

Field measurement of Anycast DNS root traffic delivery

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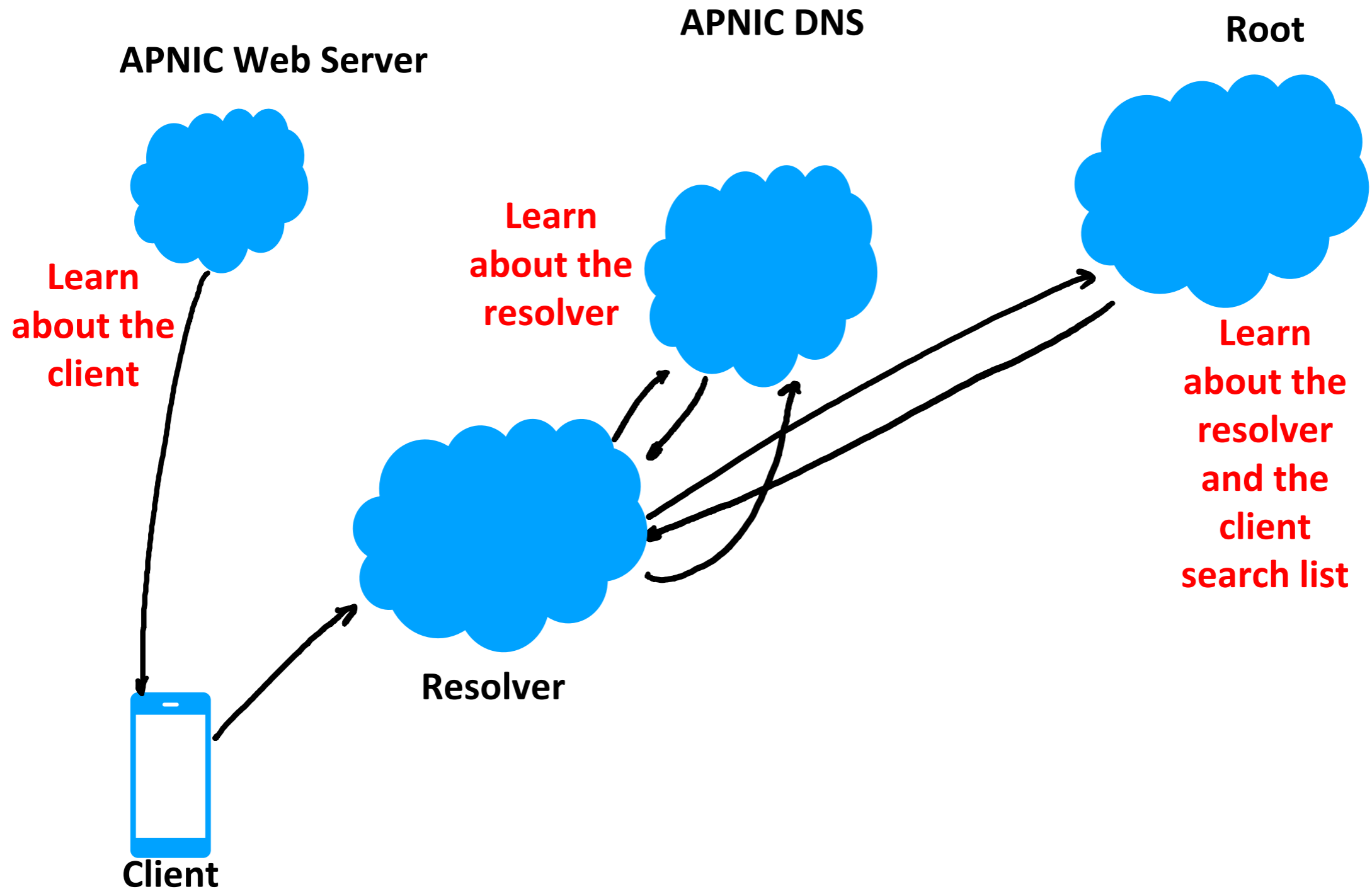
Basic question

- Do clients ask the any cast nodes you think they do?
- Users' experience depends on the local choice of resolver and on the resolver's choice of any cast node

Measure it

- Designed an experiment to see the details of how clients send queries that hit the root servers.
- Initial study with K-root data. Thank you RIPE NCC!

The experiment



What do we see?

Anycast routing for the prize

- Most resolvers are pretty good at hitting they closest any cast node
- ISPs usually have their routing act together

QA:doh	MV
DE:ber	PS
US:rno	LT
ZA:jnb	KE
DE:fra	AT
CH:gva	SI
IN:bom	LK
BG:sof	CA
UY:mvd	AR
HU:bud	RS
LV:rix	LT
US:mia	CO
RU:led	KG
CH:zrh	GB
US:mkc	VN
RU:mow	EE
IR:thr	RU
US:ric	CA
KW:kwi	JO
JP:tyo	VN
RS:beg	BA
AT:vie	RS
RO:buh	US
GR:ath	CY
FR:par	MC
IT:mil	SI
KZ:plx	UZ
NL:ams	US
PL:poz	SK
CZ:prg	SK
DE:ham	LT
AU:bne	PH
IS:rey	FO
PL:gdy	DZ
GB:lon	US

Resolver at the clients...

- A lot more clients make sub-optimal geo choices for resolvers
 - They end up far from home but it is not the resolver's fault
 - Is it Google DNS?
 - Nope. At least 76% of these go to OpenDNS addresses

TLDs, or something

