

# Name Collision Analysis

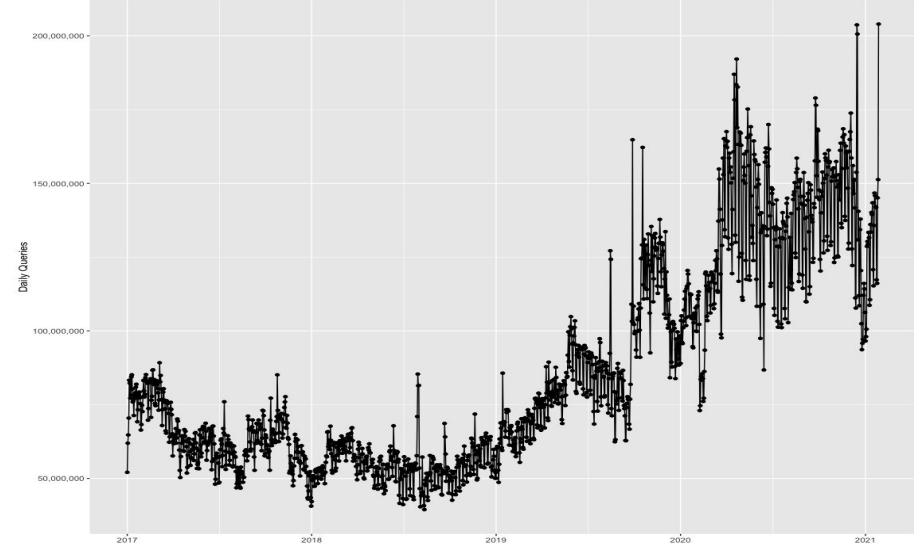
.LAN

# .LAN Analysis :: Daily Query Volume

.LAN Queries to A and J Root Servers per Day by IP Version



Total Daily Queries to A and J for .LAN

