

## LAB-3

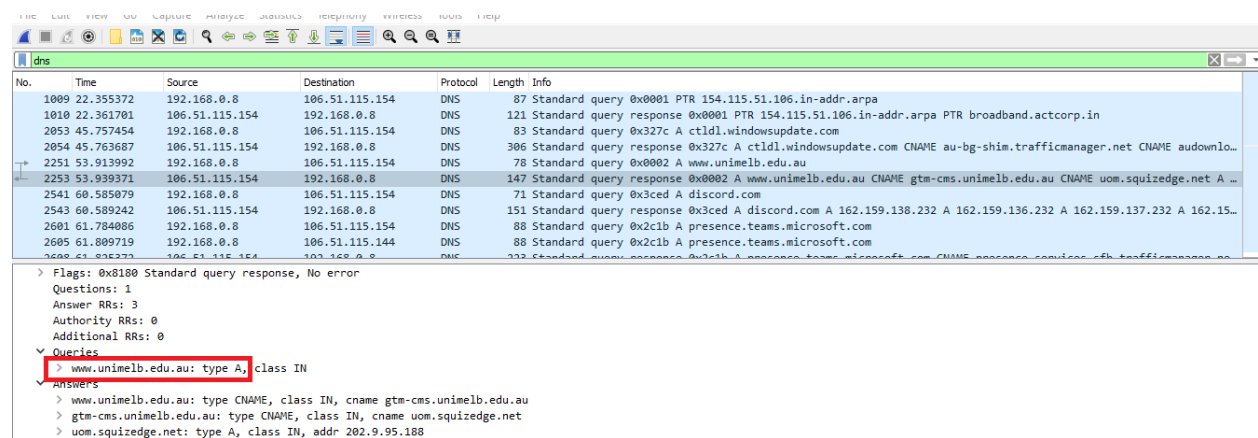
3. Try to make different types (A,NS,MX) of DNS queries and map the response to the protocol structure

Type=A

```
PS C:\WINDOWS\system32> nslookup
Default Server:  broadband.actcorp.in
Address:  106.51.115.154

> set type=A
set type=A
> www.unimelb.edu.au
Server:  broadband.actcorp.in
Address:  106.51.115.154

Non-authoritative answer:
Name:      uom.squizedge.net
Address:   202.9.95.188
Aliases:   www.unimelb.edu.au
           gtm-cms.unimelb.edu.au
```



No.	Time	Source	Destination	Protocol	Length	Info
1009	22.355372	192.168.0.8	106.51.115.154	DNS	87	Standard query 0x0001 PTR 154.115.51.106.in-addr.arpa
1010	22.361701	106.51.115.154	192.168.0.8	DNS	121	Standard query response 0x0001 PTR 154.115.51.106.in-addr.arpa PTR broadband.actcorp.in
2053	45.757454	192.168.0.8	106.51.115.154	DNS	83	Standard query 0x327c A ctld1.windowsupdate.com
2054	45.763687	106.51.115.154	192.168.0.8	DNS	306	Standard query response 0x327c A ctld1.windowsupdate.com CNAME au-bg-shim.trafficmanager.net CNAME audownlo...
2251	53.913992	192.168.0.8	106.51.115.154	DNS	78	Standard query 0x0002 A www.unimelb.edu.au
2253	53.939371	106.51.115.154	192.168.0.8	DNS	147	Standard query response 0x0002 A www.unimelb.edu.au CNAME gtm-cms.unimelb.edu.au CNAME uom.squizedge.net A ...
2541	60.505079	192.168.0.8	106.51.115.154	DNS	71	Standard query 0x3ced A discord.com
2543	60.509242	106.51.115.154	192.168.0.8	DNS	151	Standard query response 0x3ced A discord.com A 162.159.138.232 A 162.159.136.232 A 162.159.137.232 A 162.15...
2601	61.784086	192.168.0.8	106.51.115.154	DNS	88	Standard query 0x2c1b A presence.teams.microsoft.com
2605	61.809719	192.168.0.8	106.51.115.144	DNS	88	Standard query 0x2c1b A presence.teams.microsoft.com
3600	61.836233	106.51.115.154	192.168.0.8	DNS	332	Standard query response 0x2c1b A presence.teams.microsoft.com CNAME uom.squizedge.net CNAME trafficmanager.net

Flags: 0x0100 Standard query response, No error  
Questions: 1  
Answer RRs: 3  
Authority RRs: 0  
Additional RRs: 0

Queries

- www.unimelb.edu.au: type A, class IN

Answers

- www.unimelb.edu.au: type CNAME, class IN, cname gtm-cms.unimelb.edu.au
- gtm-cms.unimelb.edu.au: type CNAME, class IN, cname uom.squizedge.net
- uom.squizedge.net: type A, class IN, addr 202.9.95.188

## Type=NS

```
> set type=NS
> www.unimelb.edu.au
Server: broadband.actcorp.in
Address: 106.51.115.154

Non-authoritative answer:
www.unimelb.edu.au      canonical name = gtm-cms.unimelb.edu.au
gtm-cms.unimelb.edu.au  canonical name = uom.squizedge.net

squizedge.net
  primary name server = ns-1506.awsdns-60.org
  responsible mail addr = awsdns-hostmaster.amazon.com
  serial = 1
  refresh = 7200 (2 hours)
  retry = 900 (15 mins)
  expire = 1209600 (14 days)
  default TTL = 86400 (1 day)
```

