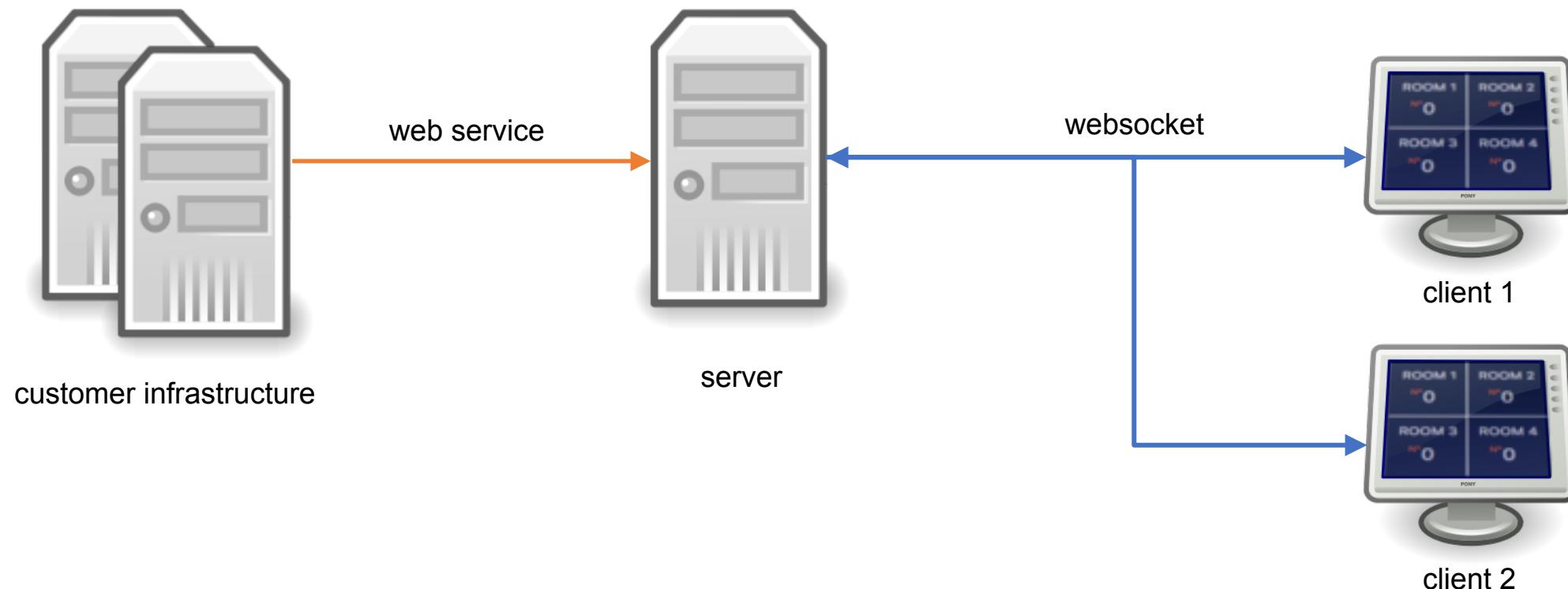
Single persistent bidirectional connection

