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1 PURPOSE OF THE WORK

The Polytechnic University of Tirana seeks to modernize critical components of the infrastructure where digital services are offered by requesting the replacement of the existing firewall devices ASA 5512 which are no longer produced and will no longer be supported with warranty and development by the manufacturer Cisco with two new firewalls new generation!

The modernization of the current system of information filtering at the entrance and exit of the network, increases the security parameters to contemporary standards through the deployment of new generation firewall equipment as well as the application of tested and predetermined practices!

Firewalls are essential to the institution because they act as a barrier between the internal network and the Internet, preventing unauthorized access to its resources and data.

The latest generation firewalls use a set of rules to filter and block traffic that does not meet specified security criteria, such as incoming traffic from known malicious IP addresses or web pages as well as outgoing traffic to unapproved or disreputable sites.
Also these devices can segment the network by applying access rights to certain groups of users at different levels!

Also, these devices can help prevent unauthorized access, data corruption, and cyber attacks, helping to keep the institution's networks and information secure. For this reason, the need for firewalls is essential as these devices protect sensitive information, apply enforced policies to internal users in accordance with predetermined rules to protect the institution's reputation.

The Polytechnic University of Tirana seeks to increase data storage capacities with a new storage which should offer high processing capacities and meet the growing demands for access to data. The necessity for this solution comes as a result of the increasing daily tasks and addressing the data storage needs of the institution in a device which must be able to
handle even more demands at once for the current load and what will be added to it
the future!

First, the data storage solution must offer scalability, allowing for the addition of more capacity in the future as the institution's data needs grow without having to replace the entire system. This will help the university avoid disruptions caused by exceeding their current storage capacity.

Second, data storage solutions must offer high availability and reliability. These systems must use redundant components and advanced data protection techniques to ensure that data is always available and protected, even in the event of a physical device failure or disaster.

Third, data storage solutions should offer higher performance than traditional storage solutions, ensuring faster access to data and reducing latency. This is especially important for historical data that is only incremental and requires real-time access.

Finally, data storage solutions should provide advanced data management capabilities, including deduplication, compression, and encryption, which help the university to