

Problem:

IPv6 is the next generation internet layer protocol, successor to IPv4 .Although many features will remain or be similar, there are some extended features like extended address spacing, IPv6 address configuration and IPv6 routing etc. This paper consists of short overview of the advanced features that IPv6 offers, compared to IP version we are using today.

Motivation:

The IP Version we are all using today, in our corporate networks and in the Internet, is IP Version4, in short IPv4. It has been developed in the early seventies by a number of pioneers who wanted to connect some educational and government networks in the United States. At the time when they started development, a network like our Internet today was beyond imagination and therefore to meet such a requirement wasn't part of their design goals. All the more fascinating it is, that they managed to create a networking protocol, which is still - 30 years later - capable of running today's Internet! But now it has reached its age and can't be pushed any further. Time for the next generation to take over! This resulted in IPv6. I found this interesting, which motivated me to select this topic for my paper.

Reason to opt for paper:

I am interested in giving a paper rather than a presentation. The reason for this is my topic which is on IPv6 which is the latest version of internet protocols. I need to give a detailed explanation on the previous version, its drawbacks, the current version and how the current one overcomes the drawbacks. Such a detailed explanation is difficult to cover in a presentation. So I felt presenting a paper would be a better choice.

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