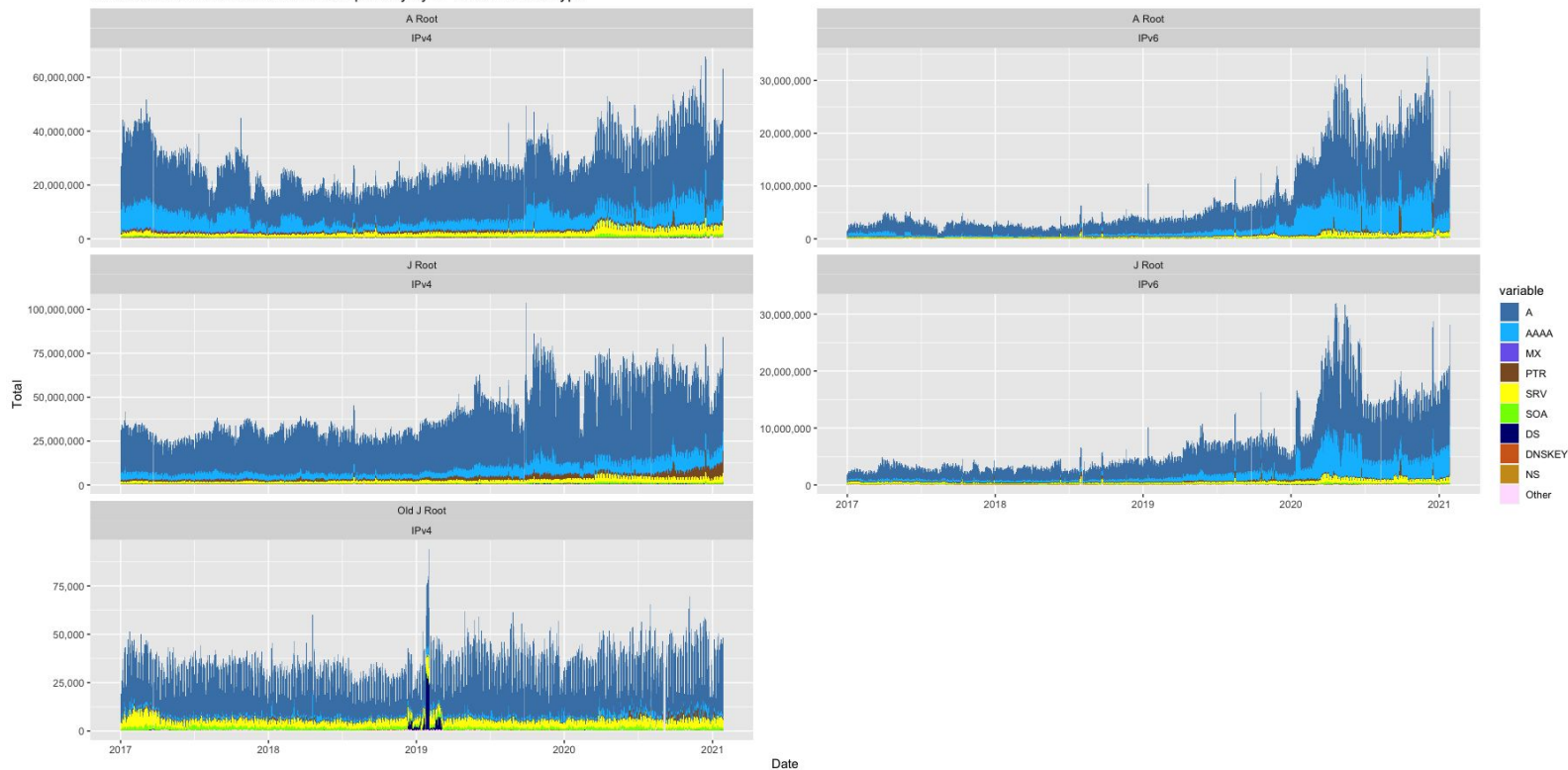


## OpenWRT 19.07

- No default hostname
- Default private-use TLD of '.lan'<sup>30</sup>
- Default blocking of names in the IANA Special-Use Domain Names Registry<sup>31</sup>

