1. Distributed Web Infrastructure

Residential Private Network

Client

Browser
Requests
www.foobar.com

Router

Asks for the IP
mapped to
www.foobar.com

The IP is **8.8.8.8**

DNS Server

A Record
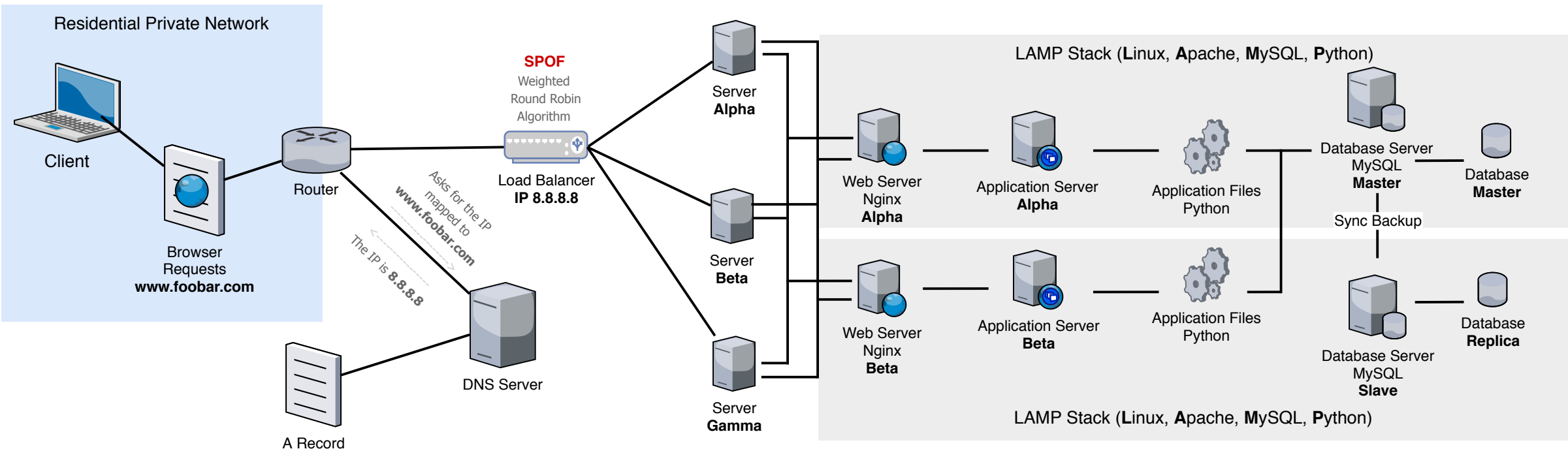
@ **maps to** IP 8.8.8.8
www.foobar.com **maps to** @

SPOF
Weighted
Round Robin
Algorithm

Load Balancer
IP 8.8.8.8

Server
Alpha

Server
Beta

Server
Gamma

LAMP Stack (**L**inux, **A**pache, **M**ySQL, **P**ython)

Web Server
Nginx
Alpha

Application Server
Alpha

Application Files
Python

Database Server
MySQL
Master

Database
Master

Sync Backup

Web Server
Nginx
Beta

Application Server
Beta

Application Files
Python

Database Server
MySQL
Slave

Database
Replica

LAMP Stack (**L**inux, **A**pache, **M**ySQL, **P**ython)