



# Routing: Apache httpd

In this lesson, we'll discuss routing with Apache httpd.

We'll cover the following ^

- Introduction
- Reverse proxy
- Load balancer

## Introduction #

The Apache httpd server (<https://httpd.apache.org/>) is one of the most widely used web servers. There are modules that adapt the server to different usage scenarios. In the example, modules are configured that turn Apache httpd into a reverse proxy.

## Reverse proxy #

While a **conventional proxy** can be used to process traffic from a **network to the outside**, a **reverse proxy** is a solution for **inbound network** connections.

It can forward external requests to specific services. This means that the entire microservices system can be accessible under one URL but can use different microservices internally.

The concept of a reverse proxy has already been explained in the lesson,  
Router: Zuul

(<https://www.educative.io/collection/page/10370001/5441945024331776/4902518603644928>).



# Load balancer #

In addition, Apache httpd serves as a **load balancer** by distributing network traffic to make the application scalable.

In the example, there is only one Apache httpd, that functions simultaneously as a reverse proxy and a load balancer for requests from the outside.

The requests the microservices send to each other are not handled by this load balancer. For the communication between the microservices, the library **Ribbon** is used, as we already saw in the Netflix example (see Load Balancing: Ribbon

(<https://www.educative.io/collection/page/10370001/5441945024331776/5862586534854656>)).

One of the strengths of this solution is that it uses a **well-proven software** that many teams have already gained experience with.

As microservices place high demands on the operation and infrastructure, such a conservative choice is advantageous to avoid the effort that goes into learning another technology. Instead of Apache httpd you can also use example nginx (<https://nginx.org/>).

There are also approaches like Fabio (<https://github.com/eBay/fabio>) which are written specifically for the load balancing of microservices and are easier to use and configure.

# Q U I

# Z



1 Can Apache httpd work as a load balancer and reverse proxy at the same time?

☐ A) No

☐ B) Yes

Submit Answer



Question 1 of 3  
0 attempted



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In the next lesson, we'll discuss the Consul template.

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Service Discovery

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Consul Template



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