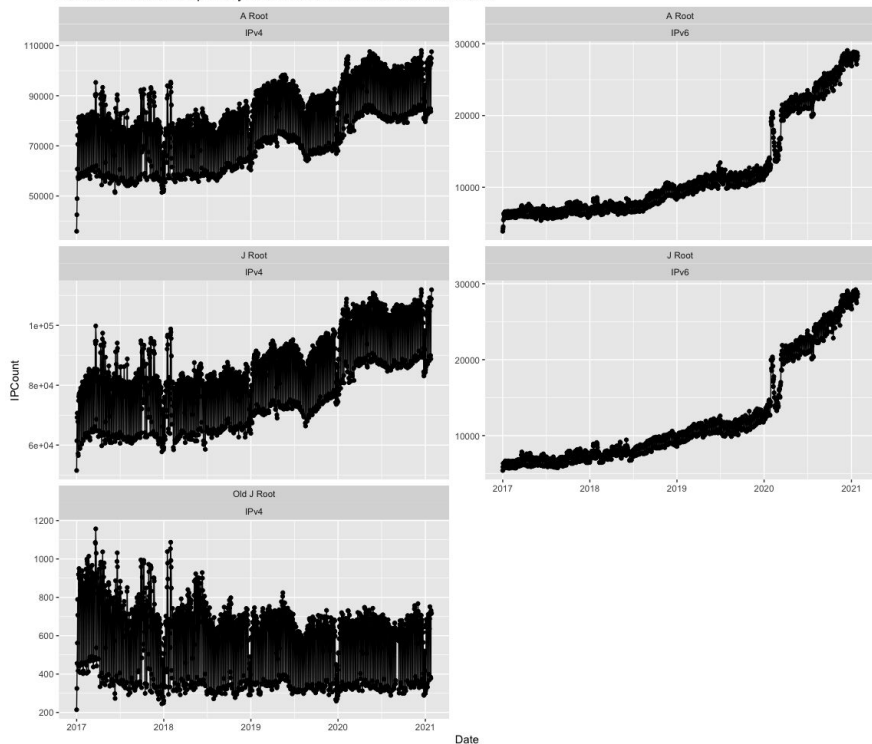
# .LAN Analysis :: Qtype Distribution

.LAN Queries to A and J Root Servers per Day by IP Version and QType

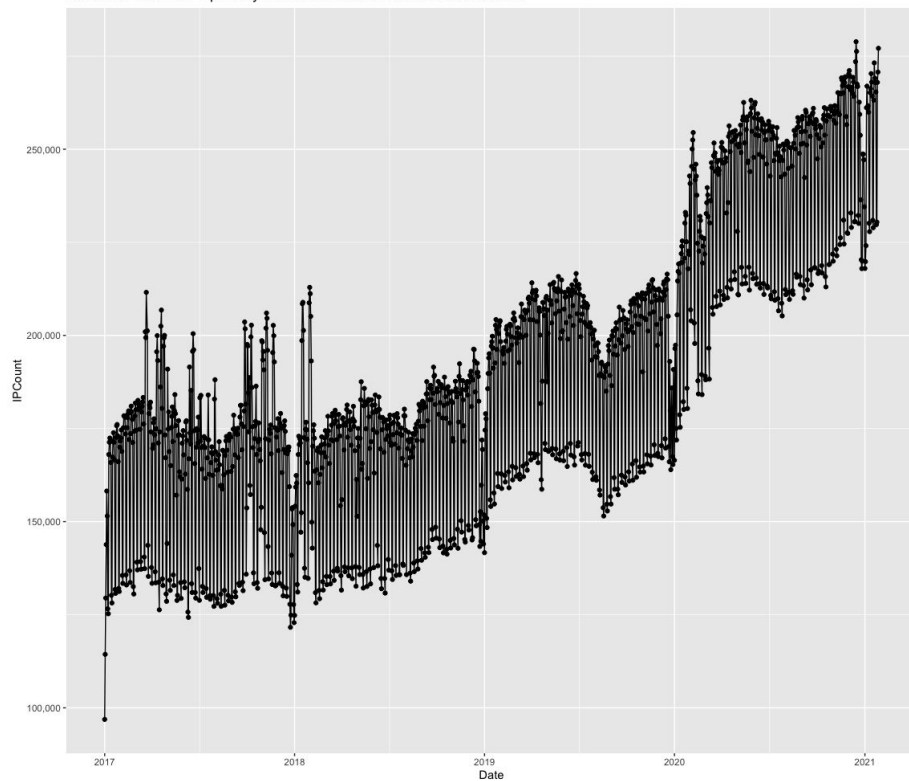


