ZITHA TECH SPECIALTY CABLES (Pty) Ltd

Tracing MAC addresses on the core switch



Overview

How to trace a MAC address on a switched LAN? I want to be able to find out a switch port''s MAC address.

Key Takeaways

You can trace a MAC address from a core switch to the access layer by using show mac address-table, CDP commands, and optionally automated tools like TraceMAC.Step-by-Step Manual Tracing
• Identify the MAC Address on the Core Switch
• Log in to the core switch via SSH or console.

• Use the command: show mac address-table address [mac-address] This will display the VLAN and the interface through which the MAC address is learned, often pointing to an uplink toward a distribution or access switch .

• Check for EtherChannel or Trunk Links
• If the MAC appears on a port-channel (Po1), verify the physical interfaces using: show etherchannel summary This helps identify the actual physical ports carrying the traffic .

• Use CDP to Identify the Next Switch
• Run: show cdp neighbors This shows directly connected devices and helps determine which distribution or access switch the MAC address is behind .

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

• Move to the Next Switch
• Log into the identified switch and repeat: show mac address-table address [mac-address] Continue this process until you reach the access switch port where the device is directly connected .

• Verify the Access Port
• On the access switch, the MAC address should appear on a single interface, confirming the device's connection point.

Optional Automated Tools
• TraceMAC: A command-line tool for Windows/Linux that recursively traces a MAC address through Cisco switches using SSH, SNMP, or Telnet. It requires CDP to be enabled on trunks and links between switches .

• Network Management Software: Tools like SolarWinds or OpManager can also map MAC addresses to switch ports across large networks, reducing manual effort .
Tips for Large Networks
• Start with a Layer 3 perspective: Use show arp | include [mac-address] on routers to identify the VLAN or subnet.

• Focus on relevant distribution switches to narrow down the search.

• Be aware of STP blocking: Some ports may be blocked, so the MAC may appear on an alternate path; using trace mac commands (if supported) can help visualize the path . By following these steps, you can efficiently trace a MAC address from the core switch down to the access layer port, even in large, multi-layer Cisco networks.

Article Content

Back to Basics: Network Tracing

Network tracing is a basic task of using a router''s or switch''s CAM (MAC) table and ARP tables to trace the origin of

How to trace end user connected from which L2 switch

This command will tell you which port the MAC address is associated with on the switch. If it points to an uplink port,

How to trace a mac address

If the device support you can do a mac traces from the source. ... if this is one time that is the easiest way, if you have

Tracing a MAC address in multi-layer network

All you have to do is continue this until you get to the port that has only this mac-address. Unless your network is not a well defined

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

How to trace MAC address

If an ARP entry exists for the specified IP address, the switch uses the associated MAC address and identifies the

From core : Finding Mac address and port interface of the end device ...

The mac table on the core will only contain addresses layer 2 adjacent through the core switch and show on the

traceroute mac

The traceroute mac command output shows the Layer 2 path when the specified source and destination addresses belong to the

Quicker way to trace a device location by its MAC address

Yes, network monitoring tools like WhatsUp Gold or PRTG can help by mapping MAC addresses to switch ports,

How to trace a MAC address on a switched LAN?

How to trace a MAC address on a switched LAN? I want to be able to find out a switch port''s MAC address. No device uses IP,

TraceMAC

TraceMAC is a Windows/Linux command-line tool that allows you to trace a specific MAC address thru Cisco switches.

How To Trace A Device on A Network?

Tracert to find the switch MAC address and find the port on the switch the mac address is connected to. (If your

Chasing MAC Addresses

For example the core switch will show you what port the mac address in question is coming from, which will be the uplink port from

How to track down which switch port a device is connected to on a

How to track down a computer, printer, network node etc.. by using only it''s MAC Address: Telnet/SSH into your Layer

TraceMAC

Download TraceMAC - Traceroute for MAC addresses for free. TraceMAC is a command-line Layer 2 traceroute for

layer2

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

While some switches offer some kind of MAC ''tracing'', an actual traceroute functionality isn''t possible due to the lack

Solved: traceroute mac command example

Hi everybody I am reading about the command " traceroute mac SRC-MAC-ADD DESTI-MAC-ADDRESS ".

