

# Traceroute

www.google.com

DAY1

1

saijoshithakathari@Sais-MacBook-Air documents % traceroute www.google.com

traceroute to www.google.com (172.217.4.196), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 8.436 ms 8.746 ms 12.496 ms
2 96.120.42.5 (96.120.42.5) 223.431 ms 17.865 ms 40.196 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 24.457 ms 27.413 ms 19.773 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 21.567 ms 15.489 ms 12.866 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 40.364 ms 19.237 ms 19.018 ms
6 be-32131-cs23.350ecermak.il.ibone.comcast.net (96.110.42.185) 26.008 ms *
  be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 24.527 ms
7 be-2304-pe04.350ecermak.il.ibone.comcast.net (96.110.37.42) 28.874 ms
  be-2111-pe11.350ecermak.il.ibone.comcast.net (96.110.33.194) 20.078 ms
  be-2103-pe03.350ecermak.il.ibone.comcast.net (96.110.37.18) 30.310 ms
8 75.149.229.142 (75.149.229.142) 20.872 ms
  75.149.231.2 (75.149.231.2) 22.956 ms
  66.208.233.218 (66.208.233.218) 19.510 ms
9 * * *
10 108.170.243.174 (108.170.243.174) 34.916 ms
  142.251.60.6 (142.251.60.6) 21.806 ms
  142.251.231.248 (142.251.231.248) 21.785 ms
11 74.125.251.47 (74.125.251.47) 24.262 ms 27.600 ms
  108.170.243.165 (108.170.243.165) 21.166 ms
12 209.85.241.124 (209.85.241.124) 20.319 ms
  142.251.234.36 (142.251.234.36) 29.981 ms
  209.85.241.124 (209.85.241.124) 22.862 ms
13 lga15s48-in-f196.1e100.net (172.217.4.196) 27.227 ms
  142.251.233.222 (142.251.233.222) 21.443 ms
  lga15s48-in-f196.1e100.net (172.217.4.196) 30.205 ms
```

## IP Address

saijoshithakathari@Sais-MacBook-Air documents % traceroute 172.217.4.196

traceroute to 172.217.4.196 (172.217.4.196), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 14.529 ms 5.825 ms 19.673 ms
2 96.120.42.5 (96.120.42.5) 24.333 ms 23.223 ms 22.717 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 20.497 ms 22.111 ms 18.574 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 17.905 ms 15.669 ms 17.041 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 16.863 ms 18.548 ms 20.284 ms
6 be-32111-cs21.350ecermak.il.ibone.comcast.net (96.110.42.177) 25.317 ms * *
7 be-2304-pe04.350ecermak.il.ibone.comcast.net (96.110.37.42) 31.464 ms
  be-2311-pe11.350ecermak.il.ibone.comcast.net (96.110.33.202) 26.472 ms
  be-2403-pe03.350ecermak.il.ibone.comcast.net (96.110.37.30) 25.235 ms
8 75.149.231.238 (75.149.231.238) 70.856 ms
  66.208.233.90 (66.208.233.90) 37.418 ms
  50.208.235.178 (50.208.235.178) 25.515 ms
9 * * *
10 142.251.60.208 (142.251.60.208) 33.932 ms
  142.251.231.246 (142.251.231.246) 34.361 ms
  142.251.60.204 (142.251.60.204) 26.680 ms
11 108.170.243.219 (108.170.243.219) 25.623 ms
  108.170.243.165 (108.170.243.165) 23.409 ms
```

74.125.251.47 (74.125.251.47) 30.203 ms  
12 ord37s19-in-f4.1e100.net (172.217.4.196) 19.058 ms 19.130 ms 28.067 ms

2

saijoshithakathari@Sais-MacBook-Air documents % traceroute www.google.com  
traceroute to www.google.com (172.217.4.196), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 8.436 ms 8.746 ms 12.496 ms
2 96.120.42.5 (96.120.42.5) 223.431 ms 17.865 ms 40.196 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 24.457 ms 27.413 ms 19.773 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 21.567 ms 15.489 ms 12.866 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 40.364 ms 19.237 ms 19.018 ms
6 be-32131-cs23.350ecermak.il.ibone.comcast.net (96.110.42.185) 26.008 ms *
  be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 24.527 ms
7 be-2304-pe04.350ecermak.il.ibone.comcast.net (96.110.37.42) 28.874 ms
  be-2111-pe11.350ecermak.il.ibone.comcast.net (96.110.33.194) 20.078 ms
  be-2103-pe03.350ecermak.il.ibone.comcast.net (96.110.37.18) 30.310 ms
8 75.149.229.142 (75.149.229.142) 20.872 ms
  75.149.231.2 (75.149.231.2) 22.956 ms
  66.208.233.218 (66.208.233.218) 19.510 ms
9 * * *
10 108.170.243.174 (108.170.243.174) 34.916 ms
   142.251.60.6 (142.251.60.6) 21.806 ms
   142.251.231.248 (142.251.231.248) 21.785 ms
11 74.125.251.47 (74.125.251.47) 24.262 ms 27.600 ms
   108.170.243.165 (108.170.243.165) 21.166 ms
12 209.85.241.124 (209.85.241.124) 20.319 ms
   142.251.234.36 (142.251.234.36) 29.981 ms
   209.85.241.124 (209.85.241.124) 22.862 ms
13 lga15s48-in-f196.1e100.net (172.217.4.196) 27.227 ms
   142.251.233.222 (142.251.233.222) 21.443 ms
   lga15s48-in-f196.1e100.net (172.217.4.196) 30.205 ms
```

## IP Address

saijoshithakathari@Sais-MacBook-Air documents % traceroute 172.217.4.196  
traceroute to 172.217.4.196 (172.217.4.196), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 14.529 ms 5.825 ms 19.673 ms
2 96.120.42.5 (96.120.42.5) 24.333 ms 23.223 ms 22.717 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 20.497 ms 22.111 ms 18.574 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 17.905 ms 15.669 ms 17.041 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 16.863 ms 18.548 ms 20.284 ms
6 be-32111-cs21.350ecermak.il.ibone.comcast.net (96.110.42.177) 25.317 ms * *
7 be-2304-pe04.350ecermak.il.ibone.comcast.net (96.110.37.42) 31.464 ms
  be-2311-pe11.350ecermak.il.ibone.comcast.net (96.110.33.202) 26.472 ms
  be-2403-pe03.350ecermak.il.ibone.comcast.net (96.110.37.30) 25.235 ms
8 75.149.231.238 (75.149.231.238) 70.856 ms
  66.208.233.90 (66.208.233.90) 37.418 ms
  50.208.235.178 (50.208.235.178) 25.515 ms
9 * * *
10 142.251.60.208 (142.251.60.208) 33.932 ms
   142.251.231.246 (142.251.231.246) 34.361 ms
   142.251.60.204 (142.251.60.204) 26.680 ms
11 108.170.243.219 (108.170.243.219) 25.623 ms
   108.170.243.165 (108.170.243.165) 23.409 ms
   74.125.251.47 (74.125.251.47) 30.203 ms
12 ord37s19-in-f4.1e100.net (172.217.4.196) 19.058 ms 19.130 ms 28.067 ms
```

## AUTONOMOUS SYSTEM NUMBER OR ISP FOR EACH ROUTER:

Output:

saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 96.110.42.185

NetRange: 96.64.0.0 - 96.124.255.255

CIDR: 96.120.0.0/14, 96.64.0.0/11, 96.112.0.0/13, 96.124.0.0/16, 96.96.0.0/12

NetName: CABLE-1

NetHandle: NET-96-64-0-0-1

Parent: NET96 (NET-96-0-0-0-0)

NetType: Direct Allocation

OriginAS: AS7922

Organization: Comcast Cable Communications, LLC (CCCS)

