

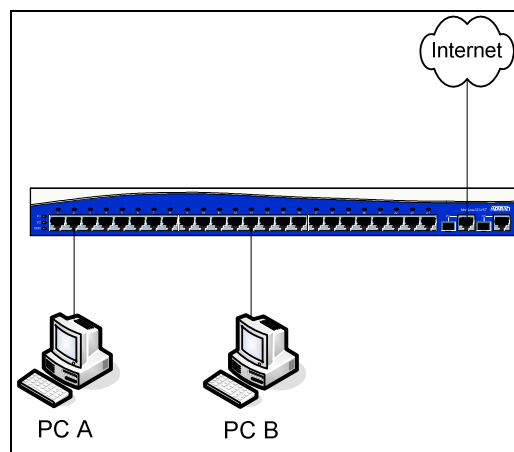


Quick Configuration Guide Configuring Port Isolation (Protected Ports) in AOS

Introduction

On a single broadcast domain (VLAN), it sometimes becomes important to secure certain ports against traffic from other ports. By putting a port in protected mode, traffic destined to other protected ports will be dropped. In many situations, different divisions of a company or even completely different companies may be managed on the same switch. Whenever this occurs, all divisions/companies will need access to the same resources whether it be the Internet or other networks, but do not need to ever communicate between each other. Sometimes, it may even be a security risk for that to occur.

To prevent intra-VLAN communication between these two ports, both ports can be configured as “Protected Ports.” This allows each port to send and receive traffic from any unprotected port while preventing traffic between each other. Below is an example of how this works:



In the example above, PC A and PC B both need to be able to reach the Internet, however there is no reason for either device to communicate with each other. Therefore, both of these ports are put into protected mode to prevent communication between these two devices.

Hardware/Software Requirements and Limitations

Protected Ports was introduced beginning in AOS Version 10.01.00 on switch products. Support for Protected Ports on AOS products is outlined in the ADTRAN knowledge base article number 2272, Product Feature Matrix. This matrix is available online at <http://kb.adtran.com>.

Configuration Through the CLI

To configure a switchport to be protected through the command line, first, navigate to the Interface Configuration Mode Context:

```
Router>enable
Router#config t
Router(config)#interface switchport 0/1
Router(config-sw 0/1)#
```

From this menu, use the following command to configure a port to be in protected mode:

Syntax: *switchport protected*

If a port needs to be taken out of protected mode, use no in front of the prior command as shown below:

Syntax: *no switchport protected*



Switchport protected only works for ports that are set to access mode. It is not possible to protect a port that is configured for trunking. Also, when in access mode, a protected port will only communicate with an unprotected port in the same VLAN.

When using a NetVanta Switch/Router products like a 1224R or a 1335, it is still possible to route between two different subnets as the Route Processor for these products is an unprotected port. However, be sure the device on the protected port uses the Switch/Router's IP address as its default gateway.

Troubleshooting

There truly is no show or troubleshooting commands that will help with protected ports as this is either an on or off function. To verify whether a port is unprotected or protected, use the following command from the Enable mode context:

```
show running-config switchport 0/<interface number>
```

If it does not show the port is protected in the configuration, then it currently is in an unprotected state.

If you experience any problems using your ADTRAN product, please contact [ADTRAN Technical Support](#).

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