

OGPX

context, please!

- OGP is an application layer wire protocol suite for virtual worlds.
- OGP work started as a public project to "open up" Second Life (tm).
- OGP is **not** the existing Second Life(tm) legacy protocol.
- OGP makes assumptions about virtual worlds it describes.

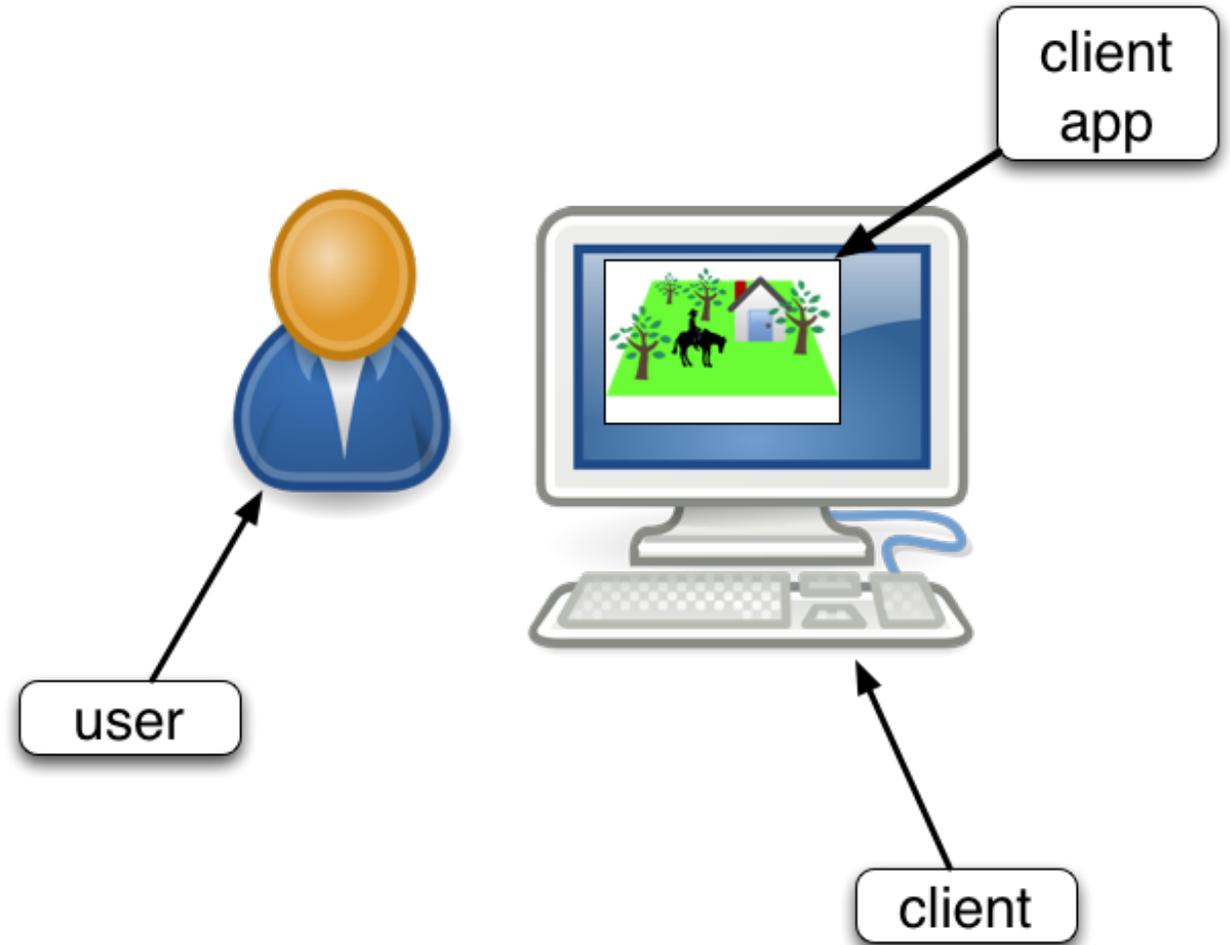
virtual world? wha?