RegDate: 2008-02-21

Updated: 2021-01-25

Ref: <https://rdap.arin.net/registry/ip/96.64.0.0>

OrgName: Comcast Cable Communications, LLC

OrgId: CCCS

Address: 1800 Bishops Gate Blvd

City: Mt Laurel

StateProv: NJ

PostalCode: 08054

Country: US

RegDate: 2001-09-18

Updated: 2020-11-18

Ref: <https://rdap.arin.net/registry/entity/CCCS>

OrgAbuseHandle: NAPO-ARIN

OrgAbuseName: Network Abuse and Policy Observance

OrgAbusePhone: +1-888-565-4329

OrgAbuseEmail: abuse@comcast.net

OrgAbuseRef: <https://rdap.arin.net/registry/entity/NAPO-ARIN>

OrgTechHandle: IC161-ARIN

OrgTechName: Comcast Cable Communications Inc

OrgTechPhone: +1-856-792-2300

OrgTechEmail: CNIPEO-lp-registration@cable.comcast.com

OrgTechRef: <https://rdap.arin.net/registry/entity/IC161-ARIN>

OrgRoutingHandle: ROUTI25-ARIN

OrgRoutingName: Routing

OrgRoutingPhone: +1-856-792-2300

OrgRoutingEmail: routing@comcast.com

OrgRoutingRef: <https://rdap.arin.net/registry/entity/ROUTI25-ARIN>

saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 96.110.42.177

NetRange: 96.64.0.0 - 96.124.255.255

CIDR: 96.112.0.0/13, 96.64.0.0/11, 96.124.0.0/16, 96.96.0.0/12, 96.120.0.0/14

NetName: CABLE-1

NetHandle: NET-96-64-0-0-1

Parent: NET96 (NET-96-0-0-0-0)  
NetType: Direct Allocation  
OriginAS: AS7922  
Organization: Comcast Cable Communications, LLC (CCCS)  
RegDate: 2008-02-21  
Updated: 2021-01-25  
Ref: <https://rdap.arin.net/registry/ip/96.64.0.0>  
OrgName: Comcast Cable Communications, LLC  
OrgId: CCCS  
Address: 1800 Bishops Gate Blvd  
City: Mt Laurel  
StateProv: NJ  
PostalCode: 08054  
Country: US  
RegDate: 2001-09-18  
Updated: 2020-11-18  
Ref: <https://rdap.arin.net/registry/entity/CCCS>  
OrgTechHandle: IC161-ARIN  
OrgTechName: Comcast Cable Communications Inc  
OrgTechPhone: +1-856-792-2300  
OrgTechEmail: [CNIPEO-lp-registration@cable.comcast.com](mailto:CNIPEO-lp-registration@cable.comcast.com)  
OrgTechRef: <https://rdap.arin.net/registry/entity/IC161-ARIN>  
OrgAbuseHandle: NAPO-ARIN  
OrgAbuseName: Network Abuse and Policy Observance  
OrgAbusePhone: +1-888-565-4329  
OrgAbuseEmail: [abuse@comcast.net](mailto:abuse@comcast.net)  
OrgAbuseRef: <https://rdap.arin.net/registry/entity/NAPO-ARIN>  
OrgRoutingHandle: ROUTI25-ARIN  
OrgRoutingName: Routing  
OrgRoutingPhone: +1-856-792-2300  
OrgRoutingEmail: [routing@comcast.com](mailto:routing@comcast.com)  
OrgRoutingRef: <https://rdap.arin.net/registry/entity/ROUTI25-ARIN>

saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 75.149.229.142

NetRange: 75.144.0.0 - 75.151.255.255  
CIDR: 75.144.0.0/13  
NetName: CBC-CM-5  
NetHandle: NET-75-144-0-0-1  
Parent: NET75 (NET-75-0-0-0-0)  
NetType: Direct Allocation  
OriginAS: AS7922  
Organization: Comcast Cable Communications, LLC (CCCS)  
RegDate: 2006-09-25  
Updated: 2021-01-25  
Ref: <https://rdap.arin.net/registry/ip/75.144.0.0>  
OrgName: Comcast Cable Communications, LLC  
OrgId: CCCS  
Address: 1800 Bishops Gate Blvd  
City: Mt Laurel  
StateProv: NJ  
PostalCode: 08054  
Country: US  
RegDate: 2001-09-18  
Updated: 2020-11-18

Ref: <https://rdap.arin.net/registry/entity/CCCS>  
OrgTechHandle: IC161-ARIN  
OrgTechName: Comcast Cable Communications Inc  
OrgTechPhone: +1-856-792-2300  
OrgTechEmail: CNIPEO-lp-registration@cable.comcast.com  
OrgTechRef: <https://rdap.arin.net/registry/entity/IC161-ARIN>  
OrgAbuseHandle: NAPO-ARIN  
OrgAbuseName: Network Abuse and Policy Observance  
OrgAbusePhone: +1-888-565-4329  
OrgAbuseEmail: abuse@comcast.net  
OrgAbuseRef: <https://rdap.arin.net/registry/entity/NAPO-ARIN>  
OrgRoutingHandle: ROUTI25-ARIN  
OrgRoutingName: Routing  
OrgRoutingPhone: +1-856-792-2300  
OrgRoutingEmail: routing@comcast.com  
OrgRoutingRef: <https://rdap.arin.net/registry/entity/ROUTI25-ARIN>  
saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 75.149.231.238  
NetRange: 75.144.0.0 - 75.151.255.255  
CIDR: 75.144.0.0/13  
NetName: CBC-CM-5  
NetHandle: NET-75-144-0-0-1  
Parent: NET75 (NET-75-0-0-0-0)  
NetType: Direct Allocation  
OriginAS: AS7922  
Organization: Comcast Cable Communications, LLC (CCCS)  
RegDate: 2006-09-25  
Updated: 2021-01-25  
Ref: <https://rdap.arin.net/registry/ip/75.144.0.0>  
OrgName: Comcast Cable Communications, LLC  
OrgId: CCCS  
Address: 1800 Bishops Gate Blvd  
City: Mt Laurel  
StateProv: NJ  
PostalCode: 08054  
Country: US  
RegDate: 2001-09-18  
Updated: 2020-11-18  
Ref: <https://rdap.arin.net/registry/entity/CCCS>  
OrgTechHandle: IC161-ARIN  
OrgTechName: Comcast Cable Communications Inc  
OrgTechPhone: +1-856-792-2300  
OrgTechEmail: CNIPEO-lp-registration@cable.comcast.com  
OrgTechRef: <https://rdap.arin.net/registry/entity/IC161-ARIN>  
OrgRoutingHandle: ROUTI25-ARIN  
OrgRoutingName: Routing  
OrgRoutingPhone: +1-856-792-2300  
OrgRoutingEmail: routing@comcast.com  
OrgRoutingRef: <https://rdap.arin.net/registry/entity/ROUTI25-ARIN>  
OrgAbuseHandle: NAPO-ARIN  
OrgAbuseName: Network Abuse and Policy Observance  
OrgAbusePhone: +1-888-565-4329  
OrgAbuseEmail: abuse@comcast.net  
OrgAbuseRef: <https://rdap.arin.net/registry/entity/NAPO-ARIN>

## DAY-2

### 1

saijoshithakathari@Sais-MacBook-Air documents % traceroute www.google.com  
traceroute to www.google.com (142.250.191.228), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 8.866 ms 5.080 ms 6.218 ms
2 96.120.42.5 (96.120.42.5) 20.534 ms 12.313 ms 19.490 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 15.517 ms 17.186 ms 23.338 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 17.973 ms 15.165 ms 17.654 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 25.190 ms 19.283 ms 16.058 ms
6 be-32141-cs24.350ecermak.il.ibone.comcast.net (96.110.42.189) 23.359 ms
  be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 26.013 ms
  be-32141-cs24.350ecermak.il.ibone.comcast.net (96.110.42.189) 21.833 ms
7 be-2103-pe03.350ecermak.il.ibone.comcast.net (96.110.37.18) 25.841 ms
  be-2204-pe04.350ecermak.il.ibone.comcast.net (96.110.37.38) 26.111 ms
  be-2103-pe03.350ecermak.il.ibone.comcast.net (96.110.37.18) 25.069 ms
8 75.149.229.142 (75.149.229.142) 22.038 ms
  75.149.231.2 (75.149.231.2) 28.841 ms
  50.208.235.170 (50.208.235.170) 20.120 ms
9 * * *
10 108.170.243.225 (108.170.243.225) 41.727 ms
    142.251.60.6 (142.251.60.6) 20.402 ms
    216.239.47.128 (216.239.47.128) 24.733 ms
11 108.170.244.2 (108.170.244.2) 22.032 ms
    108.170.243.233 (108.170.243.233) 30.806 ms
    142.251.60.17 (142.251.60.17) 28.180 ms
12 216.239.63.175 (216.239.63.175) 27.308 ms
    ord38s32-in-f4.1e100.net (142.250.191.228) 33.051 ms
    142.251.234.67 (142.251.234.67) 28.528 ms
```

### IP Address

saijoshithakathari@Sais-MacBook-Air documents % traceroute 142.250.191.228  
traceroute to 142.250.191.228 (142.250.191.228), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 9.228 ms 5.949 ms 12.291 ms
2 96.120.42.5 (96.120.42.5) 15.785 ms 38.841 ms 18.736 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 19.790 ms 15.842 ms 23.398 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 19.248 ms 15.536 ms 20.114 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 20.693 ms 25.035 ms 60.352 ms
6 be-32131-cs23.350ecermak.il.ibone.comcast.net (96.110.42.185) 37.861 ms
  be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 32.726 ms *
7 be-2404-pe04.350ecermak.il.ibone.comcast.net (96.110.37.46) 22.675 ms
  be-2103-pe03.350ecermak.il.ibone.comcast.net (96.110.37.18) 25.083 ms
  be-2204-pe04.350ecermak.il.ibone.comcast.net (96.110.37.38) 23.241 ms
8 75.149.230.26 (75.149.230.26) 24.074 ms
  66.208.233.218 (66.208.233.218) 28.612 ms
  66.208.233.90 (66.208.233.90) 25.291 ms
9 * * *
10 142.251.60.2 (142.251.60.2) 49.877 ms
    108.170.243.225 (108.170.243.225) 29.965 ms 24.816 ms
11 142.251.60.19 (142.251.60.19) 19.096 ms
    108.170.244.15 (108.170.244.15) 25.335 ms 19.174 ms
12 ord38s32-in-f4.1e100.net (142.250.191.228) 19.411 ms
    216.239.63.175 (216.239.63.175) 24.714 ms
    142.251.234.161 (142.251.234.161) 22.647 ms
```