# .LAN Analysis :: Unique Daily Source IPs

Number of Distinct IPs per Day at A and J Root Servers for .LAN Queries

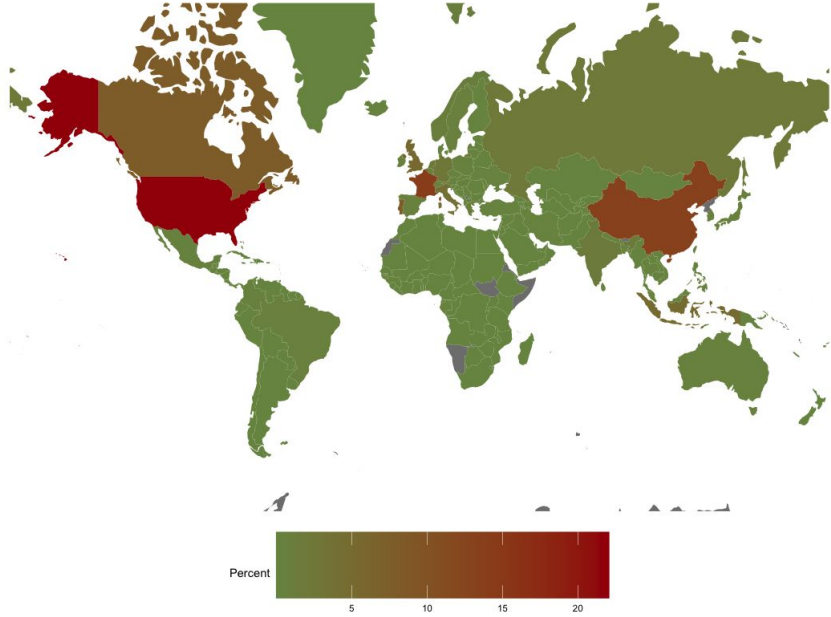


Number of Distinct IPs per Day at A and J Root Servers for .LAN Queries