No.	Time	Source	Destination	Protocol	Length	Info
2605	61.809719	192.168.0.8	106.51.115.144	DNS	88	Standard query 0x2c1b A presence.teams.microsoft.com
2608	61.825372	106.51.115.154	192.168.0.8	DNS	223	Standard query response 0x2c1b A presence.teams.microsoft.com CNAME presence.services.sfb.trafficmanager.net
2610	61.827007	106.51.115.144	192.168.0.8	DNS	223	Standard query response 0x2c1b A presence.teams.microsoft.com CNAME presence.services.sfb.trafficmanager.net
2684	63.461583	192.168.0.8	106.51.115.154	DNS	78	Standard query 0x0003 NS www.unimelb.edu.au
2686	63.485702	106.51.115.154	192.168.0.8	DNS	216	Standard query response 0x0003 NS www.unimelb.edu.au CNAME gtm-cms.unimelb.edu.au CNAME uom.squizedge.net
2921	71.896395	192.168.0.8	106.51.115.154	DNS	78	Standard query 0x0004 MX www.unimelb.edu.au
2925	71.930408	106.51.115.154	192.168.0.8	DNS	216	Standard query response 0x0004 MX www.unimelb.edu.au CNAME gtm-cms.unimelb.edu.au CNAME uom.squizedge.net
6346	142.985871	192.168.0.8	106.51.115.154	DNS	79	Standard query 0x1b4d A g.static.mega.co.nz
6347	142.992074	106.51.115.154	192.168.0.8	DNS	176	Standard query response 0x1b4d A g.static.mega.co.nz CNAME eu.static.mega.co.nz A 66.203.127.13 A 66.203.127.13
7410	170.787253	192.168.0.8	106.51.115.154	DNS	88	Standard query 0x13ad A presence.teams.microsoft.com
7413	170.792000	106.51.115.154	192.168.0.8	DNS	312	Standard query response 0x13ad A presence.teams.microsoft.com CNAME presence.services.sfb.trafficmanager.net

Authority RRs: 1  
Additional RRs: 0

Query:

```
> www.unimelb.edu.au: type NS, class IN
Answer:
> www.unimelb.edu.au: type CNAME, class IN, cname gtm-cms.unimelb.edu.au
> gtm-cms.unimelb.edu.au: type CNAME, class IN, cname uom.squizedge.net
Authoritative nameservers
> squizedge.net: type SOA, class IN, mname ns-1506.awsdns-60.org
[Request ID: 2684]
[Time: 0.024119000 seconds]
```

## Type=MX

```
> set type=MX
> www.unimelb.edu.au
Server: broadband.actcorp.in
Address: 106.51.115.154

Non-authoritative answer:
www.unimelb.edu.au      canonical name = gtm-cms.unimelb.edu.au
gtm-cms.unimelb.edu.au  canonical name = uom.squizedge.net

squizedge.net
    primary name server = ns-1506.awsdns-60.org
    responsible mail addr = awsdns-hostmaster.amazon.com
    serial = 1
    refresh = 7200 (2 hours)
    retry = 900 (15 mins)
    expire = 1209600 (14 days)
    default TTL = 86400 (1 day)
>
```

File Edit View Tools Capture Analyze Statistics Interactivity Wireless Tools Help

dns

No.	Time	Source	Destination	Protocol	Length	Info
2605	61.809719	192.168.0.8	106.51.115.144	DNS	88	Standard query 0x2c1b A presence.teams.microsoft.com
2608	61.825372	106.51.115.154	192.168.0.8	DNS	223	Standard query response 0x2c1b A presence.teams.microsoft.com CNAME presence.services.sfb.trafficmanager.ne...
2610	61.827807	106.51.115.144	192.168.0.8	DNS	223	Standard query response 0x2c1b A presence.teams.microsoft.com CNAME presence.services.sfb.trafficmanager.ne...
2684	63.461583	192.168.0.8	106.51.115.154	DNS	78	Standard query 0x0003 NS www.unimelb.edu.au
2686	63.485702	106.51.115.154	192.168.0.8	DNS	216	Standard query response 0x0003 NS www.unimelb.edu.au CNAME gtm-cms.unimelb.edu.au CNAME uom.squizedge.net S...
2921	71.896395	192.168.0.8	106.51.115.154	DNS	78	Standard query 0x0004 MX www.unimelb.edu.au
2925	71.930408	106.51.115.154	192.168.0.8	DNS	216	Standard query response 0x0004 MX www.unimelb.edu.au CNAME gtm-cms.unimelb.edu.au CNAME uom.squizedge.net S...
6346	142.985871	192.168.0.8	106.51.115.154	DNS	79	Standard query 0x1b4d A g.static.mega.co.nz
6347	142.992074	106.51.115.154	192.168.0.8	DNS	176	Standard query response 0x1b4d A g.static.mega.co.nz CNAME eu.static.mega.co.nz A 66.203.127.13 A 66.203.12...
7410	170.787253	192.168.0.8	106.51.115.154	DNS	88	Standard query 0x13ad A presence.teams.microsoft.com
7411	170.792890	106.51.115.154	192.168.0.8	DNS	212	Standard query response 0x13ad A presence.teams.microsoft.com CNAME presence.services.sfb.trafficmanager.ne...

Authority RRs: 1  
Additional RRs: 0

Queries

- > www.unimelb.edu.au: type MX class IN

Answers

- > www.unimelb.edu.au: type CNAME, class IN, cname gtm-cms.unimelb.edu.au
- > gtm-cms.unimelb.edu.au: type CNAME, class IN, cname uom.squizedge.net

Authoritative nameservers

- > squizedge.net: type SOA, class IN, mname ns-1506.awsdns-60.org

[Request In: 2921]

[Time: 0.034013000 seconds]