## 2

saijoshithakathari@Sais-MacBook-Air documents % traceroute www.google.com  
traceroute to www.google.com (142.250.190.4), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 8.125 ms 4.262 ms 5.046 ms
2 96.120.42.5 (96.120.42.5) 19.925 ms 16.647 ms 16.890 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 16.818 ms 19.420 ms 13.386 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 20.655 ms 14.138 ms 13.869 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 28.128 ms 21.428 ms 20.163 ms
6 be-32131-cs23.350ecermak.il.ibone.comcast.net (96.110.42.185) 24.787 ms
  be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 25.069 ms
  be-32111-cs21.350ecermak.il.ibone.comcast.net (96.110.42.177) 27.939 ms
7 be-2111-pe11.350ecermak.il.ibone.comcast.net (96.110.33.194) 23.144 ms
  be-2413-pe13.350ecermak.il.ibone.comcast.net (96.110.32.98) 20.219 ms
  be-2403-pe03.350ecermak.il.ibone.comcast.net (96.110.37.30) 21.628 ms
8 50.208.235.178 (50.208.235.178) 24.955 ms
  50.208.235.174 (50.208.235.174) 24.107 ms
  96-87-9-226-static.hfc.comcastbusiness.net (96.87.9.226) 28.943 ms
g * * *
10 142.251.231.244 (142.251.231.244) 28.643 ms
   142.251.60.22 (142.251.60.22) 28.453 ms
   142.251.60.10 (142.251.60.10) 25.189 ms
11 142.251.61.41 (142.251.61.41) 27.737 ms 23.841 ms
   108.170.243.165 (108.170.243.165) 27.600 ms
12 ord37s32-in-f4.1e100.net (142.250.190.4) 24.578 ms 20.971 ms 22.500 ms
```

### IP Address

saijoshithakathari@Sais-MacBook-Air documents % traceroute 172.217.4.196  
traceroute to 172.217.4.196 (172.217.4.196), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 7.521 ms 5.096 ms 4.888 ms
2 96.120.42.5 (96.120.42.5) 15.630 ms 20.425 ms 24.671 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 19.364 ms 14.684 ms 15.151 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 16.334 ms 14.031 ms 16.642 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 15.186 ms 22.559 ms 15.930 ms
6 be-32141-cs24.350ecermak.il.ibone.comcast.net (96.110.42.189) 25.857 ms
  be-32131-cs23.350ecermak.il.ibone.comcast.net (96.110.42.185) 25.105 ms
  be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 30.593 ms
7 be-2313-pe13.350ecermak.il.ibone.comcast.net (96.110.32.94) 24.441 ms
  be-2203-pe03.350ecermak.il.ibone.comcast.net (96.110.37.22) 21.768 ms
  be-2311-pe11.350ecermak.il.ibone.comcast.net (96.110.33.202) 23.968 ms
8 75.149.231.2 (75.149.231.2) 52.705 ms
  50.208.235.170 (50.208.235.170) 22.348 ms
  75.149.229.142 (75.149.229.142) 21.152 ms
g * * *
10 209.85.247.116 (209.85.247.116) 22.062 ms
   142.251.60.212 (142.251.60.212) 27.223 ms
   209.85.247.116 (209.85.247.116) 28.731 ms
11 108.170.243.219 (108.170.243.219) 27.218 ms
   108.170.243.165 (108.170.243.165) 23.139 ms
   108.170.230.235 (108.170.230.235) 24.158 ms
12 ord37s19-in-f4.1e100.net (172.217.4.196) 25.335 ms 24.236 ms 24.981 ms
```

### **AUTONOMOUS SYSTEM NUMBER OR ISP FOR EACH ROUTER:**

saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 75.149.229.142

NetRange: 75.144.0.0 - 75.151.255.255  
CIDR: 75.144.0.0/13  
NetName: CBC-CM-5  
NetHandle: NET-75-144-0-0-1  
Parent: NET75 (NET-75-0-0-0-0)  
NetType: Direct Allocation  
OriginAS: AS7922  
Organization: Comcast Cable Communications, LLC (CCCS)  
RegDate: 2006-09-25  
Updated: 2021-01-25  
Ref: <https://rdap.arin.net/registry/ip/75.144.0.0>  
OrgName: Comcast Cable Communications, LLC  
OrgId: CCCS  
Address: 1800 Bishops Gate Blvd  
City: Mt Laurel  
StateProv: NJ  
PostalCode: 08054  
Country: US  
RegDate: 2001-09-18  
Updated: 2020-11-18  
Ref: <https://rdap.arin.net/registry/entity/CCCS>  
OrgTechHandle: IC161-ARIN  
OrgTechName: Comcast Cable Communications Inc  
OrgTechPhone: +1-856-792-2300  
OrgTechEmail: [CNIPEO-lp-registration@cable.comcast.com](mailto:CNIPEO-lp-registration@cable.comcast.com)  
OrgTechRef: <https://rdap.arin.net/registry/entity/IC161-ARIN>  
OrgRoutingHandle: ROUTI25-ARIN  
OrgRoutingName: Routing  
OrgRoutingPhone: +1-856-792-2300  
OrgRoutingEmail: [routing@comcast.com](mailto:routing@comcast.com)  
OrgRoutingRef: <https://rdap.arin.net/registry/entity/ROUTI25-ARIN>  
OrgAbuseHandle: NAPO-ARIN  
OrgAbuseName: Network Abuse and Policy Observance  
OrgAbusePhone: +1-888-565-4329  
OrgAbuseEmail: [abuse@comcast.net](mailto:abuse@comcast.net)  
OrgAbuseRef: <https://rdap.arin.net/registry/entity/NAPO-ARIN>  
saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 75.149.230.26  
NetRange: 75.144.0.0 - 75.151.255.255  
CIDR: 75.144.0.0/13  
NetName: CBC-CM-5  
NetHandle: NET-75-144-0-0-1  
Parent: NET75 (NET-75-0-0-0-0)  
NetType: Direct Allocation  
OriginAS: AS7922  
Organization: Comcast Cable Communications, LLC (CCCS)  
RegDate: 2006-09-25  
Updated: 2021-01-25  
Ref: <https://rdap.arin.net/registry/ip/75.144.0.0>



