

Vikram Negi <v-negi@northwestern.edu>
Fri, 13 Jan 2006 16:22:26 -0500

A Knowledge Plane for the Internet: Clark et.al

I believe that the idea of a generic knowledge plane on a network of a scale on the Internet as proposed in the paper is really too grand to be seen implemented in decades to come.

We have been trying to standardize, optimize data flow over the networks for sometime. The systems that can manage and optimize network are very much possible if we have control the network so that we can understand the data and its information to create a smart logic for optimal management.

The idea of knowledge plane is weak if we consider networks which are as diverse and open such as the Internet. I doubt if Internet would ever be standardized to an extent they we could build generic software architecture that could control and make intelligent decision on the top of it.

The idea of fault diagnosis and mitigation as discussed in the paper also seems like a weak case for knowledge plane over the Internet. Though implementation of FIX(IT) type problem could though be possible over smaller networks.

In conclusion the paper seems to build for a case of grand intelligent networks. Which I feel would be possible for a given set of networks over which we have control. This probably is extension of the work in network communication and management. But the idea of a grand knowledge plane is too weak a case even as a vision and is not well supported by the material in the paper.