

ABSTRACT

Storage Area Network (SAN) is a specialized network consisting of server and storage (storage). The technology used for data storage server for institutions that provide data services. Instructional media that use a lot of multimedia learning system, is in need of space for data storage. At this time the school SMAN 1 Padalarang still store data and multimedia learning with the student data storage media manually without using a server, it can be a problem if the data resides on a different place different.

Storage Area Network (SAN) can be a container for the storage of data in SMA N 1 Padalarang. By using SAN storage of all data and equipment will be made in a single server. The server will serve any exchange of data is needed at high speeds. SAN consists of ifrastruktur communication, which provides a physical connection, and a layer of management, which set up the connection, storage elements, and computer systems resulting in the transfer of power which is very safe and reliable.

Performance storage area network using ATA over Ethernet protocol that is generated at the end of this project is a storage solution that can deliver good performance by looking at the performance speed of download and upload of data and data integrity is maintained. Testing has been done to produce that SAN using AoE protocol can provide a maximum speed of 9.7999 (MB / s) while on the local network with the TCP protocol can provide a maximum speed of 9.9961 (MB / s). the integrity of the data maintained by the use of RAID 1 if there is damage to one of the hard drive.

Keywords: Storage, AoE, RAID