OrgName: Comcast Cable Communications, LLC  
OrgId: CCCS  
Address: 1800 Bishops Gate Blvd  
City: Mt Laurel  
StateProv: NJ  
PostalCode: 08054  
Country: US  
RegDate: 2001-09-18  
Updated: 2020-11-18  
Ref: <https://rdap.arin.net/registry/entity/CCCS>  
OrgTechHandle: IC161-ARIN  
OrgTechName: Comcast Cable Communications Inc  
OrgTechPhone: +1-856-792-2300  
OrgTechEmail: [CNIPEO-lp-registration@cable.comcast.com](mailto:CNIPEO-lp-registration@cable.comcast.com)  
OrgTechRef: <https://rdap.arin.net/registry/entity/IC161-ARIN>  
OrgRoutingHandle: ROUTI25-ARIN  
OrgRoutingName: Routing  
OrgRoutingPhone: +1-856-792-2300  
OrgRoutingEmail: [routing@comcast.com](mailto:routing@comcast.com)  
OrgRoutingRef: <https://rdap.arin.net/registry/entity/ROUTI25-ARIN>  
OrgAbuseHandle: NAPO-ARIN  
OrgAbuseName: Network Abuse and Policy Observance  
OrgAbusePhone: +1-888-565-4329  
OrgAbuseEmail: [abuse@comcast.net](mailto:abuse@comcast.net)  
OrgAbuseRef: <https://rdap.arin.net/registry/entity/NAPO-ARIN>  
[saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net](mailto:saijoshithakathari@Sais-MacBook-Air~%20whois-h%20whois.arin.net) 142.251.231.244  
NetRange: 142.250.0.0 - 142.251.255.255  
CIDR: 142.250.0.0/15  
NetName: GOOGLE  
NetHandle: NET-142-250-0-0-1  
Parent: NET142 (NET-142-0-0-0-0)  
NetType: Direct Allocation  
OriginAS: AS15169  
Organization: Google LLC (GOGL)  
RegDate: 2012-05-24  
Updated: 2012-05-24  
Ref: <https://rdap.arin.net/registry/ip/142.250.0.0>  
OrgName: Google LLC  
OrgId: GOGL  
Address: 1600 Amphitheatre Parkway  
City: Mountain View  
StateProv: CA  
PostalCode: 94043  
Country: US  
RegDate: 2000-03-30  
Updated: 2019-10-31  
Comment: Please note that the recommended way to file abuse complaints are located in the following links.  
Comment:  
Comment: To report abuse and illegal activity: <https://www.google.com/contact/>  
Comment:  
Comment: For legal requests: <http://support.google.com/legal>  
Comment:  
Comment: Regards,  
Comment: The Google Team

Ref: <https://rdap.arin.net/registry/entity/GOGL>  
OrgAbuseHandle: ABUSE5250-ARIN  
OrgAbuseName: Abuse  
OrgAbusePhone: +1-650-253-0000  
OrgAbuseEmail: network-abuse@google.com  
OrgAbuseRef: <https://rdap.arin.net/registry/entity/ABUSE5250-ARIN>  
OrgTechHandle: ZG39-ARIN  
OrgTechName: Google LLC  
OrgTechPhone: +1-650-253-0000  
OrgTechEmail: arin-contact@google.com  
OrgTechRef: <https://rdap.arin.net/registry/entity/ZG39-ARIN>  
saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 209.85.247.116  
NetRange: 209.85.128.0 - 209.85.255.255  
CIDR: 209.85.128.0/17  
NetName: GOOGLE  
NetHandle: NET-209-85-128-0-1  
Parent: NET209 (NET-209-0-0-0-0)  
NetType: Direct Allocation  
OriginAS:  
Organization: Google LLC (GOGL)  
RegDate: 2006-01-13  
Updated: 2012-02-24  
Ref: <https://rdap.arin.net/registry/ip/209.85.128.0>  
OrgName: Google LLC  
OrgId: GOGL  
Address: 1600 Amphitheatre Parkway  
City: Mountain View  
StateProv: CA  
PostalCode: 94043  
Country: US  
RegDate: 2000-03-30  
Updated: 2019-10-31  
Comment: Please note that the recommended way to file abuse complaints are located in the following links.  
Comment:  
Comment: To report abuse and illegal activity: <https://www.google.com/contact/>  
Comment:  
Comment: For legal requests: <http://support.google.com/legal>  
Comment:  
Comment: Regards,  
Comment: The Google Team  
Ref: <https://rdap.arin.net/registry/entity/GOGL>  
OrgAbuseHandle: ABUSE5250-ARIN  
OrgAbuseName: Abuse  
OrgAbusePhone: +1-650-253-0000  
OrgAbuseEmail: network-abuse@google.com  
OrgAbuseRef: <https://rdap.arin.net/registry/entity/ABUSE5250-ARIN>  
OrgTechHandle: ZG39-ARIN  
OrgTechName: Google LLC  
OrgTechPhone: +1-650-253-0000  
OrgTechEmail: arin-contact@google.com  
OrgTechRef: <https://rdap.arin.net/registry/entity/ZG39-ARIN>

## DAY-3

### 3

saijoshithakathari@Sais-MacBook-Air documents % traceroute www.google.com  
traceroute to www.google.com (142.250.191.132), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 7.736 ms 4.982 ms 9.522 ms
2 96.120.42.5 (96.120.42.5) 16.527 ms 13.477 ms 19.068 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 20.105 ms 17.127 ms 21.916 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 16.519 ms 15.464 ms 14.961 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 26.410 ms 25.602 ms 34.430 ms
6 be-32131-cs23.350ecermak.il.ibone.comcast.net (96.110.42.185) 36.855 ms
  be-32141-cs24.350ecermak.il.ibone.comcast.net (96.110.42.189) 26.876 ms *
7 be-2303-pe03.350ecermak.il.ibone.comcast.net (96.110.37.26) 35.447 ms
  be-2411-pe11.350ecermak.il.ibone.comcast.net (96.110.33.206) 31.311 ms
  be-2403-pe03.350ecermak.il.ibone.comcast.net (96.110.37.30) 19.806 ms
8 66.208.233.218 (66.208.233.218) 21.636 ms
  75.149.230.26 (75.149.230.26) 28.043 ms
  66.208.233.218 (66.208.233.218) 26.773 ms
9 * * *
10 108.170.243.174 (108.170.243.174) 33.237 ms
   108.170.243.225 (108.170.243.225) 21.054 ms 29.088 ms
11 142.251.60.7 (142.251.60.7) 22.147 ms 26.055 ms 21.160 ms
12 ord38s29-in-f4.1e100.net (142.250.191.132) 21.206 ms
   142.251.234.157 (142.251.234.157) 20.499 ms
   142.251.234.29 (142.251.234.29) 28.959 ms
```

### IP Address

saijoshithakathari@Sais-MacBook-Air documents % traceroute 142.250.191.132  
traceroute to 142.250.191.132 (142.250.191.132), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 8.294 ms 4.682 ms 5.525 ms
2 96.120.42.5 (96.120.42.5) 23.665 ms 15.215 ms 19.668 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 16.678 ms 21.244 ms 22.496 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 20.313 ms 18.681 ms 20.107 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 17.162 ms 22.974 ms 23.245 ms
6 be-32141-cs24.350ecermak.il.ibone.comcast.net (96.110.42.189) 24.352 ms
  be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 26.056 ms 24.977 ms
7 be-2411-pe11.350ecermak.il.ibone.comcast.net (96.110.33.206) 22.255 ms
  be-2413-pe13.350ecermak.il.ibone.comcast.net (96.110.32.98) 21.448 ms
  be-2313-pe13.350ecermak.il.ibone.comcast.net (96.110.32.94) 36.358 ms
8 66.208.233.218 (66.208.233.218) 29.322 ms 41.290 ms
  50.208.235.178 (50.208.235.178) 20.062 ms
9 * * *
10 142.251.60.14 (142.251.60.14) 25.878 ms
   108.170.243.225 (108.170.243.225) 26.814 ms
   ord38s29-in-f4.1e100.net (142.250.191.132) 24.643 ms
```

### 2

saijoshithakathari@Sais-MacBook-Air documents % traceroute www.google.com  
traceroute to www.google.com (172.217.4.196), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 6.511 ms 6.336 ms 7.321 ms
2 96.120.42.5 (96.120.42.5) 19.144 ms 18.481 ms 16.966 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 18.445 ms 20.087 ms 23.594 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 12.596 ms 16.752 ms 16.073 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 34.034 ms 22.107 ms 25.879 ms
6 be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 23.622 ms
  be-32111-cs21.350ecermak.il.ibone.comcast.net (96.110.42.177) 30.169 ms *
```