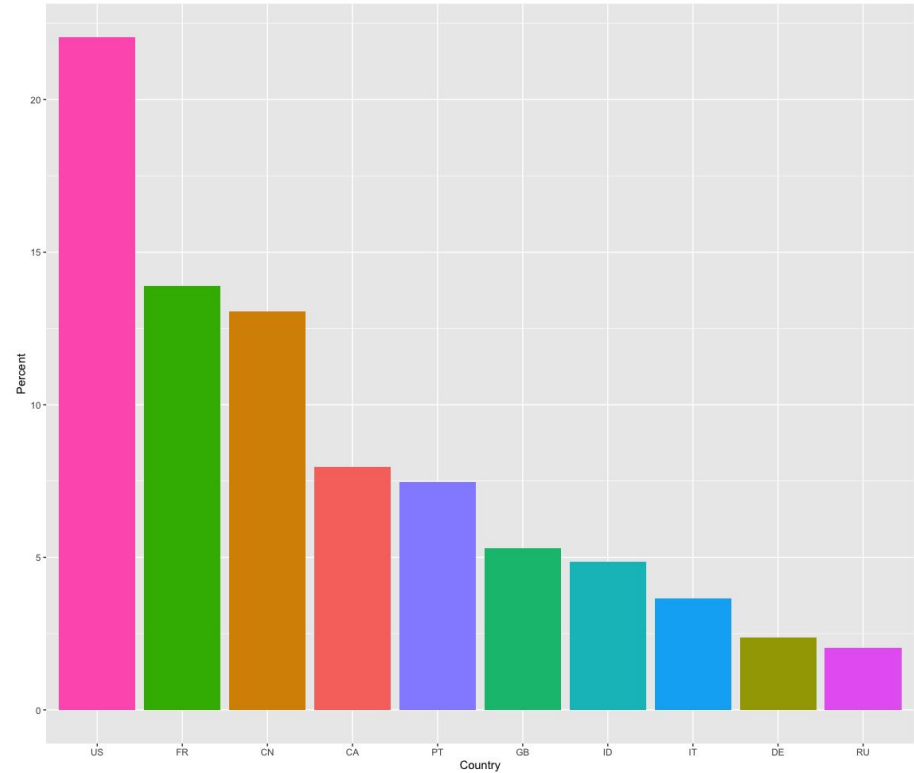


# .LAN Analysis :: Geographical Distribution

.LAN Global Distribution

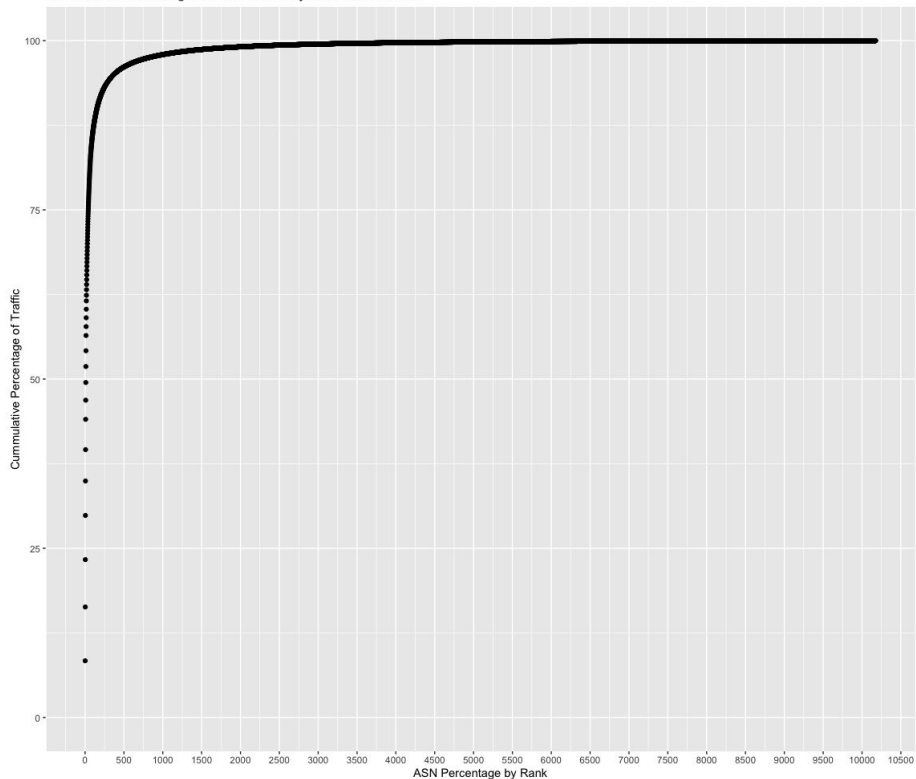


Top Countries for .LAN to A and J Root Servers

