

A (very) brief overview of REST

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What is REST?

- Stands for **REpresentational State Transfer**
- From Roy Fielding's Thesis *Architectural Styles and the Design of Network-based Software Architectures*
- *Been around since ~ '95*
- Became a buzzword a few years ago
- Not just for API's
- An architectural style for modern web architectures
- Set of constraints you would see in a protocol built to that style, HTTP being the one we're talking about here.
- Makes use of existing standards
 - URIs
 - HTTP
 - Various Formats (HTML, XML - AtomPub, OpenSearch, etc)

REST Resources

- Application layer functionality is abstracted into set of resources
- All important resources have URIs
 - /voicemail/inbox/
 - /voicemail/saved/
 - /voicemail/inbox/msg001
 - /voicemail/inbox/msg002

etc...

- Server stores resource state, client stores session state.

HTTP Methods in REST

- Standard interface to resources. Each can be:
 - Repeatable
 - Effect-Free
 - Cachable
- **POST** - **C**reate Resource
- **GET** - **R**ead representation of resource (Repeatable, Effect-Free, and Cachable)
- **PUT** - **U**ppdate representation of resource (Repeatable)
- **DELETE** - **D**elete resource (Repeatable)
- **HEAD** (Repeatable & Effect-Free)