Tracing of MAC address

Hi, If i have a MAC address, am i able to tell which port it is connected to on a switch. I hav2 core switch and 10 edge

switch

The best way to trace a potential L2 path across multiple switches is to examine their MAC tables. Each frame will

Solved: Trace network port

Solved: Hi, i have core switch 6509.I need to trace this server A is connected to which port in the Core Switch.I found

Traceroute MAC address

is the source mac in the same switch and from where you are tracing the mac, from your core/distribution or access?

Finding a MAC address on the network

Hello, unless you have something like Cisco Network Assistant installed, you need to dig your way through to the

How to Trace a Layer 2 Path on Cisco Nexus Switches?

It was going to be tricky though, since the core switches were using both port-channels and virtual port-channels. The command mac

How to see mac address of the switch that you are currently on

1) I DO NOT mean the mac addresses that the switch has learnt. (from what I know you can check that by Switch#sh mac-address

Commands to find mac-address and IP on a port

Can someone show me the commands to find a mac-address on a switch and if I know the port I am looking to find it

Finding a MAC address on the network

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

Hello, unless you have something like Cisco Network Assistant installed, you need to dig your way through to the

How to Trace a Layer 2 Path on Cisco Nexus Switches?

It was going to be tricky though, since the core switches were using both port-channels and virtual port-channels. The command mac

How to see mac address of the switch that you are currently on

1) I DO NOT mean the mac addresses that the switch has learnt. (from what I know you can check that by Switch#sh mac-address

Commands to find mac-address and IP on a port

Can someone show me the commands to find a mac-address on a switch and if I know the port I am looking to find it

Commands to Find Device Mac Address on Cisco Switch Port

At times, network and IT admins face challenge to find out which port of the switch is a specific device mac address

Tool to trace mac address back to a switch port

The off-brand switches do support snmp. Can someone recommend a good (and cheap/free) software tool (probably

How to Find a Device MAC Address on a Cisco Switch

Locating a device''s MAC address on a Cisco switch port is a fundamental skill for network administrators. Whether you''re enforcing

How to find port it connected to a switch using mac-address/ip add ...

On a Cisco switch, you can issue the “sh cam 00-0d-60-cb-44-5d” command. The output should tell you the VLAN

Quicker way to trace a device location by its MAC address

Lansweeper will tell you what port on what switch a client PC is connected to: Each switch in the assets list will also

Will Traceroute-MAC or similar Command works on Nexus Devices

Just like traceroute mac works on IOS device, will same feature works on NX-os as well. I have 7k seats on my Core

Finding switch & port using MAC add

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

Hi, let say in the building of 6 level level 6 is the core switch level 5 - 1 is access switch i need to find mac address of a

HowTo: Find switchport for a MAC Address on a Cisco Catalyst Switch

If you have a big network with multiple Access Switches connecting to the core switches or routers then tracing a device like a PC or

Re: How to trace end user connected from which L2 switch

Finding which switch and port an end user IP is connected to in a large LAN with multiple switches involves a series

How To Trace A Device on A Network?

Tracert to find the switch MAC address and find the port on the switch the mac address is connected to. (If your

Chasing MAC Addresses

For example the core switch will show you what port the mac address in question is coming from, which will be the uplink port from

How to track down which switch port a device is connected to on a

How to track down a computer, printer, network node etc.. by using only it''s MAC Address: Telnet/SSH into your Layer

TraceMAC

Download TraceMAC - Traceroute for MAC addresses for free. TraceMAC is a command-line Layer 2 traceroute for

layer2

While some switches offer some kind of MAC ''tracing'', an actual traceroute functionality isn''t possible due to the lack

Solved: traceroute mac command example

Hi everybody I am reading about the command " traceroute mac SRC-MAC-ADD DESTI-MAC-ADDRESS ".

