Physical framework

After conversing with the server administrator in the Faculty of Industrial engineering, we gathered information about the servers in which our project will work.

Computational force:

The current servers are running on a 'Vmware vsphere' Digital framework, with the current computation power of 2 CPU, and 2 GB RAM memory.
These limitations can be enhanced through a formal request to the server administrator, for up to 4 times from its current computation power.
According to the information we received from Rakefet, the current framework allows up 50 users use the server at once.
With the data gathered from the server administrator, it seems like with a more efficient resource usage, the server should handle up to twice the amount of users using the same computational force. Since the bottlenecks with handling a server dedicated for holding online tests is data transfer and data storage, an efficient way for handling the two issues is required in order to efficiently run the project on the given servers.

Security requirement:

The servers run on Linux OS, without any additional security measurements other than the ones the OS supplies. The data transfer from, and out of the server is done using 'httpl' protocol – an encrypted data transfer protocol that encrypts that data before sending it through the web.
Connection to the server farm is only possible through the Technion subnet, and only with the correct VPN key, that can be supplied by the server administrator.
The current server farm does not support adding more security measurements to the OS.
Therefore, the current framework allows secure data transfer from the test subjects into the server, but in case of a malicious access to the server, the data in the server farm is not protected.