```
7 be-2113-pe13.350ecermak.il.ibone.comcast.net (96.110.32.86) 27.664 ms
  be-2211-pe11.350ecermak.il.ibone.comcast.net (96.110.33.198) 24.998 ms
  be-2113-pe13.350ecermak.il.ibone.comcast.net (96.110.32.86) 23.151 ms
8 75.149.231.238 (75.149.231.238) 23.508 ms
  66.208.233.218 (66.208.233.218) 48.398 ms
  75.149.231.2 (75.149.231.2) 26.616 ms
9 * * *
10 142.251.231.246 (142.251.231.246) 38.619 ms
  108.170.243.174 (108.170.243.174) 28.081 ms 26.712 ms
11 74.125.251.47 (74.125.251.47) 23.648 ms 27.138 ms
  108.170.243.165 (108.170.243.165) 26.066 ms
12 142.251.233.230 (142.251.233.230) 24.381 ms 44.076 ms
  142.251.234.159 (142.251.234.159) 26.836 ms
13 142.251.233.222 (142.251.233.222) 22.081 ms
  216.239.63.32 (216.239.63.32) 26.770 ms
  ord37s19-in-f4.1e100.net (172.217.4.196) 26.957 ms
```

### IP Address

saijoshithakathari@Sais-MacBook-Air documents % traceroute 172.217.4.196

traceroute to 172.217.4.196 (172.217.4.196), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 13.519 ms 4.548 ms 5.039 ms
2 96.120.42.5 (96.120.42.5) 22.440 ms 21.183 ms 20.085 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 23.741 ms 21.925 ms 19.415 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 17.352 ms 21.314 ms 17.080 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 20.406 ms 19.492 ms 19.921 ms
6 be-32111-cs21.350ecermak.il.ibone.comcast.net (96.110.42.177) 29.109 ms *
  be-32131-cs23.350ecermak.il.ibone.comcast.net (96.110.42.185) 32.605 ms
7 be-2104-pe04.350ecermak.il.ibone.comcast.net (96.110.37.34) 22.071 ms
  be-2413-pe13.350ecermak.il.ibone.comcast.net (96.110.32.98) 31.268 ms
  be-2313-pe13.350ecermak.il.ibone.comcast.net (96.110.32.94) 25.820 ms
8 96-87-9-230-static.hfc.comcastbusiness.net (96.87.9.230) 27.613 ms
  66.208.233.90 (66.208.233.90) 26.144 ms
  75.149.231.238 (75.149.231.238) 28.400 ms
9 * * *
10 108.170.243.174 (108.170.243.174) 42.563 ms
  142.251.231.246 (142.251.231.246) 27.388 ms
  142.251.60.10 (142.251.60.10) 27.381 ms
11 108.170.243.219 (108.170.243.219) 37.169 ms
  74.125.251.47 (74.125.251.47) 24.216 ms 26.186 ms
12 142.251.233.230 (142.251.233.230) 27.703 ms
  ord37s19-in-f4.1e100.net (172.217.4.196) 23.545 ms 24.979 ms
```

### AUTONOMOUS SYSTEM NUMBER OR ISP FOR EACH ROUTER:

saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 142.251.60.7

NetRange: 142.250.0.0 - 142.251.255.255

CIDR: 142.250.0.0/15

NetName: GOOGLE

NetHandle: NET-142-250-0-0-1

Parent: NET142 (NET-142-0-0-0-0)

NetType: Direct Allocation

OriginAS: AS15169

Organization: Google LLC (GOGL)

RegDate: 2012-05-24

Updated: 2012-05-24  
Ref: <https://rdap.arin.net/registry/ip/142.250.0.0>  
OrgName: Google LLC  
OrgId: GOGL  
Address: 1600 Amphitheatre Parkway  
City: Mountain View  
StateProv: CA  
PostalCode: 94043  
Country: US  
RegDate: 2000-03-30  
Updated: 2019-10-31  
Comment: Please note that the recommended way to file abuse complaints are located in the following links.  
Comment:  
Comment: To report abuse and illegal activity: <https://www.google.com/contact/>  
Comment:  
Comment: For legal requests: <http://support.google.com/legal>  
Comment:  
Comment: Regards,  
Comment: The Google Team  
Ref: <https://rdap.arin.net/registry/entity/GOGL>  
OrgAbuseHandle: ABUSE5250-ARIN  
OrgAbuseName: Abuse  
OrgAbusePhone: +1-650-253-0000  
OrgAbuseEmail: network-abuse@google.com  
OrgAbuseRef: <https://rdap.arin.net/registry/entity/ABUSE5250-ARIN>  
OrgTechHandle: ZG39-ARIN  
OrgTechName: Google LLC  
OrgTechPhone: +1-650-253-0000  
OrgTechEmail: arin-contact@google.com  
OrgTechRef: <https://rdap.arin.net/registry/entity/ZG39-ARIN>  
saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 142.251.234.157  
NetRange: 142.250.0.0 - 142.251.255.255  
CIDR: 142.250.0.0/15  
NetName: GOOGLE  
NetHandle: NET-142-250-0-0-1  
Parent: NET142 (NET-142-0-0-0-0)  
NetType: Direct Allocation  
OriginAS: AS15169  
Organization: Google LLC (GOGL)  
RegDate: 2012-05-24  
Updated: 2012-05-24  
Ref: <https://rdap.arin.net/registry/ip/142.250.0.0>  
OrgName: Google LLC  
OrgId: GOGL  
Address: 1600 Amphitheatre Parkway  
City: Mountain View  
StateProv: CA  
PostalCode: 94043  
Country: US  
RegDate: 2000-03-30  
Updated: 2019-10-31  
Comment: Please note that the recommended way to file abuse complaints are located in the following links.  
Comment:  
Comment: To report abuse and illegal activity: <https://www.google.com/contact/>

Comment:  
Comment: For legal requests: <http://support.google.com/legal>  
Comment:  
Comment: Regards,  
Comment: The Google Team  
Ref: <https://rdap.arin.net/registry/entity/GOGL>  
OrgTechHandle: ZG39-ARIN  
OrgTechName: Google LLC  
OrgTechPhone: +1-650-253-0000  
OrgTechEmail: [arin-contact@google.com](mailto:arin-contact@google.com)  
OrgTechRef: <https://rdap.arin.net/registry/entity/ZG39-ARIN>  
OrgAbuseHandle: ABUSE5250-ARIN  
OrgAbuseName: Abuse  
OrgAbusePhone: +1-650-253-0000  
OrgAbuseEmail: [network-abuse@google.com](mailto:network-abuse@google.com)  
OrgAbuseRef: <https://rdap.arin.net/registry/entity/ABUSE5250-ARIN>  
saijoshithakathari@Sais-MacBook-Air ~ %

saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 96.110.32.86  
NetRange: 96.64.0.0 - 96.124.255.255  
CIDR: 96.120.0.0/14, 96.112.0.0/13, 96.96.0.0/12, 96.64.0.0/11, 96.124.0.0/16  
NetName: CABLE-1  
NetHandle: NET-96-64-0-0-1  
Parent: NET96 (NET-96-0-0-0-0)  
NetType: Direct Allocation  
OriginAS: AS7922  
Organization: Comcast Cable Communications, LLC (CCCS)  
RegDate: 2008-02-21  
Updated: 2021-01-25  
Ref: <https://rdap.arin.net/registry/ip/96.64.0.0>  
OrgName: Comcast Cable Communications, LLC  
OrgId: CCCS  
Address: 1800 Bishops Gate Blvd  
City: Mt Laurel  
StateProv: NJ  
PostalCode: 08054  
Country: US  
RegDate: 2001-09-18  
Updated: 2020-11-18  
Ref: <https://rdap.arin.net/registry/entity/CCCS>  
OrgAbuseHandle: NAPO-ARIN  
OrgAbuseName: Network Abuse and Policy Observance  
OrgAbusePhone: +1-888-565-4329  
OrgAbuseEmail: [abuse@comcast.net](mailto:abuse@comcast.net)  
OrgAbuseRef: <https://rdap.arin.net/registry/entity/NAPO-ARIN>  
OrgRoutingHandle: ROUTI25-ARIN  
OrgRoutingName: Routing  
OrgRoutingPhone: +1-856-792-2300  
OrgRoutingEmail: [routing@comcast.com](mailto:routing@comcast.com)  
OrgRoutingRef: <https://rdap.arin.net/registry/entity/ROUTI25-ARIN>  
OrgTechHandle: IC161-ARIN  
OrgTechName: Comcast Cable Communications Inc  
OrgTechPhone: +1-856-792-2300  
OrgTechEmail: [CNIPEO-lp-registration@cable.comcast.com](mailto:CNIPEO-lp-registration@cable.comcast.com)

