

Source-Based Vs. Policy-Based Routing

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Source-based routing allows the source of the traffic to specify all or part of the path the traffic takes. One advantage of this routing method is that it reduces the need for routing tables on intermediate hops. However, it does mean the packets are more complex, and increases overhead. (Sunshine & Sunshine, 1977)

A good use case for source-based routing would be to connect small to medium intranets. This would allow for each system to have its own fastest routes established, without the need for routing tables on each hop. It could present a security issue, however, if this system were used to route traffic around security systems.

Policy-based routing establishes a policy for how traffic will be handled on a network. This can be used to route traffic through specific points based on where it is from or where it is going. Policy-based routing can establish rules based on any information available in the headers. (Cisco)

This tends to be the most effective method of routing. It allows for all traffic from or to a specific port to be sent through an IDS/IPS system. It allows for traffic to be routed based on internal or external IP address. Policy based routing should be used in networks that require traffic to abide by a set of rules, instead of allowing the source to determine the path.

References

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