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(54) Title: PRIVATE NETWORK ACCESS POINT ROUTER FOR INTERCONNECTING AMONG INTERNET ROUTE PROVIDERS

(57) Abstract

A P-NAP routing complex (100) for routing packet traffic on the Internet using core routers connected to National Internet Services providers such as MCI (420), Sprint (422), and the like.

Configuration files that instruct BGP4 Border Gateway Protocol version 4 to control the path of outgoing packets as well as the packet return path are created and loaded into the core routers as ASCII text files. The code routers read off the commands one-by-one and act upon the commands by taking the appropriate action. In creating the router configuration files, it is necessary to instruct BGP4 to place different preference values on routes determined to be within a provider to which the P-NAP (100) has a connection from all other routes. There are four alternative methods for creating commands which instruct

BGP4 on how to determine which routes are within a provider and which are not. There is a choice either specifically permitting all routes known to be a part of a provider or denying all routes known not to be part of a provider and permitting everything else.

