



RIPE NCC
RIPE NETWORK COORDINATION CENTRE

Redesigning rDNS

Alex Band | 27 October 2016 | RIPE 73, Madrid, Spain

Seamless RIPE NCC Access SSO integration

Reverse DNS setup wizard

"abuse-c:" added to all organisations

Refined password reset procedure

Periodic deletion of unreferenced objects

Conditional "status:" attribute

Lock down the RPSL maintainer

Improved, user friendly syncupdates



RIPE NCC
RIPE Database

2016

Autocomplete on every attribute

Highlight RIPE NCC managed values

Integrated "abuse-c:" creation on objects

Optional "descr:" attribute

Show full object details by default

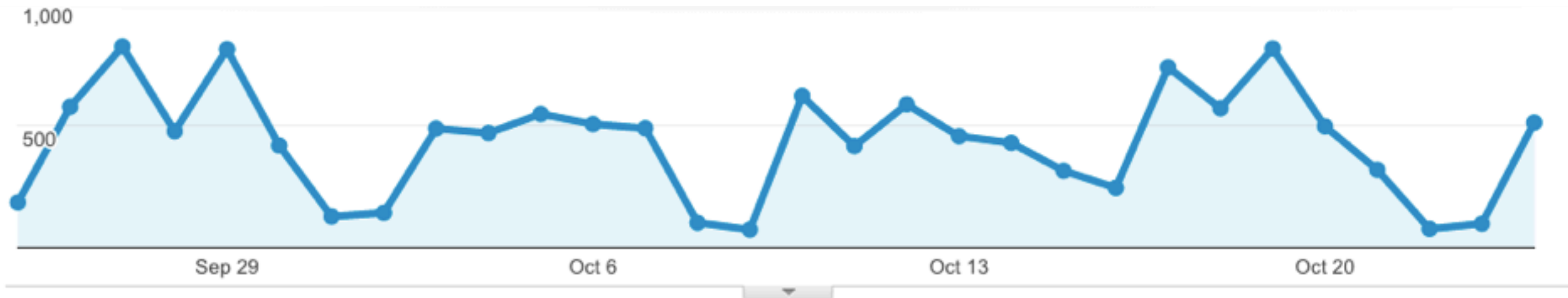
Automated deployment of builds

Separate parent authorisation on inetnum creation

Clarified all help text

Reverse DNS setup wizard

Errors – Last 30 Days



Primary Dimension: **Event Action** [Event Label](#) [Other](#) ▼

Plot Rows

Secondary dimension ▼

Sort Type:

Default ▼



[advanced](#)



<input type="checkbox"/>	Event Action ?	Total Events ?	Unique Events (New) ?	Event Value ?	Avg. Value ?
		12,813 % of Total: 2.19% (584,270)	7,583 % of Total: 2.74% (276,370)	0 % of Total: 0.00% (0)	0.00 Avg for View: 0.00 (0.00%)
<input type="checkbox"/>	1. domain	7,135 (55.69%)	3,525 (46.49%)	0 (0.00%)	0.00
<input type="checkbox"/>	2. inetnum	1,094 (8.54%)	743 (9.80%)	0 (0.00%)	0.00
<input type="checkbox"/>	3. route	1,024 (7.99%)	537 (7.08%)	0 (0.00%)	0.00
<input type="checkbox"/>	4. inetnum.netname	321 (2.51%)	268 (3.53%)	0 (0.00%)	0.00
<input type="checkbox"/>	5. inetnum.inetnum	287 (2.24%)	255 (3.36%)	0 (0.00%)	0.00
<input type="checkbox"/>	6. organisation	228 (1.78%)	153 (2.02%)	0 (0.00%)	0.00
<input type="checkbox"/>	7. domain.domain	223 (1.74%)	185 (2.44%)	0 (0.00%)	0.00
<input type="checkbox"/>	8. mntner	214 (1.67%)	145 (1.91%)	0 (0.00%)	0.00



550%

Create "domain" object

Create in text area

Please enter the maintainers you would like to use as mnt-by

ALEXBAND-MNT ★ ✕



domain

The reverse domain name, e.g. 2.0.192.in-addr.arpa



admin-c

Nic-handle of an administrative contact.



tech-c

Nic-handle of a technical contact.



zone-c

Nic-handle of a zone contact.



nserver

Specifies the nameserver of the domain. Include this attribute at least twice.



nserver

Specifies the nameserver of the domain. Include this attribute at least twice.



source

RIPE



By submitting this form you explicitly express your agreement with the [RIPE Database Terms and Conditions](#)

Cancel

Submit

No name servers found at child. No name servers could be found at the child. This usually means that the child is not configured to answer queries about the zone.
Fatal error in delegation for zone 2.0.192.in-addr.arpa. No name servers found at child or at parent. No further testing can be performed.