- a 3d simulation of physical objects
- includes places, people and things
- all participants see the same thing



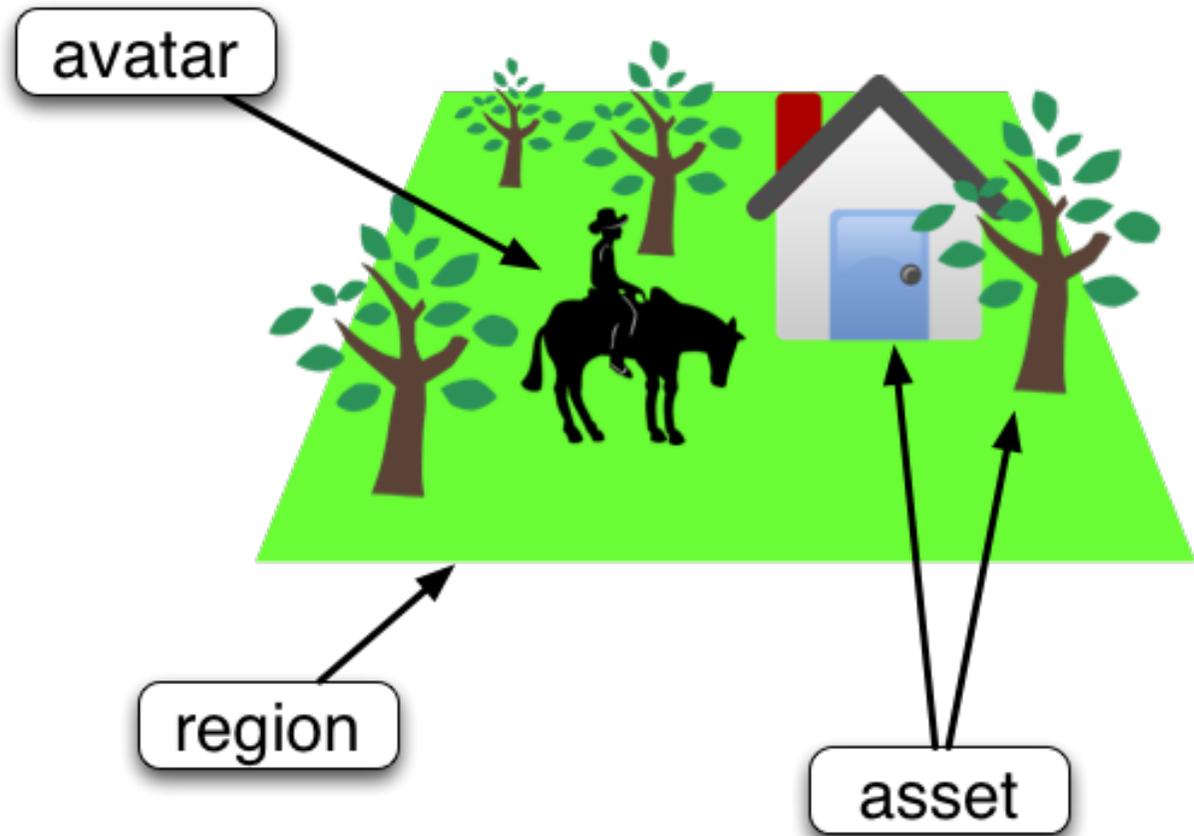
some terms

- user
- client application
- client



some terms

- avatar
- region
- asset



OGP Virtual World Characteristics

- the virtual world doesn't go away when no one's looking
- like the Internet: hosts are owned by different peeps
- the landscape is divided into "regions"
- users control "agents"
- agents are placed into regions as avatars
- everyone shares a consistent view of the world

Virtual World -> Domain -> Service -> Resource

- a virtual world may contain many domains. (a domain is a collection of servers who share an administrative owner and function.)
- Examples include a "region domain" or an "agent domain"
- A domain may contain services exposing an interface to modify or query the state of the domain or virtual world.
- Examples include "an authentication service" or the "an asset service."
- A domain may be split among several hosts, each responsible for simulating small part of the world.

we <3 REST-like things

REST is from Fielding's REpresentational State Transfer

we interpret "REST-like" to mean:

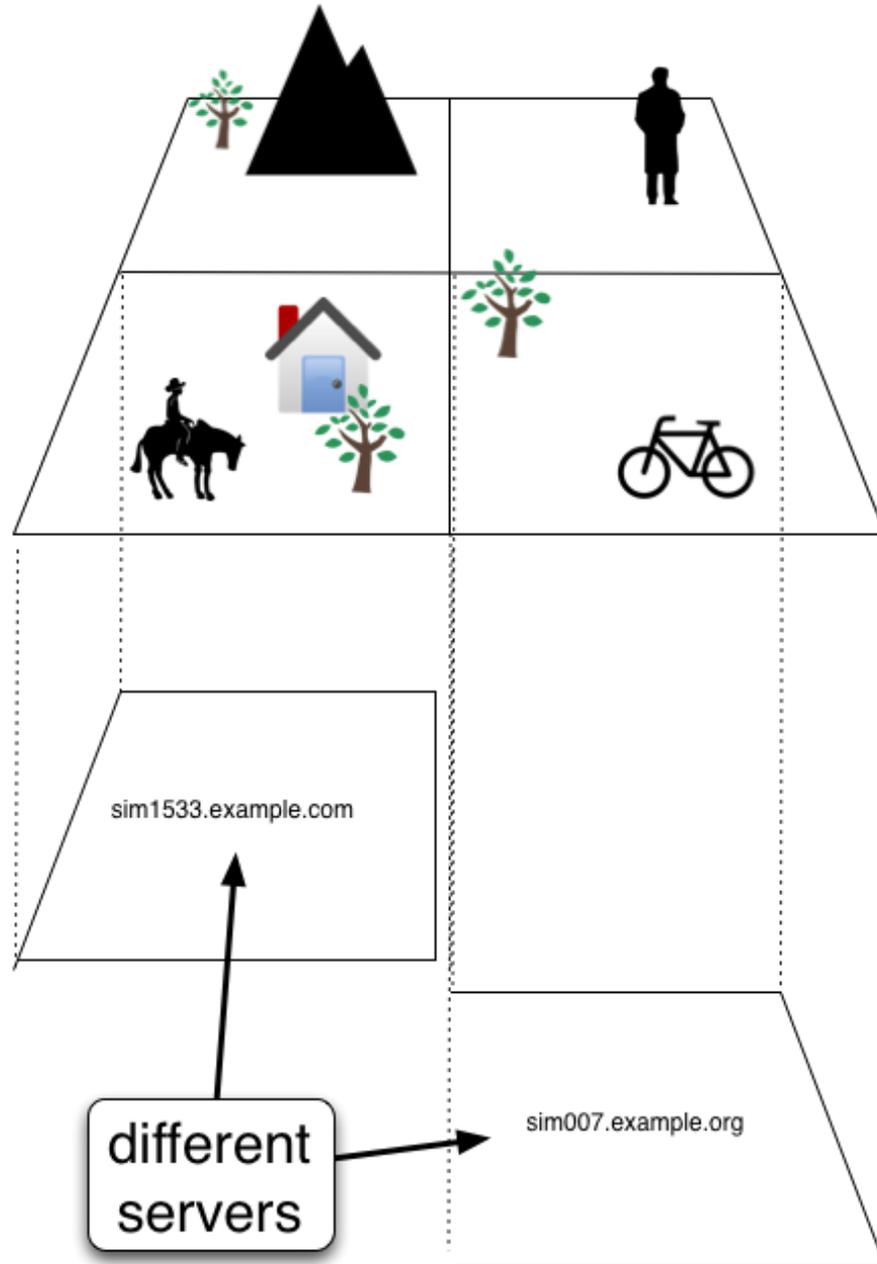
- addressable resources
- request / response pattern
- small set of verbs
- idempotent

"REST-like" does not mean "the web," or only http(s)

The Virtual World Persists on Authoritative Hosts

- OGP does not use "co-simulation," but rather simulates the world on authoritative servers.
- The simulated virtual world still exists when all users quit their client applications.

