VLAN Aggregation Technology Research and Implementation

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ABSTRACT

This paper gives the details of Vlan Aggregation technology and explains not only the concept of it, but also explains it works in a embedded operating system-vxWorks. This paper also discusses Layer3 switch and network vlan, puts forward that the layer-2 vlan role and layer-3 vlan role. We introduce the notion of sub-VLANs and super-VLANs, a much more optimal approach to IP addressing can be realized. This paper will expatiate the VLAN aggregation model and its implementation in Ethernet access network. It is obvious that the customers in different sub-VLANs cannot communication to each other because the ARP packet is isolated. Proxy ARP can enable the communication among them. This paper also expatiates the proxy ARP model and its implementation in Ethernet access network.

Keywords: Vlan   supervlan   subvlan   network interface   proxy arp