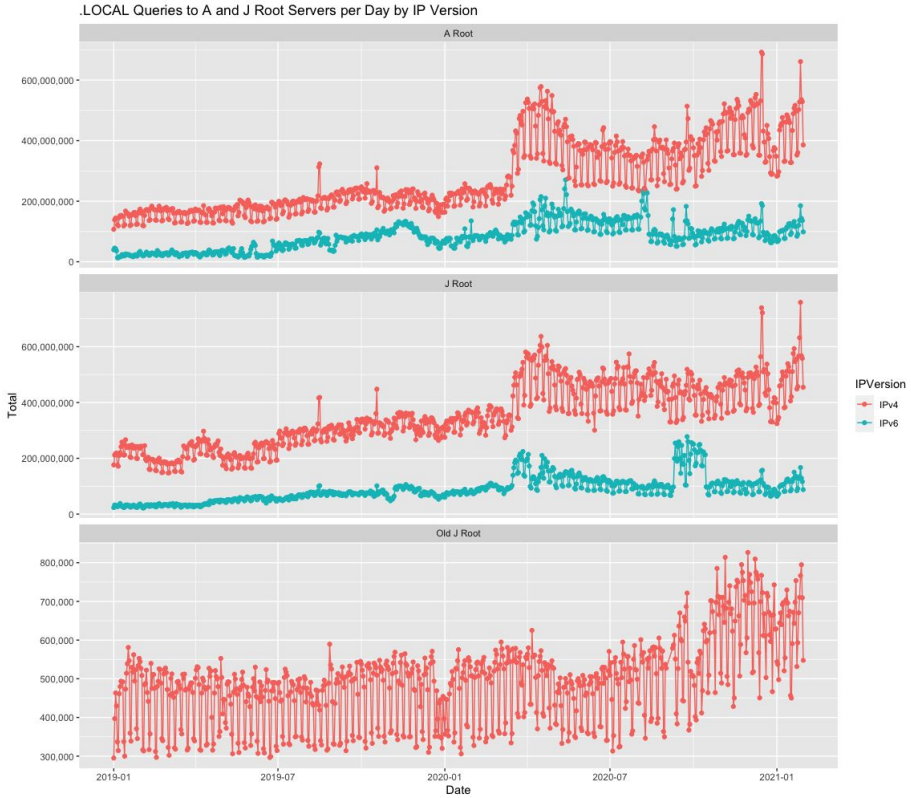
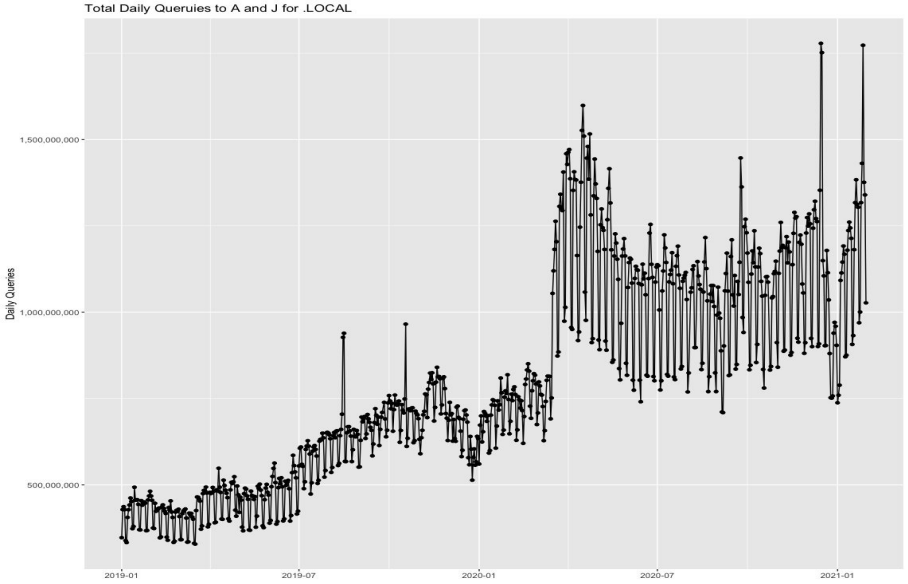
Name Collision Analysis .LOCAL