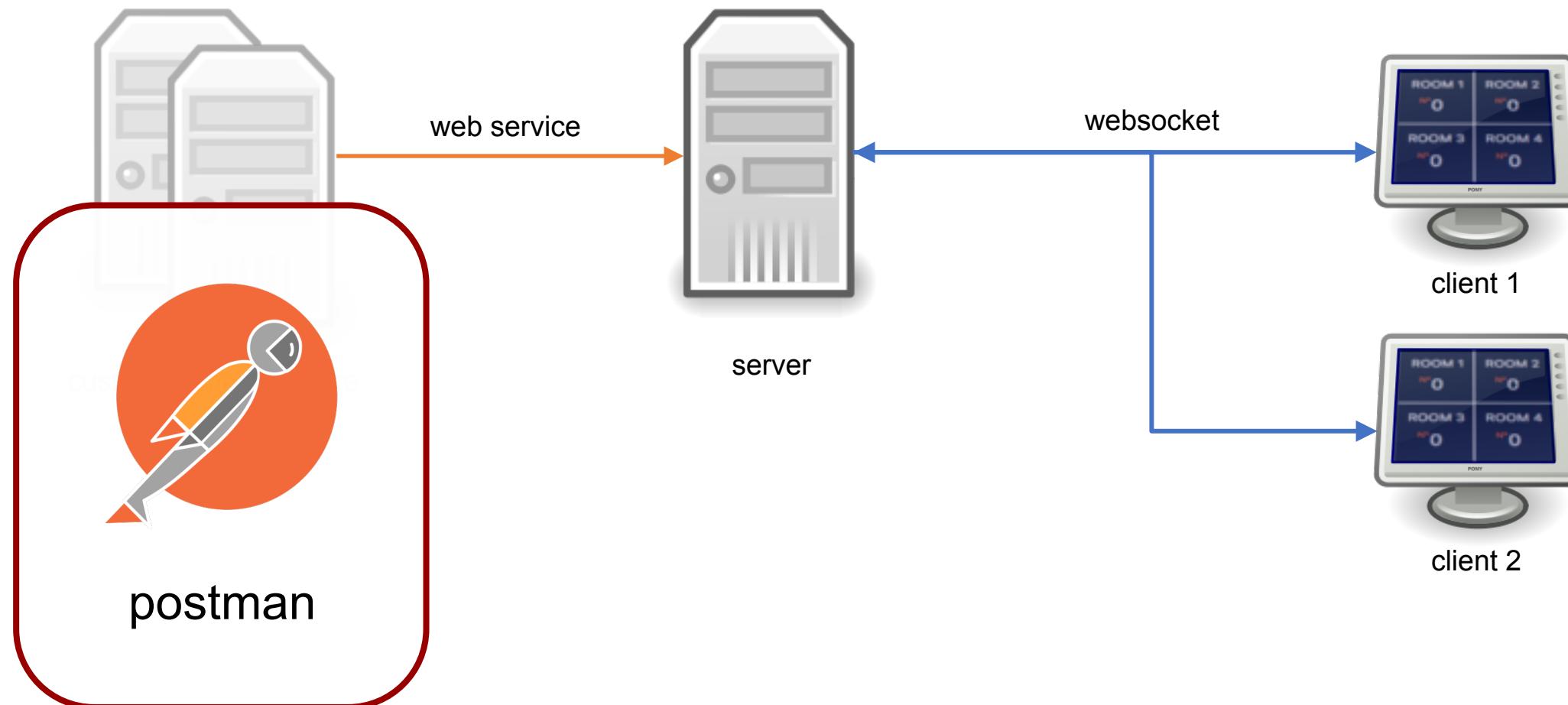
Use HTTP for connection establishment

Native support into HTML5 Standards

Low server workload







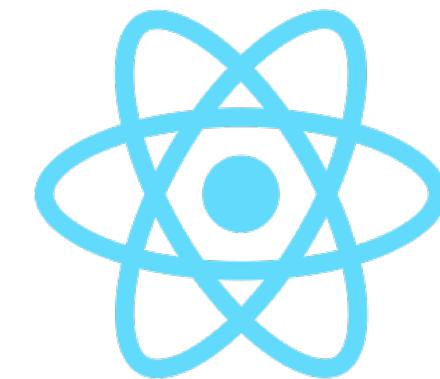




A Node.js web service framework optimized for building semantically correct RESTful web services ready for production use at scale.



WS is a Node.js WebSocket library, simple to use, blazing fast and thoroughly tested WebSocket client and server.