OrgTechRef: <https://rdap.arin.net/registry/entity/IC161-ARIN>  
 saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 96.110.37.34  
 NetRange: 96.64.0.0 - 96.124.255.255  
 CIDR: 96.96.0.0/12, 96.120.0.0/14, 96.124.0.0/16, 96.64.0.0/11, 96.112.0.0/13  
 NetName: CABLE-1  
 NetHandle: NET-96-64-0-0-1  
 Parent: NET96 (NET-96-0-0-0-0)  
 NetType: Direct Allocation  
 OriginAS: AS7922  
 Organization: Comcast Cable Communications, LLC (CCCS)  
 RegDate: 2008-02-21  
 Updated: 2021-01-25  
 Ref: <https://rdap.arin.net/registry/ip/96.64.0.0>  
 OrgName: Comcast Cable Communications, LLC  
 OrgId: CCCS  
 Address: 1800 Bishops Gate Blvd  
 City: Mt Laurel  
 StateProv: NJ  
 PostalCode: 08054  
 Country: US  
 RegDate: 2001-09-18  
 Updated: 2020-11-18  
 Ref: <https://rdap.arin.net/registry/entity/CCCS>  
 OrgAbuseHandle: NAPO-ARIN  
 OrgAbuseName: Network Abuse and Policy Observance  
 OrgAbusePhone: +1-888-565-4329  
 OrgAbuseEmail: abuse@comcast.net  
 OrgAbuseRef: <https://rdap.arin.net/registry/entity/NAPO-ARIN>  
 OrgRoutingHandle: ROUTI25-ARIN  
 OrgRoutingName: Routing  
 OrgRoutingPhone: +1-856-792-2300  
 OrgRoutingEmail: routing@comcast.com  
 OrgRoutingRef: <https://rdap.arin.net/registry/entity/ROUTI25-ARIN>  
 OrgTechHandle: IC161-ARIN  
 OrgTechName: Comcast Cable Communications Inc  
 OrgTechPhone: +1-856-792-2300  
 OrgTechEmail: CNIPEO-lp-registration@cable.comcast.com  
 OrgTechRef: <https://rdap.arin.net/registry/entity/IC161-ARIN>

## DAY-4

### 1

saijoshithakathari@Sais-MacBook-Air documents % traceroute www.google.com  
 traceroute to www.google.com (142.250.191.228), 64 hops max, 52 byte packets  
 1 10.0.0.1 (10.0.0.1) 7.794 ms 5.446 ms 6.209 ms  
 2 96.120.42.5 (96.120.42.5) 21.837 ms 12.410 ms 16.765 ms  
 3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 19.936 ms 16.303 ms 19.474 ms  
 4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 25.910 ms 15.534 ms 16.951 ms  
 5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 14.543 ms 14.614 ms 18.184 ms  
 6 \* be-32141-cs24.350ecermak.il.ibone.comcast.net (96.110.42.189) 43.631 ms  
     be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 42.764 ms  
 7 be-2211-pe11.350ecermak.il.ibone.comcast.net (96.110.33.198) 21.152 ms  
     be-2113-pe13.350ecermak.il.ibone.comcast.net (96.110.32.86) 24.897 ms  
     be-2411-pe11.350ecermak.il.ibone.comcast.net (96.110.33.206) 21.421 ms

```
8 75.149.230.26 (75.149.230.26) 22.069 ms
   96-87-9-226-static.hfc.comcastbusiness.net (96.87.9.226) 24.145 ms 20.180 ms
9 * * *
10 142.251.60.210 (142.251.60.210) 24.933 ms
    142.251.231.66 (142.251.231.66) 27.619 ms
    142.251.60.12 (142.251.60.12) 24.090 ms
11 142.251.60.19 (142.251.60.19) 19.497 ms
    ord38s32-in-f4.1e100.net (142.250.191.228) 33.000 ms
    142.251.60.19 (142.251.60.19) 68.858 ms
```

## IP Address

```
saijoshithakathari@Sais-MacBook-Air documents % traceroute 142.250.191.228
traceroute to 142.250.191.228 (142.250.191.228), 64 hops max, 52 byte packets
1 10.0.0.1 (10.0.0.1) 27.621 ms 6.980 ms 5.312 ms
2 96.120.42.5 (96.120.42.5) 19.424 ms 16.079 ms 12.865 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 18.190 ms 13.200 ms 17.663 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 18.491 ms 19.818 ms 23.204 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 18.082 ms 16.749 ms 23.838 ms
6 be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 26.568 ms
   be-32131-cs23.350ecermak.il.ibone.comcast.net (96.110.42.185) 31.313 ms 23.213 ms
7 be-2413-pe13.350ecermak.il.ibone.comcast.net (96.110.32.98) 26.792 ms
   be-2303-pe03.350ecermak.il.ibone.comcast.net (96.110.37.26) 23.914 ms
   be-2411-pe11.350ecermak.il.ibone.comcast.net (96.110.33.206) 21.036 ms
8 75.149.231.238 (75.149.231.238) 25.742 ms
   96-87-9-230-static.hfc.comcastbusiness.net (96.87.9.230) 27.974 ms
   66.208.233.218 (66.208.233.218) 49.603 ms
9 * * *
10 142.251.60.20 (142.251.60.20) 41.310 ms
    216.239.47.86 (216.239.47.86) 23.328 ms
    108.170.243.225 (108.170.243.225) 26.090 ms
11 142.251.60.19 (142.251.60.19) 42.439 ms 44.463 ms
    108.170.244.2 (108.170.244.2) 29.420 ms
12 ord38s32-in-f4.1e100.net (142.250.191.228) 27.426 ms 168.532 ms
    209.85.251.241 (209.85.251.241) 31.194 ms
```

## 2

```
saijoshithakathari@Sais-MacBook-Air documents % traceroute www.google.com
traceroute to www.google.com (142.250.191.228), 64 hops max, 52 byte packets
1 10.0.0.1 (10.0.0.1) 10.434 ms 4.999 ms 4.115 ms
2 96.120.42.5 (96.120.42.5) 17.833 ms 16.941 ms 15.844 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 21.887 ms 13.792 ms 19.852 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 18.747 ms 16.376 ms 20.241 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 18.171 ms 15.115 ms 20.504 ms
6 * be-32141-cs24.350ecermak.il.ibone.comcast.net (96.110.42.189) 32.086 ms
   be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 28.404 ms
7 be-2113-pe13.350ecermak.il.ibone.comcast.net (96.110.32.86) 21.998 ms
   be-2211-pe11.350ecermak.il.ibone.comcast.net (96.110.33.198) 24.365 ms
   be-2203-pe03.350ecermak.il.ibone.comcast.net (96.110.37.22) 23.114 ms
8 50.208.235.170 (50.208.235.170) 26.423 ms
   75.149.230.26 (75.149.230.26) 30.071 ms
   50.208.235.174 (50.208.235.174) 28.574 ms
9 * * *
10 108.170.243.225 (108.170.243.225) 29.854 ms
    142.251.60.202 (142.251.60.202) 30.523 ms
    142.251.60.20 (142.251.60.20) 23.656 ms
11 108.170.243.254 (108.170.243.254) 27.400 ms
```



142.251.60.19 (142.251.60.19) 24.935 ms  
142.251.60.17 (142.251.60.17) 28.804 ms  
12 216.239.63.33 (216.239.63.33) 29.094 ms  
ord38s32-in-f4.1e100.net (142.250.191.228) 21.882 ms 22.145 ms

### IP Address

saijoshithakathari@Sais-MacBook-Air documents % traceroute 142.250.191.228  
traceroute to 142.250.191.228 (142.250.191.228), 64 hops max, 52 byte packets  
1 10.0.0.1 (10.0.0.1) 27.621 ms 6.980 ms 5.312 ms  
2 96.120.42.5 (96.120.42.5) 19.424 ms 16.079 ms 12.865 ms  
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 18.190 ms 13.200 ms 17.663 ms  
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 18.491 ms 19.818 ms 23.204 ms  
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 18.082 ms 16.749 ms 23.838 ms  
6 be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 26.568 ms  
be-32131-cs23.350ecermak.il.ibone.comcast.net (96.110.42.185) 31.313 ms 23.213 ms  
7 be-2413-pe13.350ecermak.il.ibone.comcast.net (96.110.32.98) 26.792 ms  
be-2303-pe03.350ecermak.il.ibone.comcast.net (96.110.37.26) 23.914 ms  
be-2411-pe11.350ecermak.il.ibone.comcast.net (96.110.33.206) 21.036 ms  
8 75.149.231.238 (75.149.231.238) 25.742 ms  
96-87-9-230-static.hfc.comcastbusiness.net (96.87.9.230) 27.974 ms  
66.208.233.218 (66.208.233.218) 49.603 ms  
g \* \* \*  
10 142.251.60.20 (142.251.60.20) 41.310 ms  
216.239.47.86 (216.239.47.86) 23.328 ms  
108.170.243.225 (108.170.243.225) 26.090 ms  
11 142.251.60.19 (142.251.60.19) 42.439 ms 44.463 ms  
108.170.244.2 (108.170.244.2) 29.420 ms  
12 ord38s32-in-f4.1e100.net (142.250.191.228) 27.426 ms 168.532 ms  
209.85.251.241 (209.85.251.241) 31.194 ms