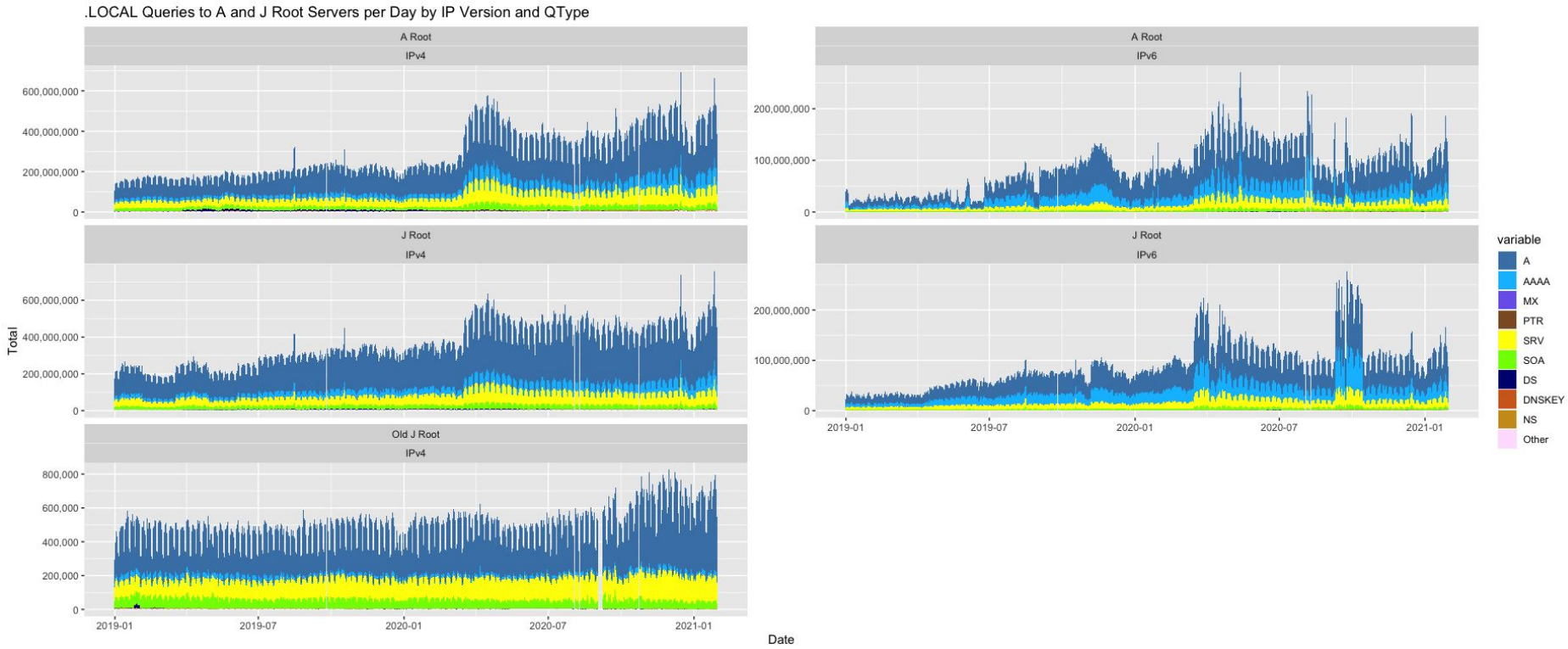
.LOCAL Analysis :: Daily Query Volume



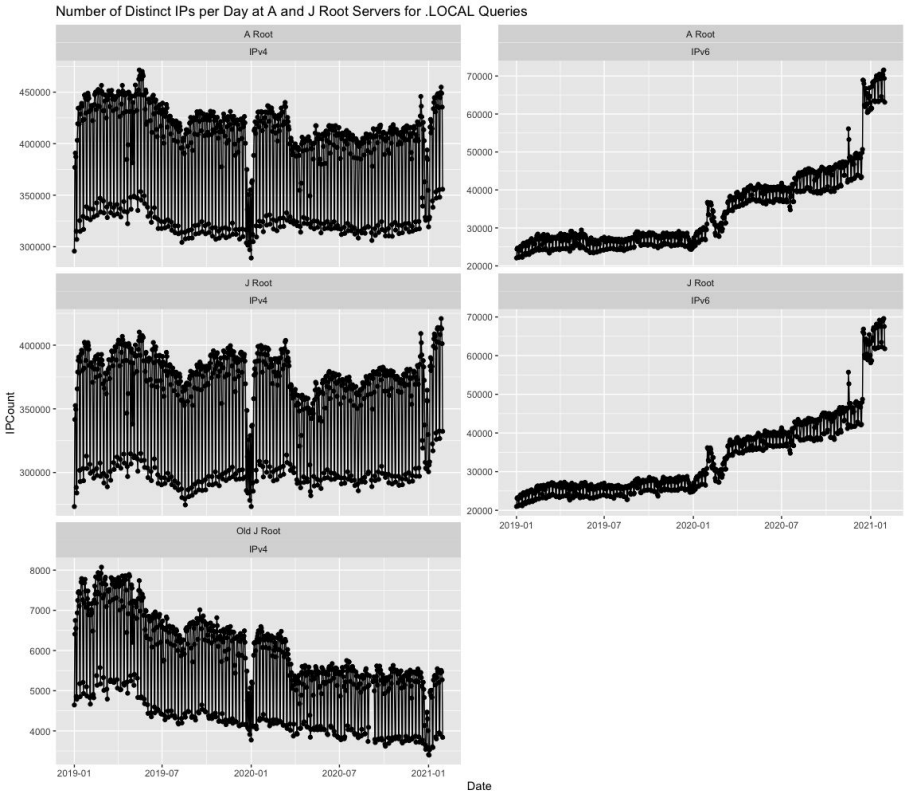


Date	Authors	Description of Proposal	Status
Feb 2013	S. Cheshire and M. Krochmal	Reserve .local for multicast DNS use	Published as RFC6762[47]

