

Configuring Unicast Reverse Path Forwarding

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Configuring Unicast Reverse Path Forwarding

The unicast reverse path forwarding (unicast RPF) feature helps to mitigate problems that are caused by the introduction of malformed or forged (spoofed) IP source addresses into a network by discarding IP packets that lack a verifiable IP source address. For example, a number of common types of denial-of-service (DoS) attacks, including Smurf and Tribal Flood Network (TFN), can take advantage of forged or rapidly changing source IP addresses to allow attackers to thwart efforts to locate or filter the attacks. For Internet service providers (ISPs) that provide public access, Unicast RPF deflects such attacks by forwarding only packets that have source addresses that are valid and consistent with the IP routing table. This action protects the network of the ISP, its customer, and the rest of the Internet.



Note

- Unicast RPF is supported in Network Essentials.
- Do not configure unicast RPF if the switch is in a mixed hardware stack combining more than one switch type.

For detailed IP unicast RPF configuration information, see the "Other Security Features" chapter in the *Cisco IOS Security Configuration Guide*.

Configuring IPv6 Unicast Reverse Path Forwarding

The unicast Reverse Path Forwarding (unicast RPF) feature helps to mitigate problems that are caused by the introduction of malformed or forged (spoofed) IP source addresses into a network by discarding IP packets that lack a verifiable IP source address. For example, a number of common types of denial-of-service (DoS) attacks, including Smurf and Tribal Flood Network (TFN), can take advantage of forged or rapidly changing source IP addresses to allow attackers to thwart efforts to locate or filter the attacks. For Internet service providers (ISPs) that provide public access, Unicast RPF deflects such attacks by forwarding only packets that have source addresses that are valid and consistent with the IP routing table. This action protects the network of the ISP, its customer, and the rest of the Internet.



Note

• Do not configure Unicast RPF if the switch is in a mixed hardware stack combining more than one switch type.

For detailed IP unicast RPF configuration information, see the *Other Security Features* chapter in the *Cisco IOS Security Configuration Guide*, *Release 12.4*.

Feature History for Unicast Reverse Path Forwarding

This table provides release and related information for the features explained in this module.

These features are available in all the releases subsequent to the one they were introduced in, unless noted otherwise.

| Release | Feature | Feature Information |
|------------------------------|---------------------------------|---|
| Cisco IOS XE Everest 16.5.1a | Unicast Reverse Path Forwarding | The unicast reverse path forwarding (unicast RPF) feature helps to mitigate problems that are caused by the introduction of malformed or forged (spoofed) IP source addresses into a network by discarding IP packets that lack a verifiable IP source address. |

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