Tracing of MAC address

Hi, If i have a MAC address, am i able to tell which port it is connected to on a switch. I hav2 core switch and 10 edge

switch

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

The best way to trace a potential L2 path across multiple switches is to examine their MAC tables. Each frame will

Solved: Trace network port

Solved: Hi, i have core switch 6509.I need to trace this server A is connected to which port in the Core Switch.I found

Traceroute MAC address

is the source mac in the same switch and from where you are tracing the mac, from your core/distribution or access?

Finding a MAC address on the network

Hello, unless you have something like Cisco Network Assistant installed, you need to dig your way through to the

How to Trace a Layer 2 Path on Cisco Nexus Switches?

It was going to be tricky though, since the core switches were using both port-channels and virtual port-channels. The command mac

How to see mac address of the switch that you are currently on

1) I DO NOT mean the mac addresses that the switch has learnt. (from what I know you can check that by Switch#sh mac-address

Commands to find mac-address and IP on a port

Can someone show me the commands to find a mac-address on a switch and if I know the port I am looking to find it

Back to Basics: Network Tracing

Network tracing is a basic task of using a router''s or switch''s CAM (MAC) table and ARP tables to trace the origin of

How to trace end user connected from which L2 switch

This command will tell you which port the MAC address is associated with on the switch. If it points to an uplink port,

How to trace a mac address

If the device support you can do a mac traces from the source. ... if this is one time that is the easiest way, if you have

Tracing a MAC address in multi-layer network

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

All you have to do is continue this until you get to the port that has only this mac-address. Unless your network is not a well defined

How to trace MAC address

If an ARP entry exists for the specified IP address, the switch uses the associated MAC address and identifies the

From core : Finding Mac address and port interface of the end device ...

The mac table on the core will only contain addresses layer 2 adjacent through the core switch and show on the

traceroute mac

The traceroute mac command output shows the Layer 2 path when the specified source and destination addresses belong to the

Quicker way to trace a device location by its MAC address

Yes, network monitoring tools like WhatsUp Gold or PRTG can help by mapping MAC addresses to switch ports,

How to trace a MAC address on a switched LAN?

How to trace a MAC address on a switched LAN? I want to be able to find out a switch port''s MAC address. No device uses IP,

TraceMAC

TraceMAC is a Windows/Linux command-line tool that allows you to trace a specific MAC address thru Cisco switches.

Back to Basics: Network Tracing

Network tracing is a basic task of using a router''s or switch''s CAM (MAC) table and ARP tables to trace the origin of

How to trace end user connected from which L2 switch

This command will tell you which port the MAC address is associated with on the switch. If it points to an uplink port,

How to trace a mac address

If the device support you can do a mac traces from the source. ... if this is one time that is the easiest way, if you have

Tracing a MAC address in multi-layer network

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

All you have to do is continue this until you get to the port that has only this mac-address. Unless your network is not a well defined

How to trace MAC address

If an ARP entry exists for the specified IP address, the switch uses the associated MAC address and identifies the

From core : Finding Mac address and port interface of the end device ...

The mac table on the core will only contain addresses layer 2 adjacent through the core switch and show on the

traceroute mac

The traceroute mac command output shows the Layer 2 path when the specified source and destination addresses belong to the

Quicker way to trace a device location by its MAC address

Yes, network monitoring tools like WhatsUp Gold or PRTG can help by mapping MAC addresses to switch ports,

How to trace a MAC address on a switched LAN?

How to trace a MAC address on a switched LAN? I want to be able to find out a switch port''s MAC address. No device uses IP,

TraceMAC

TraceMAC is a Windows/Linux command-line tool that allows you to trace a specific MAC address thru Cisco switches.

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

Contact Us

Continue your research online:

Website: https://zithatech.co.za
Technical inquiry: https://zithatech.co.za/contact.html

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved