Ethernet wan transport essay sample

Transportation

The article “ Why Ethernet Wan Transport” by Aref Meddeb offers detailed overview of wan transport paying special attention to wan technologies. The article describes some of the widely used technologies relating to wan transport. The author compares traditional wan technologies with that of the Ethernet wan transport. The author discusses the following issues: security, reliance, QoS, as well as pros and cons of wan transport system.

Special concerned is with challenging obstacles and strategies to overcome them. Actually, the author makes an attempt to prove that Ethernet wan transport is efficient enough to substitute traditional wan technologies. It is noted that Ethernet wan technologies provide excellent opportunity for service providers, because they are able to offer innovation and, what is more important, affordable application-centric services as well as broader networking culture. To achieve this Ethernet has to overcome layer 2 of wan technologies. (Meddeb 2005)

The author admits that nowadays the speed of Ethernet system has significantly increased and this fact has led to “ an ever increasing gap between LAN and WAN access speeds”. (Meddeb 2005) Traditional WAN services suffer from limitations of mobility and flexibility, whereas Ethernet offers access through the multiprotocol label switching. Therefore, Ethernet is characterized by more flexibility and higher quality of service and better maintenance, administration, security, regulation, etc. Meddeb assumes that Ethernet will match current telecom business needs. The author suggests that Ethernet is building solid ground for optimism, because it is provided with proper transmission speeds and networks.

It is mentioned in the article that Ethernet gains respect and support among alliances, forums, standardization bodies, service providers and customers due to its simplicity, scalability and lower costs. The author discusses also traditional services mentioning that there are three main layers of transport services.

The 1 st layer involves private and leased lines offering excellent security and reliability, though they are rather expensive. The 2 nd layer suggests ATM, frame relay and transport protocol. Actually, they are cost effective and highly flexible. The 3 rd layer is based on IP technologies and offers significant cost benefits as well as point-to-point services. This layer suggests high reliance, virtual routers, resilience, network monitoring, etc. (Meddeb 2005)

Speaking about main points, the author wants to prove that Ethernet offers more benefits and efficiency than traditional system:

- Ethernet offers traffic policing, shaping and excellent QoS parameters, whereas traditional services don’t;
- Ethernet offer less expensive products, whereas traditional services are more expensive and their costs are between 5-8 times more;
- Ethernet ensures faster access, whereas traditional operators are time-consuming requiring command lines interface and may failure any minute;
- Ethernet is characterized by simply signaling, whereas traditional ATM stations are connection-oriented, inefficient for sporadic traffic and they never go to desktop; (Meddeb 2005)

- Ethernet ensures scalability for multipoint and dynamic connections.

Speaking about strengths and weaknesses of the paper, it is necessary to outline that the author is rather persuasive, because he uses logical arguments, conclusions and facts defend the position that Ethernet is a service of future. The article leads through abundant data presented to persuade that traditional systems should be replaced by modern technologies which are more time saving, faster and less expensive. The author draws relevant conclusion summing up pros and cons of Ethernet, though less attention is paid to cons. It is the main weakness of the article, because readers are not provided with proper information about possible failures and challenges of Ethernet services. The tone of the article is too optimistic. (Meddeb 2005)

References

Meddeb, Aref. (2005, November). Why Ethernet Wan Transport? *IEEE Communications Magazine* , 136-141.