

ASI 12 Documents

dnsop @IETF66

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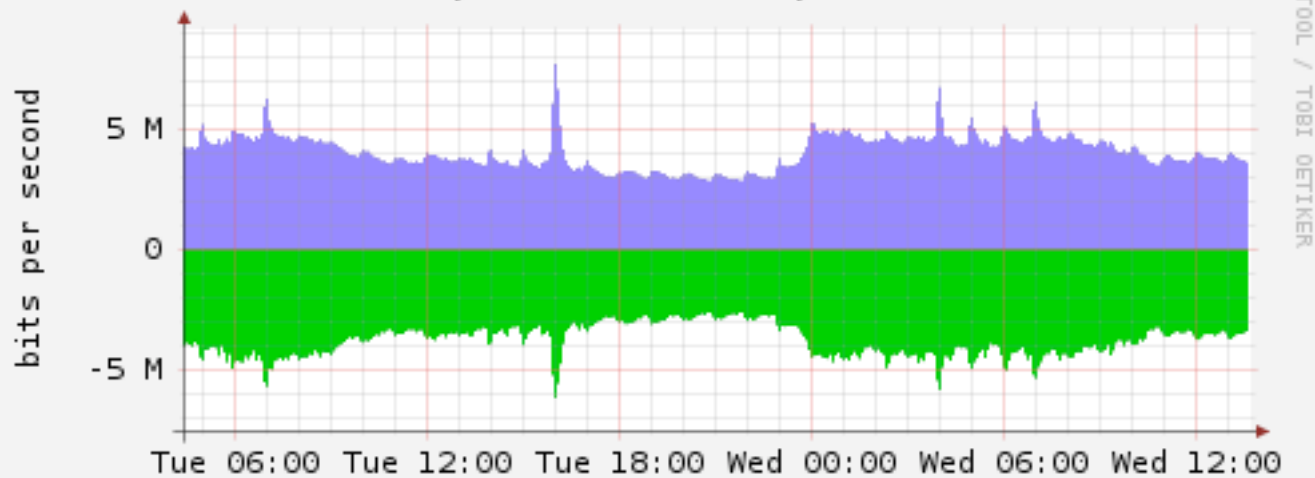
About AS112

- Authority servers for various site-local IPv4 IN-ADDR.ARPA zones
 - RFC 1918 (10.in-addr.arpa, etc)
 - RFC 3330 (254.169.in-addr.arpa)

About AS112

- An early exercise in anycast distribution of DNS authority servers
- First nodes deployed in 2002
- Service prefix 192.175.48.0/24 originated in all autonomous nodes from AS112
- hence the project name

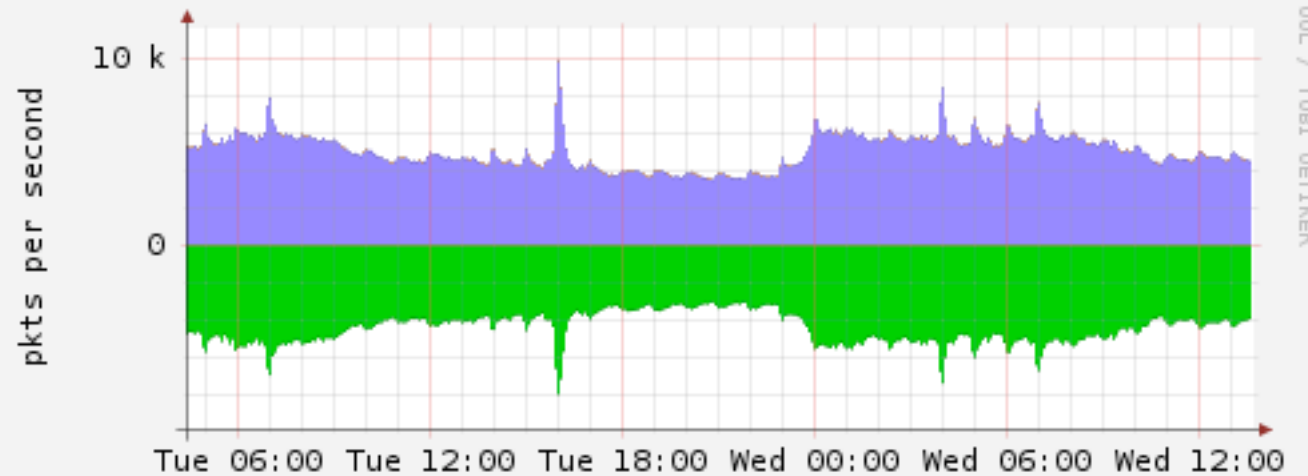
ricky traffic (~1 day, bits)



