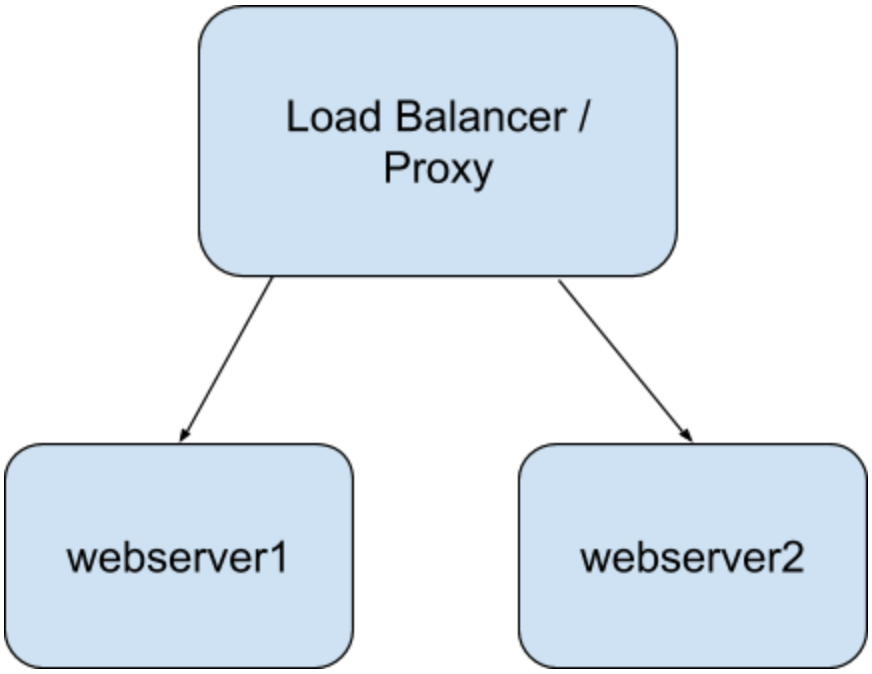
As a part of candidate selection process Alation has created a coding exercise. Please review the instructions carefully. If you have any questions about the problem send us an email to devops@alation.com.

Exercise:
Build a load balanced web server environment.

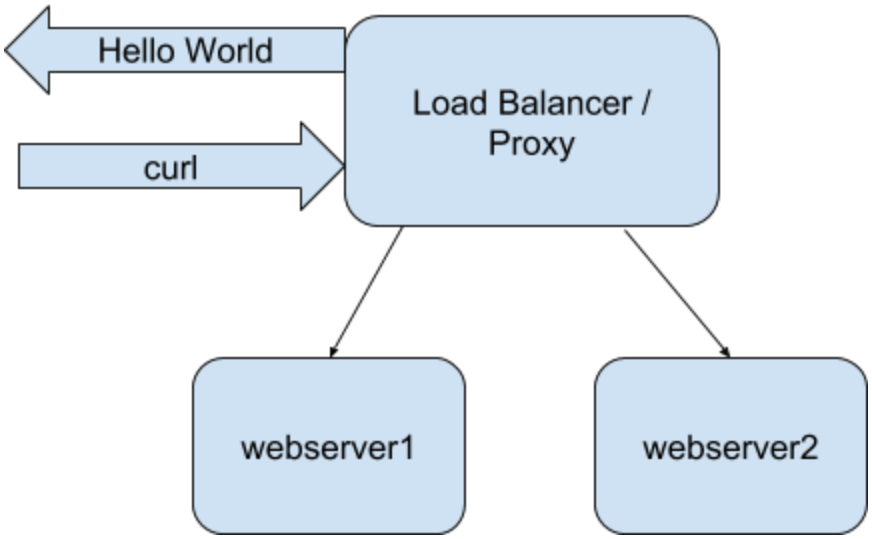


Load Balancer / Proxy:
We recommend using HAproxy. You are free to pick another FOSS load balancer / proxy following our guidelines below

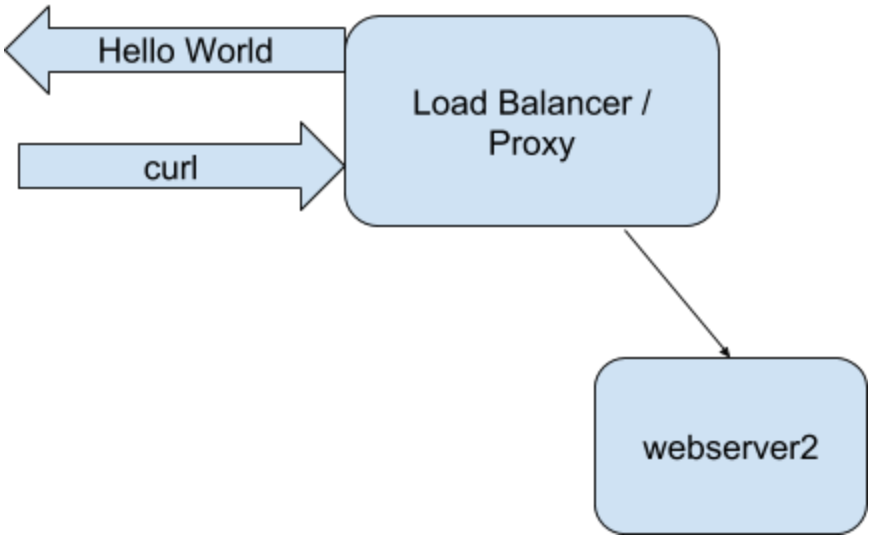
Web server:
We recommend using apache, or nginx. You are free to pick another FOSS web server following our guidelines below.

Expected Results:
Curl of your Load Balancer should return a “Hello World” that is being served by one of your web servers. Removal of either one of your web servers should automatically fail over to the other server.

Both Web Servers Enabled



One Web Server Removed



Guidelines:
In order to keep make this exercise repeatable by our staff we have chosen the virtualization platform and provisioning tool. Selection of OS, config management, and software packages are up to you. We only ask that you follow our guidelines below.

Required Tools:

- Virtualbox
  - https://www.virtualbox.org/
- Vagrant
  - https://www.vagrantup.com/

Additional Tools:

- FOSS (Free and open-source software)
- External software dependencies must be hosted on the public internet

Submission:

- Do not include binaries
- Deadline: 1 week from time you received this document
- We will accept zip, or tar.gz formats
- Readme file on how to re-create your environment
- Your submission must be repeatable by a staff member at Alation

Review Process:

- Alation will make an effort to re-create your environment in our lab using instructions provided in your readme
- If we run into issues re-creating your environment we may reach out to you for further clarification.

Bonus:

- Brief summary of what you liked about your solution
- Brief summary of what you disliked about your solution
- Configurable Round Robin / Sticky Load Balancer
- Return instance identifier of your webserver in addition to “Hello World”