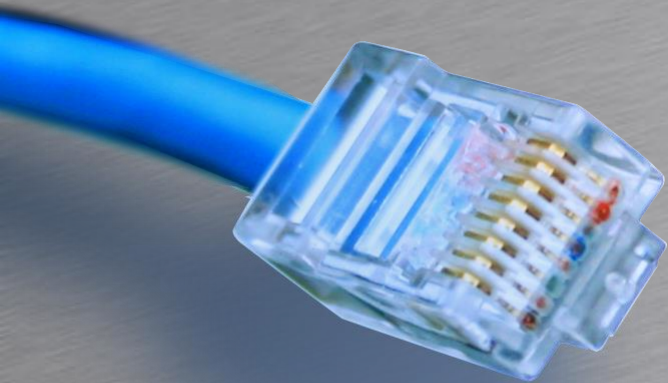


Troubleshooting



HOUSE OF
TECHNOLOGY



- en del af **mercantec**⁺

Layer 2 traceroute

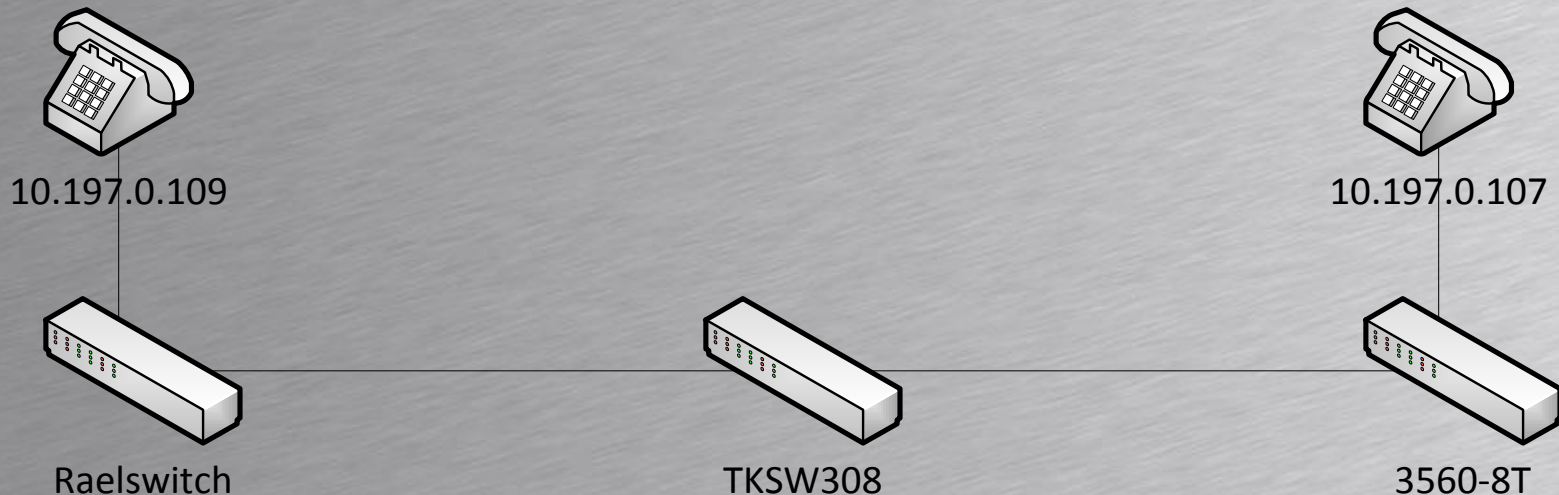
TDC IP telefoni Scale



Beskrivelse



- Lader en switch finde de fysiske porte hvor en mac adresse befinder sig.
- Kan også bruges med IP adresser hvis switchen kan slå adresserne op med ARP
- Skal bruge 2 MAC adresser eller IP adresser.