■ max input ■ avg input ■ max output ■ avg output
 (as of Wed Jul 12 13:42:14 2006 GMT)

IN	Max(Max)= 6.17Mb	Avg(Max)= 3.81Mb	Max(Avg)= 6.17Mb	Cur(Avg)= 3.39Mb
OUT	Max(Max)= 7.62Mb	Avg(Max)= 3.98Mb	Max(Avg)= 7.62Mb	Cur(Avg)= 3.55Mb

ricky traffic (~1 day, pkts)



INPUT ■ uni ■ !uni ■ dis ■ err OUTPUT ■ uni ■ !uni ■ dis ■ err
 (as of Wed Jul 12 13:42:14 2006 GMT)

	---Max (Max)---	---Avg (Max)---	---Max (Avg)---	---Cur (Avg)---
Unicast	8.01k: 9.83k	4.50k: 4.98k	8.01k: 9.83k	3.98k: 4.43k
!Unicast	165.26m: 1.65	117.75m: 875.98m	165.26m: 1.65	108.00m: 1.11
Dis+Err	0.00 : 2.38	0.00 : 171.10m	0.00 : 2.38	0.00 : 0.00

Two Drafts

- There are two individual submissions relating to AS112:
 - draft-jabley-as112-ops-00
 - draft-jabley-as112-being-attacked-help-help-00
- We are not discussing the content of those drafts here today (but comments by mail or in hallways would be great)

ASI I2 Documentation

- There is very little documentation on the ASI I2 project
 - little guidance to prospective node operators
 - little information for end users
 - no IANA paper trail, despite the names of the ASI I2 servers featuring IANA.ORG

Comparison

- Root nameservers' operational requirements are documented in RFC 2870
- Anycast prefix reserved for use by 6to4 relay routers specified in RFC 3068
- Nothing for AS112

Problem for Operators

- The lack of guidance for operators of existing nodes has resulted in some inconsistency, and little coordination
 - e.g. HOSTNAME.ASI | 2.NET is hosted by some nodes, but not by others
- The lack of documentation is a strong disincentive to roll out new nodes

Problem for Users

- Many RFC1918-numbered hosts like to send DDNS updates to set their reverse DNS, or look up addresses of their peers/clients
- When these queries leak to the Internet, the replies from AS112 servers cause confusion (and often some fear and anger)
- The only documentation available is that at www.as112.net, which looks unofficial and skunkworksy

Aside: who gets calls?

- The tech contact for the netblock includes ISC's NOC phone number
- that whois information is evidently mined by some firewall vendors and presented along with "intrusion" logs
- The reverse DNS for the nameservers features the IANA.ORG domain, and IANA also get calls

Related dnsop Work

- draft-ietf-dnsop-default-local-zones-00
- these locally-configured zones are good candidates for hosting on AS112 servers

Open Questions

- Process for requesting that the IANA delegate new zones to AS112 servers?
- Process for new transports for AS112 nameservers (e.g. IPv6 transport)?

Adoption?

- The authors think it would be a good idea if ASI I2 documentation could become a work item for dnsop, and are keen to hear the opinions of the working group.