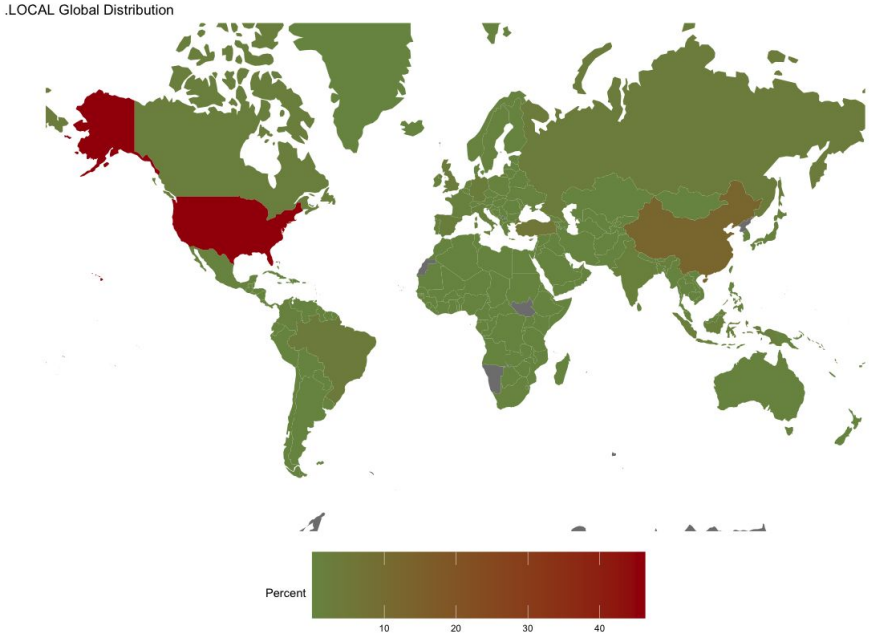
.LOCAL Analysis :: Qtype Distribution

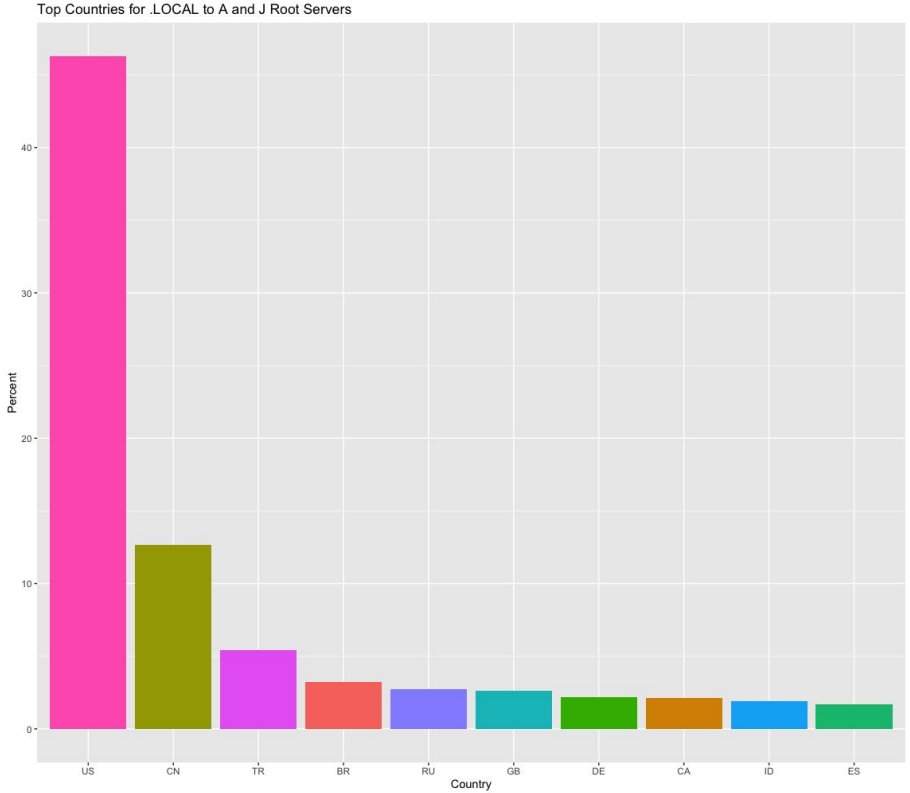


.LOCAL Analysis :: Unique Daily Source IPs

