

Network Diagram: BitOHealth

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firewall (firewall 1) will be used to filter access of the ec2 server. The firewall will allow customers to be granted access to the website and allow developers access to privileges not given to customers. The firewall will watch both requests and responses to clients.

firewall (firewall 2) will be used to prevent malicious use of the database in order to be up to date with HIPAA. Firewall Will be used for information going from server to database and database to server.

Firewall (firewall 3)- Firewall 3 will make sure only approved 3rd party APIs will communicate with the server. It will also make sure the server doesn't communicate with any nonapproved 3rd party apis.

RDS will be our main server. It will take all its input directly from the ec2 server. The RDS2 will then transfer all information to a backup RDS Server

Protocols:

TCP/IP- Protocol used to establish a connection between two devices to allow communication

TLS- Protocol to encrypt a connection to allow for extra security.

HTTPS (port 443) to transfer information into our servers with added security measures. An SSL certification will be required

SSH (port 22)- This will be left open for our team members to SSH into the ec2 server. This opens a shell for us to control the server with ease rather than using something like Remote Desktop.

Hardware

- AWS:
 - RDS
 - Database
 - Virtual CPU: 1
 - RAM: 1GB
 - SSD: 30GB
 - MySql
 - EC2 Server
 - Virtual CPU:1
 - RAM: 1GiB
 - SSD: 50GB

Works Cited

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