Krav

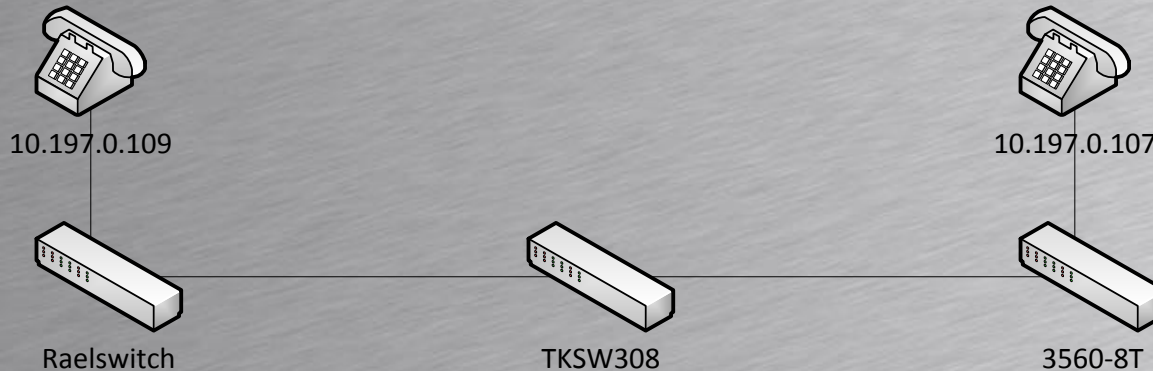
- CDP skal være aktiveret på alt udstyr
- Alle switche kan pinge hinandens management interface
- Der er maks 10 switche imellem enhederne
- Switchen behøver ikke være i datavejen imellem de 2 enheder. Man skal kunne nå alle enheder undervejs.
- **Traceroute mac ip** finder mac adresse med ARP.
 - Hvis den findes i ARP tabellen bruges denne MAC
 - Hvis den ikke findes laver den en ARP
- Virker ikke på tværs af en HUB!!



Kommandoer

- Virker med MAC adresser eller IP adresser

```
tracetroute mac [interface interface-id] {source-mac-address} [interface interface-id] {destination-mac-address} [vlan vlan-id] [detail]  
tracetroute mac ip {source-ip-address | source-hostname}{destination-ip-address | destination-hostname} [detail]
```



```
RaElswitch#tracetroute mac ip 10.197.0.107 10.197.0.109
```

```
Translating IP to mac .....
```

```
10.197.0.107 => 001a.7eab.6324
```

```
10.197.0.109 => 001a.7ea6.a917
```

```
Source 001a.7eab.6324 found on 3560-8T
```

```
1 3560-8T (10.197.0.128) : Fa0/3 => Gi0/1
```

```
2 TKS308 (10.197.0.135) : Fa0/15 => Gi0/2
```

```
3 RaElswitch (10.197.0.113) : Fa0/24 => Fa0/20
```

```
Destination 001a.7ea6.a917 found on RaElswitch
```

```
Layer 2 trace completed
```



Kommandoen

```
RaElswitch#traceroute mac ip 10.197.0.107 10.197.0.109
Source ip 10.197.0.107 error. Arp failed.
Layer2 trace aborted.
RaElswitch#ping 10.197.0.107
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.197.0.107, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/4/9 ms
RaElswitch#ping 10.197.0.109
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.197.0.109, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/8 ms
RaElswitch#traceroute mac ip 10.197.0.107 10.197.0.109
Translating IP to mac .....
10.197.0.107 => 001a.7eab.6324
10.197.0.109 => 001a.7ea6.a917

Source 001a.7eab.6324 found on 3560-8T
1 3560-8T (10.197.0.128) : Fa0/3 => Gi0/1
2 TKSW308 (10.197.0.135) : Fa0/15 => Gi0/2
3 RaElswitch (10.197.0.113) : Fa0/24 => Fa0/20
Destination 001a.7ea6.a917 found on RaElswitch
Layer 2 trace completed
```