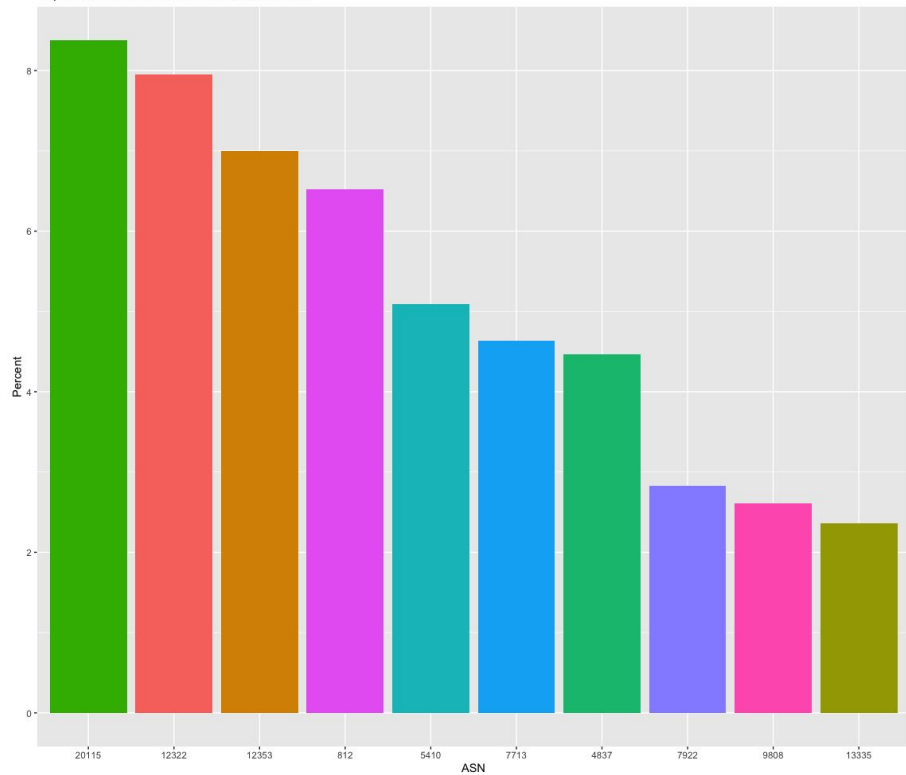


# .LAN Analysis :: ASN Distribution

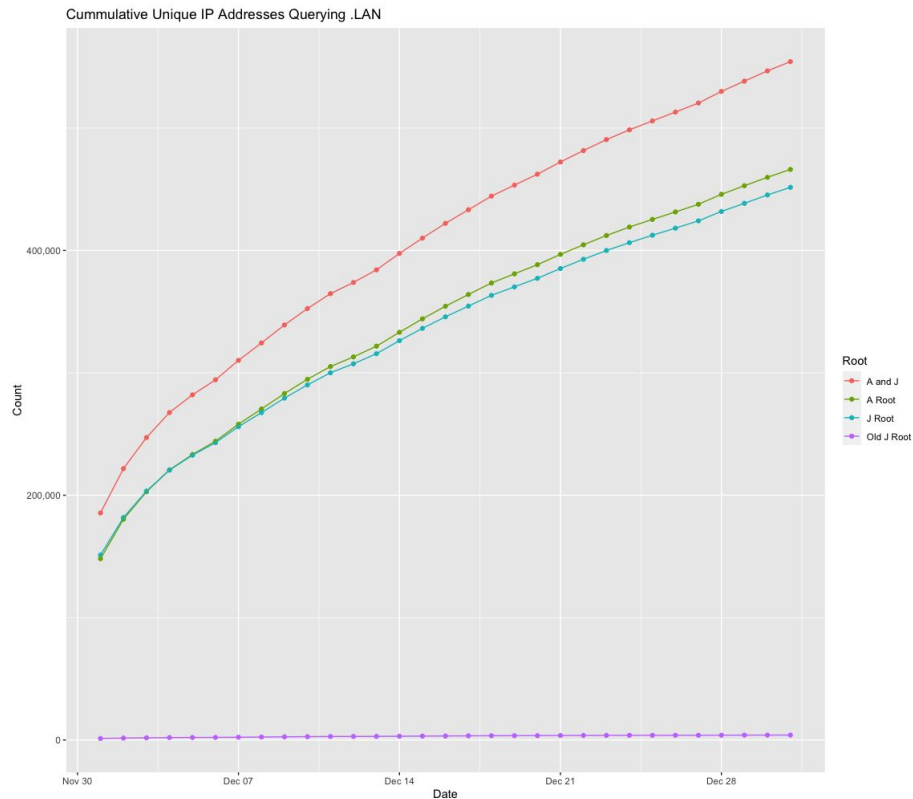
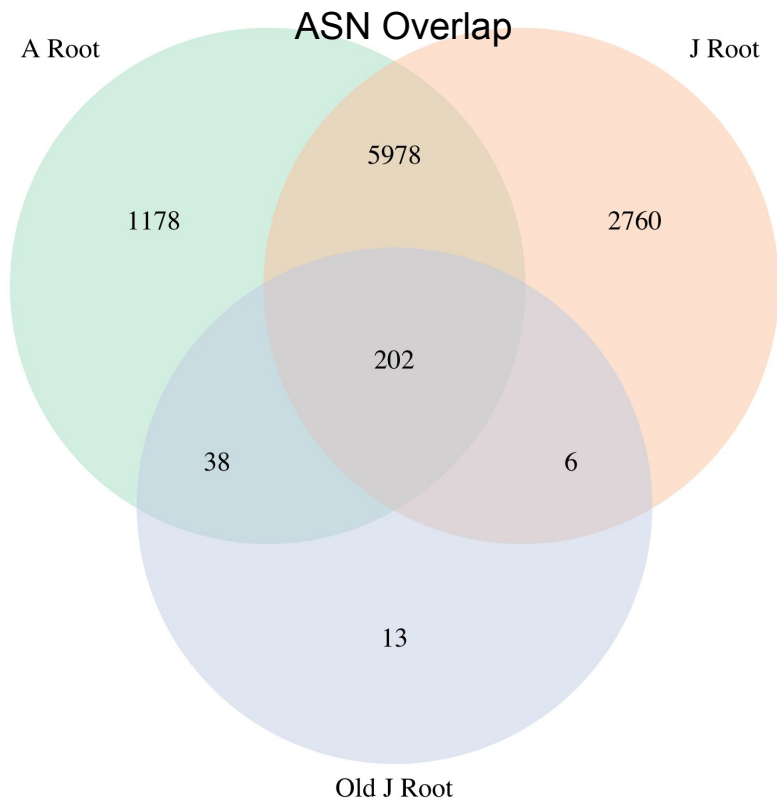
Cummulative Coverage of .LAN Traffic by Rank Order ASNs