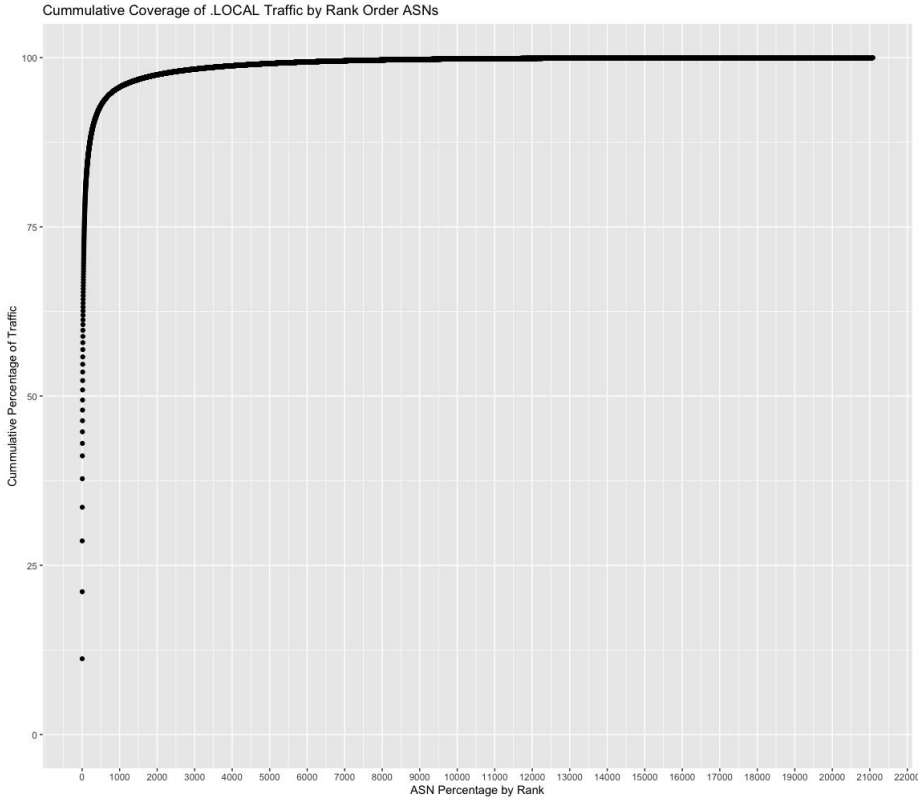


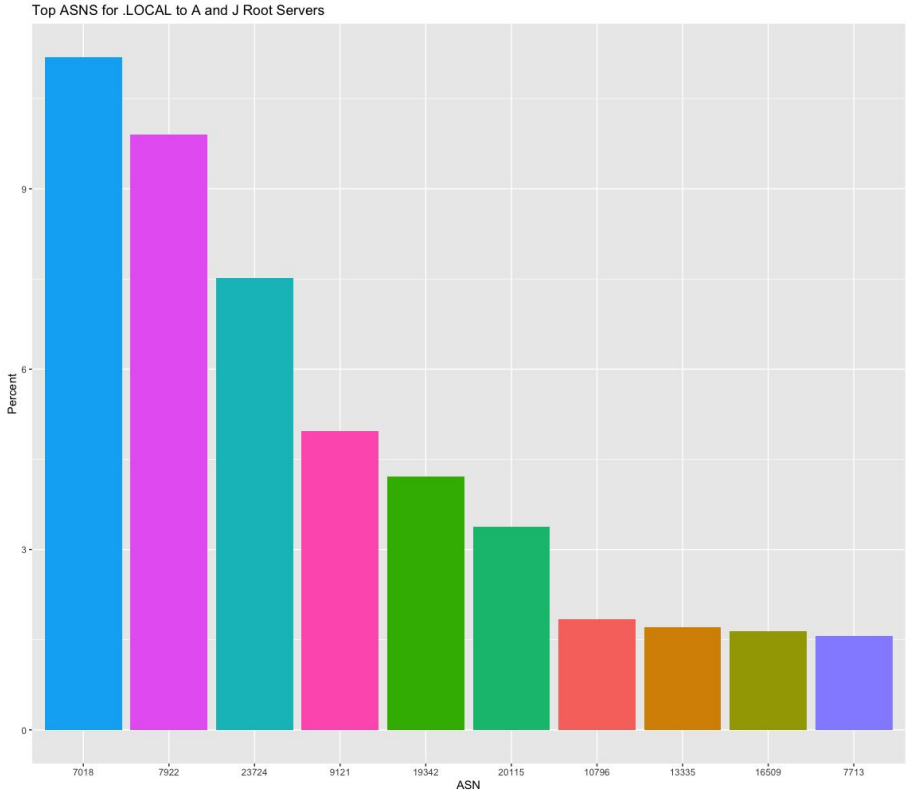
.LOCAL Analysis :: Geographical Distribution