A JavaScript library for building user interfaces

JUST COMPONENTS

- reusable
- composable
- maintainable
- testable

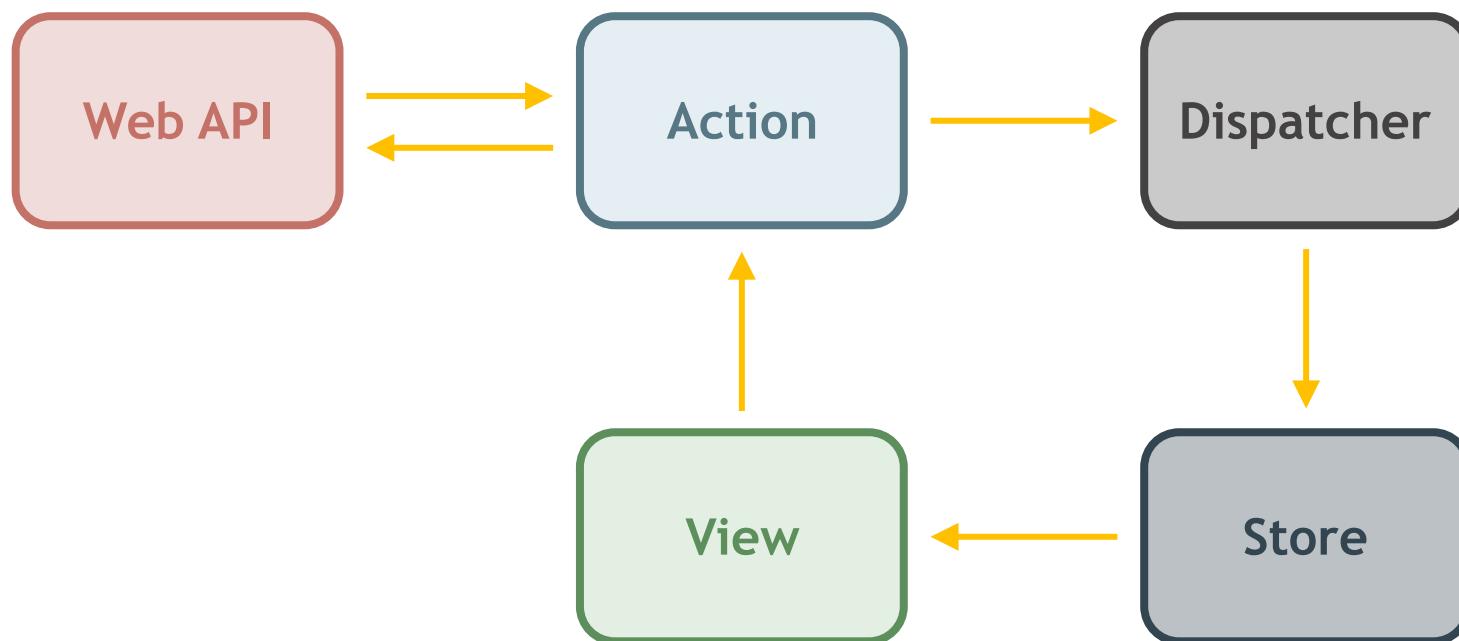
WITHOUT

- controllers
- directives
- templates
- models

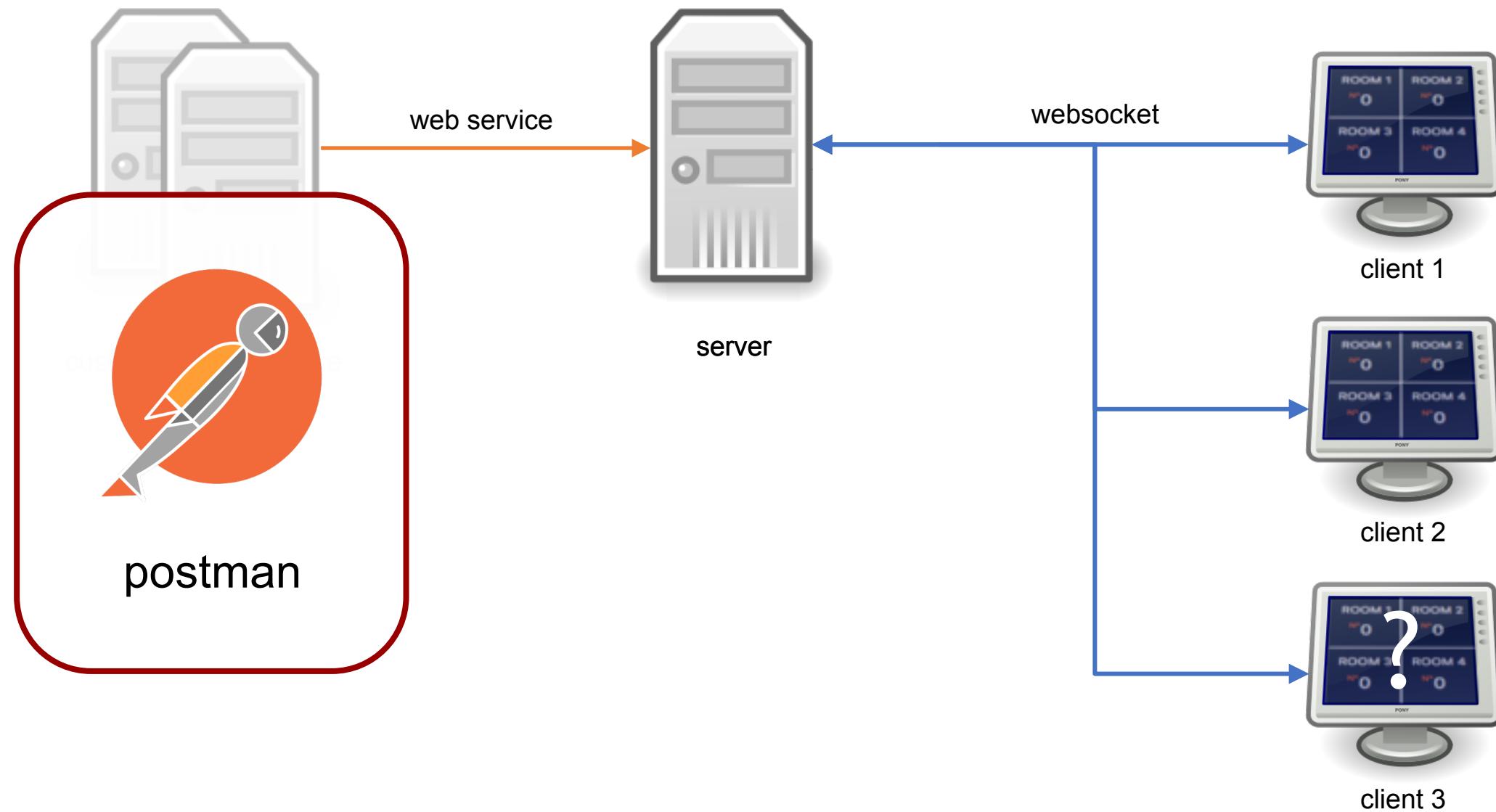


∞ Flux

Data in a Flux application flows in a single direction





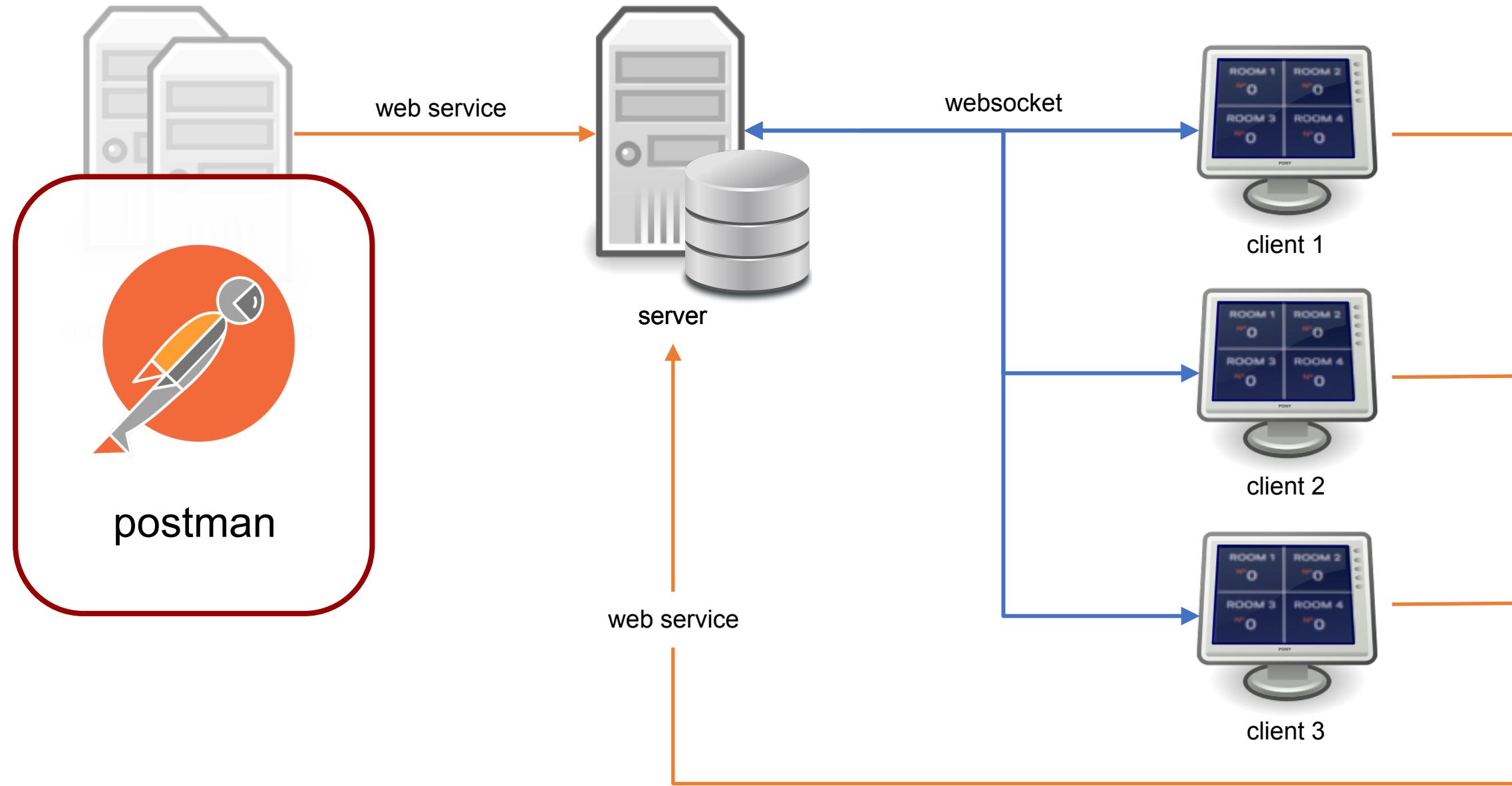






KEY BENEFITS

- document-based
- rich querying
- schema less
- quick deploy
- built-in replication





REAL-TIME

- <https://www.codeproject.com/articles/531698/introduction-to-html-websocket>
- <http://www.html5italia.com/script/68/Comunicazione-Bidirezionale-WebSockets-HTML5.aspx>
- <https://www.sitepoint.com/real-time-apps-websockets-server-sent-events/>

REACT

- <https://reactjs.org/>

FLUX

- <https://github.com/facebook/flux>
- <https://scotch.io/tutorials/getting-to-know-flux-the-react-js-architecture>
- <http://www.code-experience.com/async-requests-with-react-js-and-flux-revisited/>

MONGODB

- <https://docs.mongodb.com/manual/introduction/>
- <https://docs.mongodb.com/manual/replication/>

SOURCE CODE

- <https://github.com/Sopralt/codemotion-milan-2017>