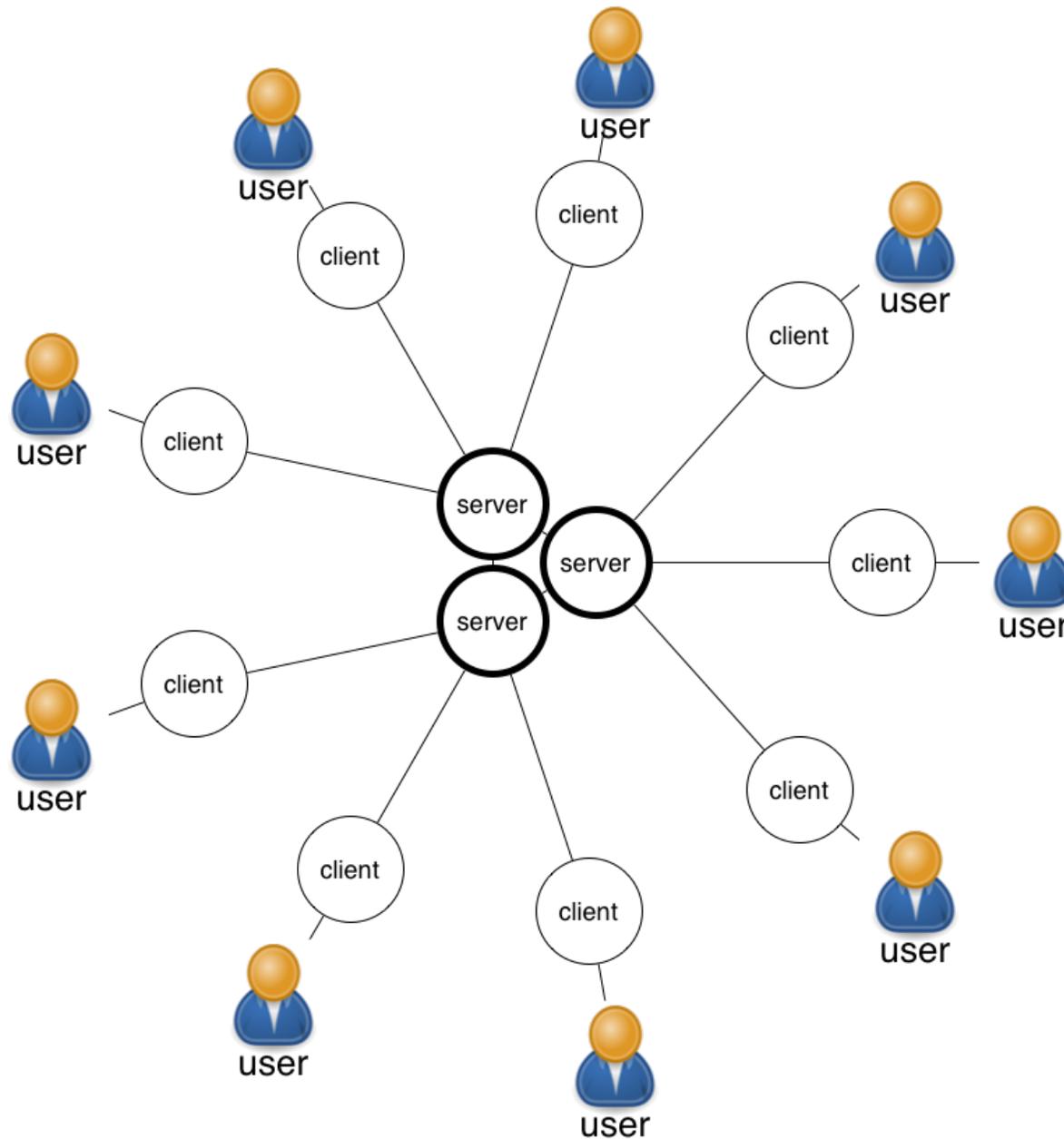
The Virtual World May Be Partitioned



A Quick Note About Sharding

- Sharding means that users cannot communicate between administrative partitions.
- Some MMOs are "sharded."
- OGP defines virtual worlds that are not sharded.

OGP Virtual Worlds Look Like Stars



OGP Virtual Worlds Are Not Meshes