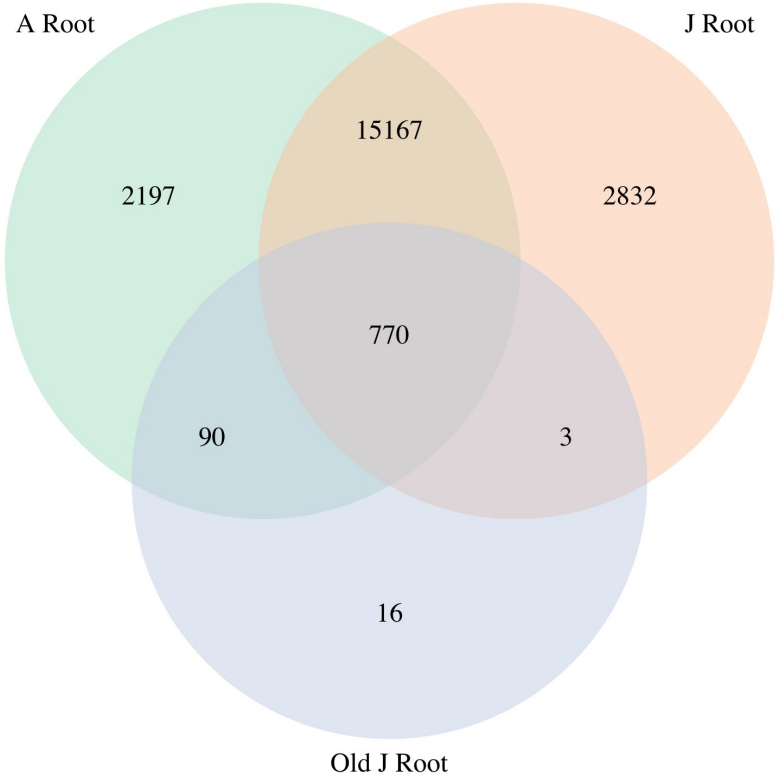


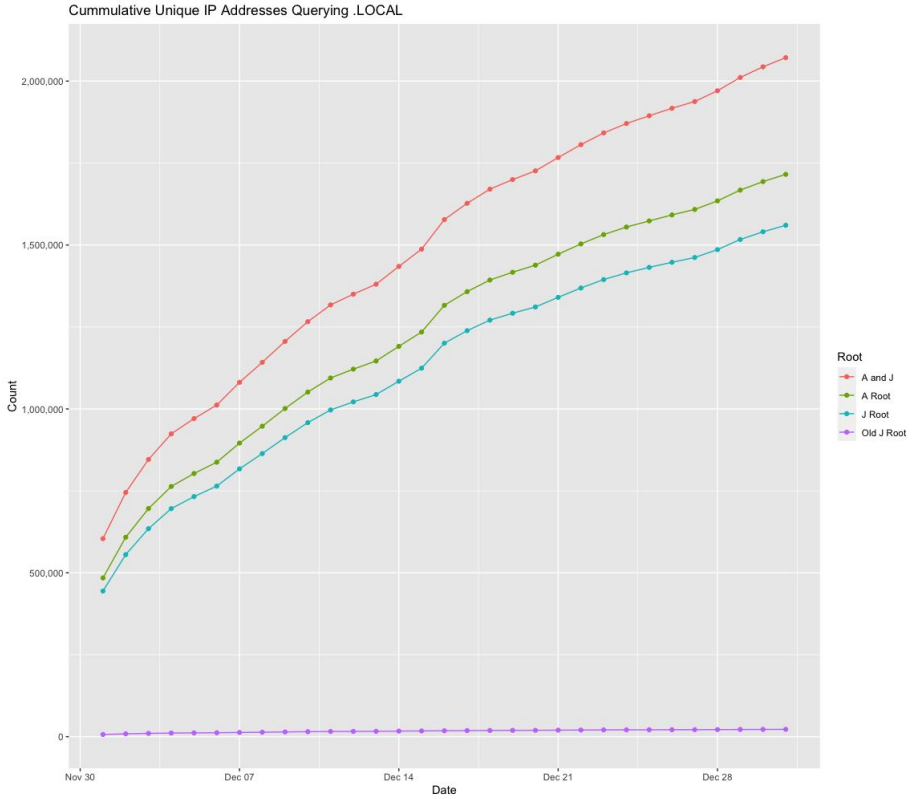
.LOCAL Analysis :: ASN Distribution



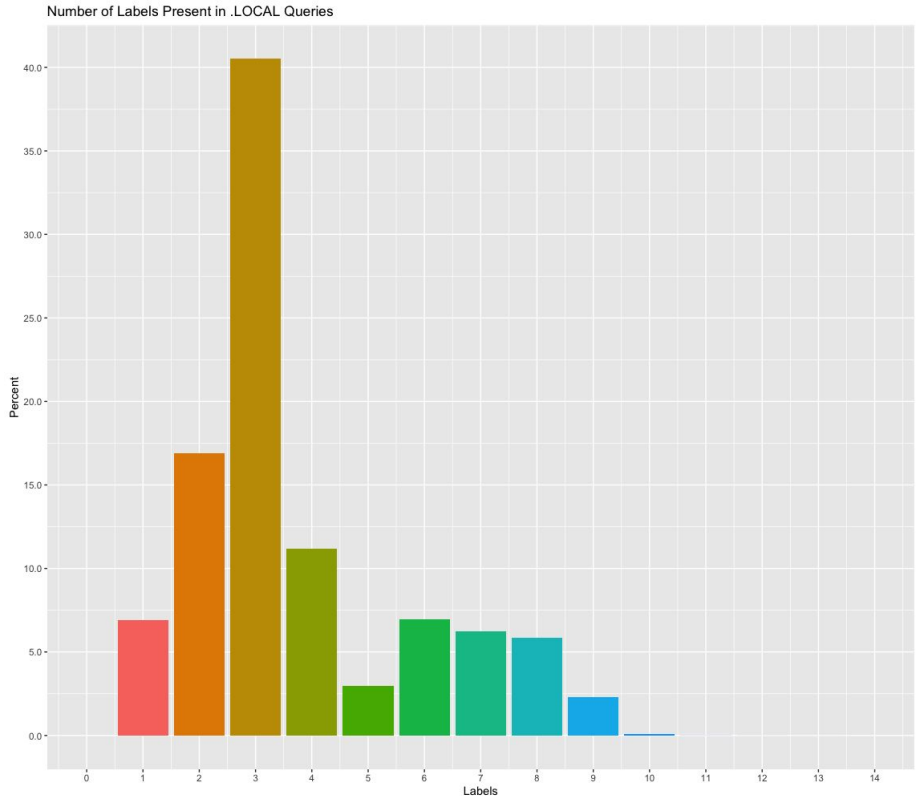


.LOCAL Analysis :: Root ASN Overlap and IP growth





.LOCAL Analysis :: Label Analysis



	SLD	Percent
1:	cluster	5.21249852
2:	_tcp	1.49889226
3:	rsyslogd	1.33485913
4:	com	0.91223693
5:	corp	0.59915487
6:	_	0.59818977
7:	navigon	0.58851840
8:	demo	0.34343977
9:	group	0.25521015
10:	meuintelbras	0.24681727
11:	constructif	0.22731762
12:	usfood	0.19251837
13:	mcint	0.18398142
14:	net	0.18000130
15:	ppdi	0.17633557
16:	root	0.15693040
17:	domain	0.15608579
18:	retracker	0.11704026
19:	ad	0.11596449
20:	hikvisionwifi	0.09515900
21:	eurofins	0.09451535
22:	lord	0.09421412
23:	fujitsu	0.09260529
24:	tfl	0.09206417
25:	experian	0.09123802
26:	samsungdemo	0.08891397
27:	pregis	0.08764093
28:	tes	0.07830863
29:	hidalgocounty	0.07609835
30:	kriton	0.07327312
	SLD	Percent

```
> sum(x$Percent)
[1] 14.06002
```

	ThirdLabel	Percent
1:	svc.cluster	3.51330249
2:	com.cluster	1.64049344
3:	.rsyslogd	1.33485913
4:	_ipp._tcp	0.91939797
5:	_ipps._tcp	0.49808035
6:	.constructif	0.22731603
7:	ad.usfood	0.19233000
8:	com.meuintelbras	0.15422826