### AUTONOMOUS SYSTEM NUMBER OR ISP FOR EACH ROUTER:

saijoshithakathari@Sais-MacBook-Air documents % traceroute 142.250.191.228  
traceroute to 142.250.191.228 (142.250.191.228), 64 hops max, 52 byte packets  
1 10.0.0.1 (10.0.0.1) 18.176 ms 4.463 ms 4.677 ms  
2 96.120.42.5 (96.120.42.5) 16.635 ms 23.088 ms 30.415 ms  
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 20.815 ms 15.036 ms 16.651 ms  
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 22.813 ms 12.584 ms 20.846 ms  
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 104.261 ms 19.428 ms 20.237 ms  
6 be-32141-cs24.350ecermak.il.ibone.comcast.net (96.110.42.189) 22.373 ms  
be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 22.518 ms \*  
7 be-2304-pe04.350ecermak.il.ibone.comcast.net (96.110.37.42) 33.885 ms  
be-2211-pe11.350ecermak.il.ibone.comcast.net (96.110.33.198) 24.347 ms  
be-2111-pe11.350ecermak.il.ibone.comcast.net (96.110.33.194) 25.696 ms  
8 66.208.233.218 (66.208.233.218) 27.170 ms  
75.149.230.26 (75.149.230.26) 30.948 ms  
75.149.231.238 (75.149.231.238) 26.960 ms  
g \* \* \*  
10 142.251.60.206 (142.251.60.206) 27.508 ms  
142.251.60.6 (142.251.60.6) 25.086 ms  
142.251.60.8 (142.251.60.8) 29.825 ms  
11 108.170.243.233 (108.170.243.233) 27.698 ms  
ord38s32-in-f4.1e100.net (142.250.191.228) 26.896 ms  
142.251.60.17 (142.251.60.17) 35.886 ms

saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 75.149.230.26

NetRange: 75.144.0.0 - 75.151.255.255  
CIDR: 75.144.0.0/13  
NetName: CBC-CM-5  
NetHandle: NET-75-144-0-0-1  
Parent: NET75 (NET-75-0-0-0-0)  
NetType: Direct Allocation  
OriginAS: AS7922  
Organization: Comcast Cable Communications, LLC (CCCS)  
RegDate: 2006-09-25  
Updated: 2021-01-25  
Ref: <https://rdap.arin.net/registry/ip/75.144.0.0>  
OrgName: Comcast Cable Communications, LLC  
OrgId: CCCS  
Address: 1800 Bishops Gate Blvd  
City: Mt Laurel  
StateProv: NJ  
PostalCode: 08054  
Country: US  
RegDate: 2001-09-18  
Updated: 2020-11-18  
Ref: <https://rdap.arin.net/registry/entity/CCCS>  
OrgRoutingHandle: ROUTI25-ARIN  
OrgRoutingName: Routing  
OrgRoutingPhone: +1-856-792-2300  
OrgRoutingEmail: [routing@comcast.com](mailto:routing@comcast.com)  
OrgRoutingRef: <https://rdap.arin.net/registry/entity/ROUTI25-ARIN>  
OrgAbuseHandle: NAPO-ARIN  
OrgAbuseName: Network Abuse and Policy Observance  
OrgAbusePhone: +1-888-565-4329  
OrgAbuseEmail: [abuse@comcast.net](mailto:abuse@comcast.net)  
OrgAbuseRef: <https://rdap.arin.net/registry/entity/NAPO-ARIN>  
OrgTechHandle: IC161-ARIN  
OrgTechName: Comcast Cable Communications Inc  
OrgTechPhone: +1-856-792-2300  
OrgTechEmail: [CNIPEO-ip-registration@cable.comcast.com](mailto:CNIPEO-ip-registration@cable.comcast.com)  
OrgTechRef: <https://rdap.arin.net/registry/entity/IC161-ARIN>

saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 75.149.231.238

NetRange: 75.144.0.0 - 75.151.255.255  
CIDR: 75.144.0.0/13  
NetName: CBC-CM-5  
NetHandle: NET-75-144-0-0-1  
Parent: NET75 (NET-75-0-0-0-0)  
NetType: Direct Allocation  
OriginAS: AS7922  
Organization: Comcast Cable Communications, LLC (CCCS)  
RegDate: 2006-09-25  
Updated: 2021-01-25  
Ref: <https://rdap.arin.net/registry/ip/75.144.0.0>  
OrgName: Comcast Cable Communications, LLC  
OrgId: CCCS  
Address: 1800 Bishops Gate Blvd  
City: Mt Laurel  
StateProv: NJ

PostalCode: 08054  
Country: US  
RegDate: 2001-09-18  
Updated: 2020-11-18  
Ref: <https://rdap.arin.net/registry/entity/CCCS>  
OrgRoutingHandle: ROUTI25-ARIN  
OrgRoutingName: Routing  
OrgRoutingPhone: +1-856-792-2300  
OrgRoutingEmail: [routing@comcast.com](mailto:routing@comcast.com)  
OrgRoutingRef: <https://rdap.arin.net/registry/entity/ROUTI25-ARIN>  
OrgAbuseHandle: NAPO-ARIN  
OrgAbuseName: Network Abuse and Policy Observance  
OrgAbusePhone: +1-888-565-4329  
OrgAbuseEmail: [abuse@comcast.net](mailto:abuse@comcast.net)  
OrgAbuseRef: <https://rdap.arin.net/registry/entity/NAPO-ARIN>  
OrgTechHandle: IC161-ARIN  
OrgTechName: Comcast Cable Communications Inc  
OrgTechPhone: +1-856-792-2300  
OrgTechEmail: [CNIPEO-lp-registration@cable.comcast.com](mailto:CNIPEO-lp-registration@cable.comcast.com)  
OrgTechRef: <https://rdap.arin.net/registry/entity/IC161-ARIN>  
saijoshithakathari@Sais-MacBook-Air ~ %

## DAY-5

### 1

saijoshithakathari@Sais-MacBook-Air documents % traceroute www.google.com  
traceroute to www.google.com (142.250.191.228), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 10.434 ms 4.999 ms 4.115 ms
2 96.120.42.5 (96.120.42.5) 17.833 ms 16.941 ms 15.844 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 21.887 ms 13.792 ms 19.852 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 18.747 ms 16.376 ms 20.241 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 18.171 ms 15.115 ms 20.504 ms
6 * be-32141-cs24.350ecermak.il.ibone.comcast.net (96.110.42.189) 32.086 ms
  be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 28.404 ms
7 be-2113-pe13.350ecermak.il.ibone.comcast.net (96.110.32.86) 21.998 ms
  be-2211-pe11.350ecermak.il.ibone.comcast.net (96.110.33.198) 24.365 ms
  be-2203-pe03.350ecermak.il.ibone.comcast.net (96.110.37.22) 23.114 ms
8 50.208.235.170 (50.208.235.170) 26.423 ms
  75.149.230.26 (75.149.230.26) 30.071 ms
  50.208.235.174 (50.208.235.174) 28.574 ms
9 * * *
10 108.170.243.225 (108.170.243.225) 29.854 ms
   142.251.60.202 (142.251.60.202) 30.523 ms
   142.251.60.20 (142.251.60.20) 23.656 ms
11 108.170.243.254 (108.170.243.254) 27.400 ms
   142.251.60.19 (142.251.60.19) 24.935 ms
   142.251.60.17 (142.251.60.17) 28.804 ms
12 216.239.63.33 (216.239.63.33) 29.094 ms
   ord38s32-in-f4.1e100.net (142.250.191.228) 21.882 ms 22.145 ms
```

### IP Address

saijoshithakathari@Sais-MacBook-Air documents % traceroute 142.250.191.228  
traceroute to 142.250.191.228 (142.250.191.228), 64 hops max, 52 byte packets

```
1 10.0.0.1 (10.0.0.1) 18.176 ms 4.463 ms 4.677 ms
2 96.120.42.5 (96.120.42.5) 16.635 ms 23.088 ms 30.415 ms
```

