Evaluation of PIM-SM and Improvement on Hot Swap Property

Abstract
This paper introduces the PIM-SM protocol and some issues about hot swap. After a simple introduce of PIM-SM's background and framework, we put our emphasis on the running flow process of the protocol, try to describe the protocol as a whole by some standard examples of PIM-SM, and seldom involve into the detail of one route's process partially. We also analysis the protocol's feature, compare and contract it with some other multicast protocols, and give some improvement approaches. Then we introduce the theory of Hot Swap and propose its concept and object. After introduce and analysis of the HSRP protocol of Cisco, we rise our own idea, and put forward some schemes for adapting it in PIM-SM protocol.

Keyword: Multicast, PIM-SM, Hot Swap