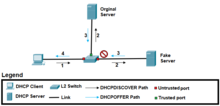
DHCP snooping

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Example showing how DHCP snooping works

In [computer networking](https://en.wikipedia.org/wiki/Computer_networking), **DHCP snooping** is a series of techniques applied to improve the security of a [DHCP](https://en.wikipedia.org/wiki/Dynamic_Host_Configuration_Protocol) infrastructure.[[1]](https://en.wikipedia.org/wiki/DHCP_snooping#cite_note-Packet_Pushers-1)

When DHCP [servers](https://en.wikipedia.org/wiki/Server_(computing)) are allocating [IP addresses](https://en.wikipedia.org/wiki/IP_address) to the [clients](https://en.wikipedia.org/wiki/Client_(computing)) on the [LAN](https://en.wikipedia.org/wiki/Local_area_network), DHCP snooping can be configured on LAN [switches](https://en.wikipedia.org/wiki/Network_switch) to prevent malicious or malformed DHCP traffic, or rogue DHCP servers. In addition, information on hosts which have successfully completed a DHCP transaction is accrued in a database of "bindings" which may then be used by other security or accounting features.

Other features may use DHCP snooping database information to ensure IP integrity on a [Layer 2](https://en.wikipedia.org/wiki/Data_link_layer) switched domain. This information enables a network to:

* Track the physical location of IP addresses when combined with AAA accounting or [SNMP](https://en.wikipedia.org/wiki/SNMP).
* Ensure that hosts only use the IP addresses assigned to them when combined with source-guard a.k.a. source-lockdown[[2]](https://en.wikipedia.org/wiki/DHCP_snooping#cite_note-2)
* Sanitize [ARP](https://en.wikipedia.org/wiki/Address_Resolution_Protocol) requests when combined with arp-inspection a.k.a. arp-protect

References[[edit](https://en.wikipedia.org/w/index.php?title=DHCP_snooping&action=edit&section=1)]

* 1. [**^**](https://en.wikipedia.org/wiki/DHCP_snooping#cite_ref-Packet_Pushers_1-0) *Banks, Ethan.*[*"Five Things To Know About DHCP Snooping"*](http://packetpushers.net/five-things-to-know-about-dhcp-snooping/)*. Packet Pushers. Retrieved 29 February 2016.*
  2. [**^**](https://en.wikipedia.org/wiki/DHCP_snooping#cite_ref-2) *Cisco Systems, Inc.*[*"Catalyst 3750-X and Catalyst 3560-X Switch Software Configuration Guide, Cisco IOS Release 15.0(2)SE and Later"*](http://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst3750x_3560x/software/release/15-0_2_se/configuration/guide/3750x_cg/swdhcp82.html#24258)*. Cisco.com. Retrieved 29 February 2016.*