Top ASNs for .LAN to A and J Root Servers

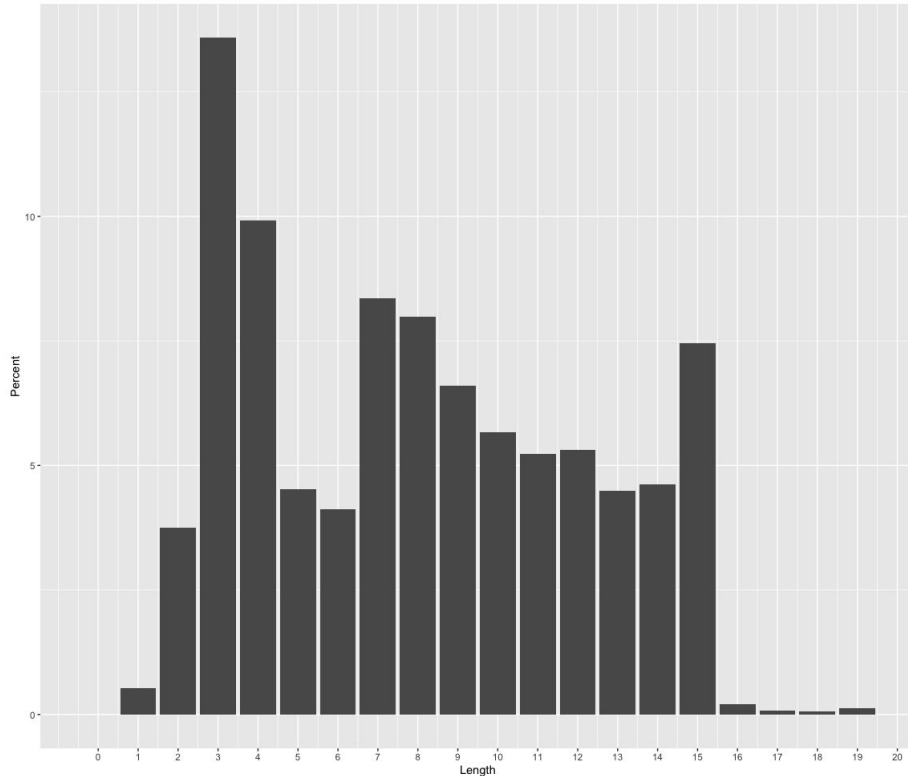


# .LAN Analysis :: Root ASN Overlap and IP growth



# .LAN Analysis :: SLD Overlap Analysis

SLD Length Distribution for .LAN

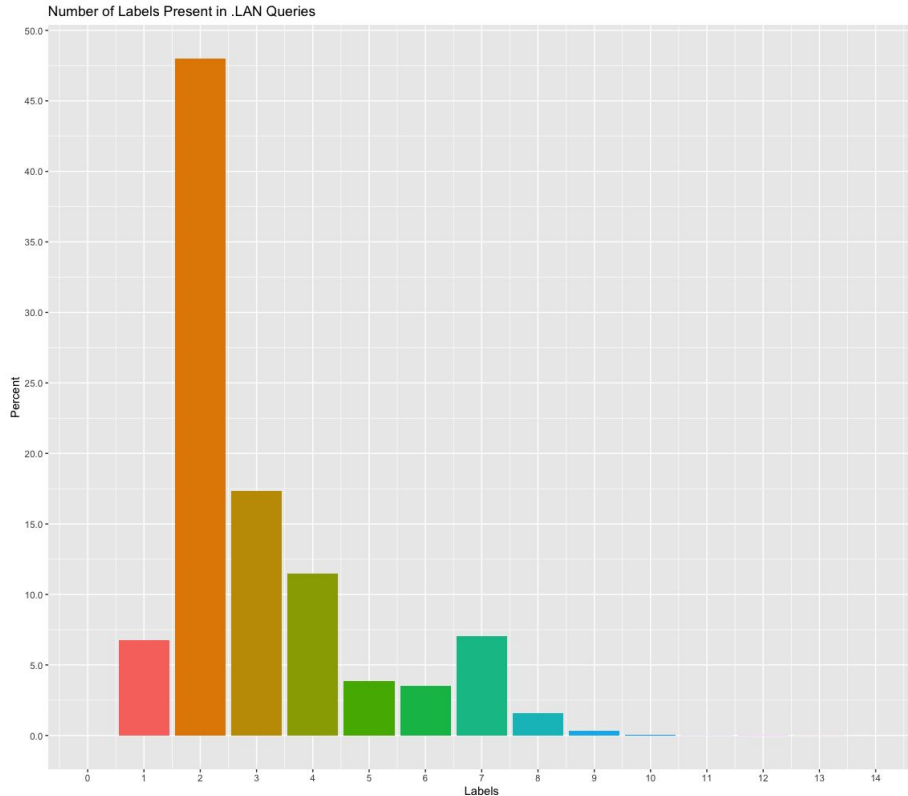


## .LAN Names for 12/31/2020

- Unique Qnames: 46,117,456
- Unique SLDs: 37,440,698



# .LAN Analysis :: SLD Analysis



```
SLD    Percent
1:     com 7.12973991
2:     arpa 5.18317203
3:     net 0.84312410
4:     wpad 0.75697182
5:     cn 0.63376531
6:     _tcp 0.46920957
7:     _ 0.41307506
8:     hl 0.38232998
9:     local 0.37466281
10:    avlcorp 0.37420665
11:    org 0.35474061
12:    _udp 0.33067472
13:    basis 0.30296325
14:    vhgrou 0.29140558
15:    asm 0.22288120
16:    zodiac 0.22274337
17:    sercol 0.19536148
18:    alliance 0.19518921
19:    zebra 0.17299217
20:    isatap 0.15135092
21:    c3connect 0.13618587
22:    workgroup 0.11708910
23:    lan 0.11662245
24:    corp 0.11101439
25:    tsi 0.10818003
26:    lixil 0.10498463
27:    emergent 0.09072142
28:    galaxy 0.08977388
29:    enivest 0.08697547
30:    mobily 0.08560098
      SLD    Percent
```

```
> sum(x$Percent)
[1] 20.04771
```

```
ThirdLabel  Percent
1:     in-addr.arpa 5.15606803
2:     .wpad 0.75620481
3:     qq.com 0.47754414
4:     avl01.avlcorp 0.31909082
5:     _dns-sd._udp 0.31551641
6:     ww.hl 0.30687549
7:     google.com 0.25032900
8:     com.cn 0.24325432
9:     googleapis.com 0.24286857
10:    facebook.com 0.19768126
11:    corp.zodiac 0.15541521
12:    .isatap 0.15135092
13:    snssdk.com 0.14456837
14:    hicloud.com 0.14448897
15:    tiktokcdn.com 0.14359312
16:    ntp.org 0.13207514
17:    baidu.com 0.13203020
18:    vgeu.vhgrou 0.13126917
19:    tiktokv.com 0.1244467
20:    vaillant.vhgrou 0.12275184
