



IP Directed Broadcast

An IP directed broadcast is an IP packet whose destination address is a valid broadcast address for some IP subnet but which originates from a node that is not itself part of that destination subnet.

A device that is not directly connected to its destination subnet forwards an IP directed broadcast in the same way it would forward unicast IP packets destined to a host on that subnet. When a directed broadcast packet reaches a device that is directly connected to its destination subnet, that packet is broadcast on the destination subnet. The destination address in the IP header of the packet is rewritten to the configured IP broadcast address for the subnet, and the packet is sent as a link-layer broadcast.

If directed broadcast is enabled for an interface, incoming IP packets whose addresses identify them as directed broadcasts intended for the subnet to which that interface is attached are broadcast on that subnet.



Note The access control list (ACL) option for directed broadcast is not supported in Cisco SD-WAN Manager.

To enable the translation of a directed broadcast to physical broadcasts, use the `ip directed-broadcast` command. To disable this function, use the `no` form of this command. By default, `ip directed-broadcast` is disabled and all IP directed broadcasts are dropped.

ip directed-broadcast and **no ip directed-broadcast**

Example

This example shows how to enable forwarding of IP directed broadcasts on Ethernet interface 2/1:

```
device# configure-transaction
device(config)# interface ethernet 2/1
device(config-if)# ip address 10.114.114.1 255.255.255.0
device(config-if)# ip directed-broadcast
device(config-if)# end
```