```

3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 20.815 ms 15.036 ms 16.651 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 22.813 ms 12.584 ms 20.846 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 104.261 ms 19.428 ms 20.237 ms
6 be-32141-cs24.350ecermak.il.ibone.comcast.net (96.110.42.189) 22.373 ms
  be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 22.518 ms *
7 be-2304-pe04.350ecermak.il.ibone.comcast.net (96.110.37.42) 33.885 ms
  be-2211-pe11.350ecermak.il.ibone.comcast.net (96.110.33.198) 24.347 ms
  be-2111-pe11.350ecermak.il.ibone.comcast.net (96.110.33.194) 25.696 ms
8 66.208.233.218 (66.208.233.218) 27.170 ms
  75.149.230.26 (75.149.230.26) 30.948 ms
  75.149.231.238 (75.149.231.238) 26.960 ms
9 * * *
10 142.251.60.206 (142.251.60.206) 27.508 ms
   142.251.60.6 (142.251.60.6) 25.086 ms
   142.251.60.8 (142.251.60.8) 29.825 ms
11 108.170.243.233 (108.170.243.233) 27.698 ms
   ord38s32-in-f4.1e100.net (142.250.191.228) 26.896 ms
   142.251.60.17 (142.251.60.17) 35.886 ms

```

## 2

saijoshithakathari@Sais-MacBook-Air documents % traceroute www.google.com  
 traceroute to www.google.com (142.250.191.164), 64 hops max, 52 byte packets

```

1 10.0.0.1 (10.0.0.1) 9.947 ms 10.476 ms 4.632 ms
2 96.120.42.5 (96.120.42.5) 21.189 ms 23.276 ms 76.315 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 22.214 ms 16.877 ms 16.067 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 18.832 ms 18.397 ms 16.315 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 18.053 ms 18.079 ms 14.065 ms
6 be-32131-cs23.350ecermak.il.ibone.comcast.net (96.110.42.185) 36.580 ms *
  be-32121-cs22.350ecermak.il.ibone.comcast.net (96.110.42.181) 32.300 ms
7 be-2311-pe11.350ecermak.il.ibone.comcast.net (96.110.33.202) 20.730 ms
  be-2404-pe04.350ecermak.il.ibone.comcast.net (96.110.37.46) 26.603 ms
  be-2113-pe13.350ecermak.il.ibone.comcast.net (96.110.32.86) 23.288 ms
8 96-87-9-226-static.hfc.comcastbusiness.net (96.87.9.226) 21.892 ms
  50.208.235.174 (50.208.235.174) 42.569 ms
  75.149.231.238 (75.149.231.238) 18.947 ms
9 * * *
10 142.251.60.12 (142.251.60.12) 28.169 ms
   108.170.243.225 (108.170.243.225) 27.543 ms
   216.239.47.128 (216.239.47.128) 22.820 ms
11 108.170.243.233 (108.170.243.233) 29.687 ms
   108.170.244.15 (108.170.244.15) 30.013 ms 26.410 ms
12 ord38s30-in-f4.1e100.net (142.250.191.164) 28.229 ms
   216.239.63.175 (216.239.63.175) 22.660 ms
   ord38s30-in-f4.1e100.net (142.250.191.164) 33.859 ms

```

## IP Address

saijoshithakathari@Sais-MacBook-Air documents % traceroute 142.250.191.164  
 traceroute to 142.250.191.164 (142.250.191.164), 64 hops max, 52 byte packets

```

1 10.0.0.1 (10.0.0.1) 10.480 ms 5.699 ms 5.217 ms
2 96.120.42.5 (96.120.42.5) 15.944 ms 17.192 ms 20.804 ms
3 po-301-1209-rur01.dearborn.mi.michigan.comcast.net (96.110.172.121) 18.158 ms 37.072 ms 20.043 ms
4 po-1-rur02.dearborn.mi.michigan.comcast.net (68.85.223.14) 20.498 ms 14.384 ms 23.207 ms
5 ae-60-ar01.pontiac.mi.michigan.comcast.net (68.87.190.29) 19.655 ms 22.952 ms 16.195 ms
6 be-32111-cs21.350ecermak.il.ibone.comcast.net (96.110.42.177) 30.302 ms
  be-32141-cs24.350ecermak.il.ibone.comcast.net (96.110.42.189) 28.534 ms

```

be-32111-cs21.350ecermak.il.ibone.comcast.net (96.110.42.177) 25.812 ms  
 7 be-2303-pe03.350ecermak.il.ibone.comcast.net (96.110.37.26) 31.216 ms  
 be-2213-pe13.350ecermak.il.ibone.comcast.net (96.110.32.90) 22.073 ms  
 be-2404-pe04.350ecermak.il.ibone.comcast.net (96.110.37.46) 28.125 ms  
 8 75.149.230.26 (75.149.230.26) 27.619 ms  
 96-87-9-230-static.hfc.comcastbusiness.net (96.87.9.230) 22.506 ms  
 66.208.233.90 (66.208.233.90) 23.950 ms  
 9 \* \* \*  
 10 ord38s30-in-f4.1e100.net (142.250.191.164) 35.289 ms  
 142.251.60.210 (142.251.60.210) 24.217 ms  
 ord38s30-in-f4.1e100.net (142.250.191.164) 22.087 ms

#### AUTONOMOUS SYSTEM NUMBER OR ISP FOR EACH ROUTER:

saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 142.251.60.202

NetRange: 142.250.0.0 - 142.251.255.255

CIDR: 142.250.0.0/15

NetName: GOOGLE

NetHandle: NET-142-250-0-0-1

Parent: NET142 (NET-142-0-0-0-0)

NetType: Direct Allocation

OriginAS: AS15169

Organization: Google LLC (GOGL)

RegDate: 2012-05-24

Updated: 2012-05-24

Ref: <https://rdap.arin.net/registry/ip/142.250.0.0>

OrgName: Google LLC

OrgId: GOGL

Address: 1600 Amphitheatre Parkway

City: Mountain View

StateProv: CA

PostalCode: 94043

Country: US

RegDate: 2000-03-30

Updated: 2019-10-31

Comment: Please note that the recommended way to file abuse complaints are located in the following links.

Comment:

Comment: To report abuse and illegal activity: <https://www.google.com/contact/>

Comment:

Comment: For legal requests: <http://support.google.com/legal>

Comment:

Comment: Regards,

Comment: The Google Team

Ref: <https://rdap.arin.net/registry/entity/GOGL>

OrgTechHandle: ZG39-ARIN

OrgTechName: Google LLC

OrgTechPhone: +1-650-253-0000

OrgTechEmail: [arin-contact@google.com](mailto:arin-contact@google.com)

OrgTechRef: <https://rdap.arin.net/registry/entity/ZG39-ARIN>

OrgAbuseHandle: ABUSE5250-ARIN

OrgAbuseName: Abuse

OrgAbusePhone: +1-650-253-0000

OrgAbuseEmail: [network-abuse@google.com](mailto:network-abuse@google.com)

OrgAbuseRef: <https://rdap.arin.net/registry/entity/ABUSE5250-ARIN>

saijoshithakathari@Sais-MacBook-Air ~ % whois -h whois.arin.net 142.251.60.206

NetRange: 142.250.0.0 - 142.251.255.255  
CIDR: 142.250.0.0/15  
NetName: GOOGLE  
NetHandle: NET-142-250-0-0-1  
Parent: NET142 (NET-142-0-0-0-0)  
NetType: Direct Allocation  
OriginAS: AS15169  
Organization: Google LLC (GOGL)  
RegDate: 2012-05-24  
Updated: 2012-05-24  
Ref: <https://rdap.arin.net/registry/ip/142.250.0.0>  
OrgName: Google LLC  
OrgId: GOGL  
Address: 1600 Amphitheatre Parkway  
City: Mountain View  
StateProv: CA  
PostalCode: 94043  
Country: US  
RegDate: 2000-03-30  
Updated: 2019-10-31  
Comment: Please note that the recommended way to file abuse complaints are located in the following links.  
Comment:  
Comment: To report abuse and illegal activity: <https://www.google.com/contact/>  
Comment:  
Comment: For legal requests: <http://support.google.com/legal>  
Comment:  
Comment: Regards,  
Comment: The Google Team  
Ref: <https://rdap.arin.net/registry/entity/GOGL>  
OrgTechHandle: ZG39-ARIN  
OrgTechName: Google LLC  
OrgTechPhone: +1-650-253-0000  
OrgTechEmail: [arin-contact@google.com](mailto:arin-contact@google.com)  
OrgTechRef: <https://rdap.arin.net/registry/entity/ZG39-ARIN>  
OrgAbuseHandle: ABUSE5250-ARIN  
OrgAbuseName: Abuse  
OrgAbusePhone: +1-650-253-0000  
OrgAbuseEmail: [network-abuse@google.com](mailto:network-abuse@google.com)  
OrgAbuseRef: <https://rdap.arin.net/registry/entity/ABUSE5250-ARIN>  
saijoshithakathari@Sais-MacBook-Air ~ %