21:    _msdcs.workgroup 0.10863245
22:    ksmobile.com 0.10593366
23:    fbcdn.net 0.09152888
24:    yximgs.com 0.09115886
25:    corp.alliance 0.07994349
26:    amemv.com 0.07836976
27:    _aaplcache3._tcp 0.07742597
28:    _aaplcache._tcp 0.07724320
29:    _aaplcache1._tcp 0.07712785
30:    _aaplcache2._tcp 0.07681325
      ThirdLabel  Percent
```

# .LAN Analysis :: Label Analysis

.LAN

Column1	Column2
lan	9071680
_ldap	7016308
wpad	4442042
_kerberos	850354
msoid	752678
_	655521
www	470657
isatap	355617
tracker	326938
api	311709
lb	298665
_tcp	277524
1	251172
_msdcs	225903
_gc	160900
dc	152028
_sites	116483
_aaplcache3	111750
_aaplcache	111421
_aaplcache1	111266
_aaplcache2	110761
_aaplcache4	110480
_vlmcs	109290
b	105420
2	100823
3	97680
connectivitycheck	95719
db	94965
server-test	91574
android	90751

.HOME

	SLD	Percent
1:	hitronhub.home.	9.75412714
2:	com.home.	6.61782804
3:	home.	3.03802436
4:	_home.	2.68200505
5:	net.home.	1.19227441
6:	ht.home.	0.57062557
7:	fios-router.home.	0.52528746
8:	_tcp.home.	0.30401179
9:	wpad.home.	0.29160084
10:	org.home.	0.28520555
11:	cn.home.	0.26442140
12:	_udp.home.	0.23789951
13:	ch.home.	0.21296067
14:	ru.home.	0.19720468
15:	arpa.home.	0.08625248
16:	io.home.	0.08591727
17:	tv.home.	0.08381899
18:	isatap.home.	0.07388558
19:	me.home.	0.06444656
20:	biz.home.	0.05839011
21:	unifi.home.	0.05735203
22:	workgroup.home.	0.05627388
23:	in.home.	0.05361050
24:	home.home.	0.05328508
25:	info.home.	0.04995074
26:	uk.home.	0.04905044
27:	co.home.	0.04637510
28:	xyz.home.	0.04604986
29:	jpg.home.	0.03915547
30:	local.home.	0.03533617

SLD Percent

```
> sum(x$Percent)
[1] 27.11263
```

.LAN

	SLD	Percent
1:	com	7.12973991
2:	arpa	5.18317203
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