

- What are firewalls?

Firewalls are used to block harmful data to infiltrate into Network and defend against hackers' attacks.

- Why is the traffic served over HTTPS?

To encrypt data and to make sure then that data is entirely secured.

- What monitoring is used for?

To monitor the performance and the availability of the system

- How the monitoring tool is collecting data?

It's installed in the system to be monitored. It collects data from different resources log files, performance metrics, system events or custom application data.

- Why terminating SSL at the load balancer level is an issue?

Increased load at the load balancer as it becomes responsible for decrypting the data

Also it makes the security at risk in case the load balancer is compromised the hacker may acquire access to keys responsible for decrypting putting data at risk.

- Why having only one MySQL server capable of accepting writes is an issue?

Because in case of failure. No data will be stored and will cause an increased downtime. Also, it will increase the load on one database that will make it prone to damage itself leading to the first scenario.

- Why having servers with all the same components (database, web server and application server) might be a problem?

In case of damage of one of the component, all components in the server also might be damaged. Some components require more cpu memory than others causing the performance to be less effective. It will be hard to make changes when having all components together. As you might need to bring down the entire server just to make a change to a single component