9:	.retracker	0.11704026
10:	onelondon.tfl	0.08225368
11:	americas.ppdi	0.08144675
12:	ld.corp	0.06288812
13:	uk.group	0.06220033
14:	asia1.group	0.05934020
15:	europe.ppdi	0.05106923
16:	area1.eurofins	0.05032565
17:	googleapis.com	0.04940997
18:	.wpad	0.04735098
19:	google.com	0.04543337
20:	com.group	0.04444318
21:	com.jltbrnet	0.04383821
22:	prant.praintl	0.04310520
23:	_msdcs.corp	0.04241632
24:	lat.tyc	0.04116376
25:	_msdcs.domain	0.03913942
26:	kt.group	0.03877845
27:	tiktokv.com	0.03711911
28:	us.experian	0.03687628
29:	.ntp	0.03675101
30:	com.hikvisionwifi	0.03673716

Data Attributes When Evaluating Collision Strings

Traffic Properties:

- Network diversity
  - Number of unique ASNs, /24s, etc.
  - Distribution of traffic (e.g. heavily weighted in a few ASNs)
- Geographical diversity
- Qtype distribution
- Query volume
- Longitudinal trends

Qname and Labels:

- Distinct SLDs
  - Distribution of traffic over SLDs
- Amount of “noise” (e.g. Chromium)
- SLDs appear to be delegated TLDs
- First label features
  - DNS-SD
  - Common protocols
- Qname Minimization effect

Other Attributes:

- The string’s context
- OSINT of string being used
- Data sensitivity and catchment of data collector