The Most Common rDNS errors



- No name servers found at child.
- Name server ns1.example.net (192.0.2.1) does not answer queries over TCP.
- Name server ns1.example.net (192.0.2.1) not authoritative for 2.0.192.in-addr.arpa.
- Too few name servers.
- Total parent/child glue mismatch.
- 2 different SOA records found.



New data-driven design

Fail fast, inspect and adapt

Create "domain" object

Please select your

ALEX-RIPE x

Prefix

Please provide

nservers

Provide the names

nservers

Provide the names

[Set RIPE NCC as source](#)

Proceed



Creating DOMAIN Objects for Reverse DNS

Make sure you set up at least two name servers that are authoritative for the zone.

- Ensure that the servers are at least in different subnets, but preferably in different networks that are geographically distributed.
- The resolvable names of these name servers should be in the NS resource records of the zone
- The SOA resource record (RR) should have the same content, both serial number and other data, on all the nameservers.
- The SOA should contain a valid 'RNAME' (the contact address).
- The timing parameters should be reasonable.

[Documentation for Reverse DNS](#)

I understand and ready to create rDNS



Create "domain" objects

Please enter the maintainers you would like to use as mnt-by

ALEX-MNT x


prefix

192.0.2.0/22

Invalid prefix notation

source

RIPE





Create "domain" objects

Please enter the maintainers you would like to use as mnt-by

ALEX-MNT x

prefix Prefix looks OK

192.0.2.0/23

nserver Server looks OK


sec3.apnic.net

nserver Checking name server...

tinnie.arin.com

source

RIPE





Create "domain" objects

Please enter the maintainers you would like to use as mnt-by

ALEX-MNT x

prefix Prefix looks OK

192.0.2.0/23

nserver Server looks OK


sec3.apnic.net

nserver Name server check failed

tinnie.arin.com

source

RIPE



Create "domain" objects

Please enter the maintainers you would like to use as mnt-by

ALEX-MNT x



prefix

Prefix looks OK

192.0.2.0/23



nserver

Server looks OK

sec3.apnic.net



nserver

Server looks OK

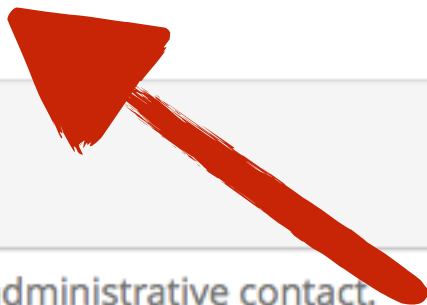
tinnie.arin.net



Reverse zones

2.0.192.in-addr.arpa

3.0.192.in-addr.arpa



admin-c

Nic-handle of an administrative contact.



tech-c

Nic-handle of a technical contact.



zone-c

Nic-handle of a zone contact.



Create "domain" objects

Please enter the maintainers you would like to use as mnt-by

ALEX-MNT x



prefix

Prefix looks OK

192.0.2.0/23



nserver

Server looks OK

sec3.apnic.net



nserver

Server looks OK

tinnie.arin.net



Reverse zones

2.0.192.in-addr.arpa

3.0.192.in-addr.arpa

admin-c

alex band



AB30341-RIPE / Alex Bandel

AB32024-RIPE / Alex Band



zone-c

Nic-handle of a zone contact.





Release Candidate

Test now at
rc.db.ripe.net



Coming Up

Prefix

194.23.42.0/22



nserver

ns1.example.com



nserver

ns2.example.com



Reverse DNS zones

4 reverse dns zones will be created. Range [40.23.194.in-addr-arpa](#) - [43.23.194.in-addr-arpa](#)

3 zones passed

[43.23.194.in-addr-arpa](#) [set ds-rdata](#)

2 errors



- Delegation not found at parent.
- Not enough nameserver information was found to test the zone ns1.name.com, but an IP address lookup succeeded in spite of that.

admin-c

Nic-handle of an administrative contact.



tech-c

Nic-handle of an technical contact.



zone-c

Nic-handle of an zone contact.



Perform checks again



Questions



alexb@ripe.net
@alexander_band