Оглавление

1. URPF CONFIGURATION

1.1. Overview of uRPF

1.1.1. uRPF(Unicast Reverse Path Forwarding)

uRPF (Unicast reverse path forwarding) is a mechanism for allowing devices to check if the source address is in the local routing table before forwarding it. This is useful to check for source address spoofing and protecting against DOS attacks.

There are two modes of uRPF strict and loose mode. Strict mode checks that the source address has a routing table entry and that the egress interface for the route is the same as the interface the packet was received on. Loose mode only checks that a route is in the table before forwarding the packet.

1.2. uRPF Configuration

1.2.1. Enabling uRPF in the Global Configuration Mode

To use uRPF,enable uRPF in the global configuration mode:

Command	Purpose
[no] urpf check	Enable/disable uRPF check in the global configuration mode

1.2.2. Configuring uRPF Check Mode on the VLAN Interface

Configure uRPF check mode on the VLAN interface (strict mode or loose mode). In the strict mode, the source address of the packet will be used not only to check whether FIB table is reachable, but also to check whether the ingress port of the packet is consistent with the next hop interface. In the loose mode, the source address of the packet will only be used to check whether it is reachable in FIB table.

After configuring uRPF,the filter of the route is also supported. When the default route is configured and uRPF check the source address based on FIB table, all source addresses can find the matched item.By default, if the finding of uRPF check FIB is the default route, it will be taken as no entry found and the packets will be dropped.

Note:

Enable urpf check in the global configuration mode and uRPF takes effect.

Configure uRPF mode in the VLAN interface and run the command in the interface configuration mode:

Command	Purpose
[no] urpf check *strict/loose [uncheck-default-route]*	Configure uRPF check mode in the VLAN interface. uncheck-default-route is disabled by default.

Note：

Enable **uncheck-default-route**. If the packet source address can check the matched item in the FIB table, the matched item whether it is the default route or not will be taken as pass and the packet will not be dropped. By default (uncheck-default-route is disabled), the packet source address finds the matched item in FIB table and if the matched item is taken as the default route, thus uRPF is failed and the packet will be dropped.