



Tech Info Library

Router Security Features

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Security: Everyone

Router Security Features

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TOPIC -----

My company is having problems with our Ethernet backbone. Everyone is on the Ethernet, but one division controls all access to the net.

People from different divisions can see into the corporate office's zone and services. They can also print on corporate's LaserWriters. The corporate office wants to block transmission into their area but let everyone in the corporate office see services outside of their area. The corporate office needs access to the IBM hosts and VAX systems which are all on the backbone but in different divisions. Thus, total isolation is out of the question.

Right now, we connect our local divisions together with VitaLink boxes and T1 lines. I thought the VitaLink could do some of the above. But, even if they could, the one division controls them. The best solution for corporate is to find a router/bridge that has the above blocking/filtering features. If this is not possible, is there a device that at least allows controlled access to LaserWriters?

DISCUSSION -----

There are several options available to allow zone and device hiding, but most of these products are LocalTalk to Ethernet routers like the Shiva FastPath or the Cayman GatorBox. There is one product that may provide the type of security you require; the NRC Macintosh-based Multigate router provides Ethernet-to-Ethernet routing and provides the ability to define parts of your network as insecure.

See the explanation below for a complete description of the options available for each device. Here is a summary of AppleTalk router security features:

LOCALTALK TO ETHERNET ROUTERS

Cayman Systems GatorBox

Zone Filtering:

Zone filtering prevents users in the filtered zone from seeing other zones on the network to which they are connected. This also prevents users in zones outside of the filtered zone from seeing devices in the filtered zone.

Laser Filtering:

Laser filtering is, in a sense, a subset of zone filtering. Where the zone filtering shields all of the devices from the outside, laser filtering lets you hide just the LaserWriters from anyone outside of its AppleTalk zone. This also prevents users in the filtered zone from seeing LaserWriters in other zones.

Tilde Filtering:

Tilde filtering lets you hide any device with a tilde character at the end of its name, so that it cannot be seen by anyone outside of its zone.

Shiva FastPath

Stay in Zone:

The stay-in-zone option prevents users in the filtered zone from seeing other zones on the network to which they are connected. This also prevents users in zones outside of the filtered zone from seeing devices in the filtered zone.

LaserWriter Security:

LaserWriter security is, in a sense, a subset of zone filtering. Where the zone filtering shields all of the devices from the outside, laser filtering lets you hide just the LaserWriters from anyone outside of its AppleTalk zone. This also prevents users in the filtered zone from seeing LaserWriters in other zones.

Tilde Security:

Tilde filtering lets you hide any device with a tilde character at the end of its name, so that it cannot be seen by anyone outside of its zone.

NRC 2000

Insecure:

The insecure option lets you define sections of your Internet as "insecure." An insecure network's routing information is not propagated to any other section of the network, thus providing a way to control who can access the secure sections of the Internet.

APT

APT has announced an update to their AppleTalk routers. They now support device security across zones. Users can, for example, hide their LaserWriter from anyone not in their zone. You can also hide other devices, like file servers and NetModems.

The user can let other users on different zones and create different sets of

access to different devices. For example, Zone A may have no access to your LaserWriter, but still have access to a File Server, while Zone B has access to all LaserWriters, but not AppleTalk ImageWriters or NetModems.

APT routers connect multiple LocalTalk, Ethernet, WAN, and Serial networks together, and supports Phase II AppleTalk. DDP/IP encapsulation is in the works.

ETHERNET TO ETHERNET ROUTERS

----- NRC Multigate Macintosh -----

Insecure:

The insecure option lets you define sections of your Internet as "insecure." An insecure network's routing information is not propagated to any other section of the network, thus providing a way to control who can access the secure sections of the Internet.

Cisco (CGS/MB/AGS) -----

The cisco router offers the ability to set up access lists that permit controlled access to your network. Access lists are set up to filter all in-bound network traffic from any network listed in the access list. Only traffic from networks not listed in the access lists is permitted into your network. Traffic from your network is still propagated to all other segments of your Internet.

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