

# Routing WG

## IRRToolSet and RPSL



i n e x  
i n t e r n e t n e u t r a l e x c h a n g e

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# Routing WG

## Awakening the Undead



inex  
internet neutral exchange

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Grand plan to document routing policy

create glue

automate configuration



Start out with **RIPE-181** style objects

**extend** where necessary

build **server** software to host database

and **client** software to understand





embrace and extend with **PRIDE**

(prcheck and prtraceroute)

RAToolSet included

peval, RtConfig, CIDRAdvisor,

prpath, aoe, roe and librpsl.



RIPE NCC funded RPSLng development

IPv6 and multicast (for you and me)

enhanced RPSL to include extra objects







No-one  
loves me



I'm going  
to sulk





Go AWAY!  
I HATE you!











i n e x  
i n t e r n e t n e u t r a l e x c h a n g e

unfortunately

IRRToolSet was still used

by some die-hards



i n t e r n e t   n e u t r a l   e x c h a n g e

```
# ls -la rs1-vlan10-ipv4.conf
-rw----- 1 quagga quagga 502006 6 Oct 18:28 rs1-vlan10-ipv4.conf
# wc -l rs1-vlan10-ipv4.conf
8454 rs1-vlan10-ipv4.conf
```



and what started out as  
a relaxing afternoon  
poking at code...





i nex

i n t e r n e t   n e u t r a l   e x c h a n g e





i n t e r n e t   n e u t r a l   e x c h a n g e

in the ensuing  
bloodbath

the following murders were registered...



i n e x  
i n t e r n e t   n e u t r a l   e x c h a n g e

# CIDRAdvisor

prpath

prtraceroute





i n t e r n e t   n e u t r a l   e x c h a n g e

aoe and roe







i n e x  
i n t e r n e t   n e u t r a l   e x c h a n g e

some bugs were done in







i n e x  
i n t e r n e t   n e u t r a l   e x c h a n g e

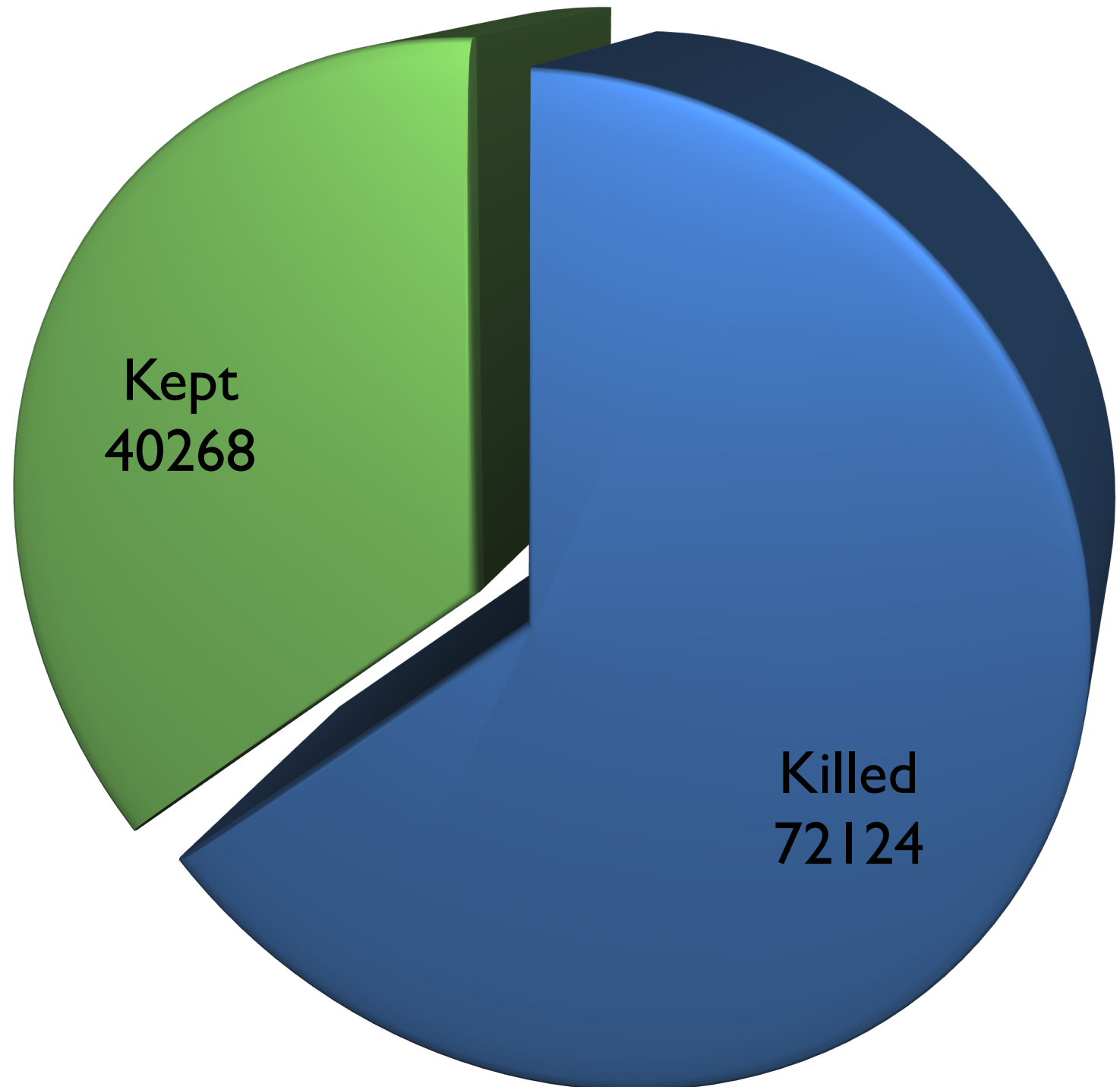
some features  
were added





i n t e r n e t   n e u t r a l   e x c h a n g e

lots of code was  
thrown away





i n e x  
i n t e r n e t n e u t r a l e x c h a n g e

development targets



FreeBSD®



debian



SOLARIS™







but the  
bottom line is...







i n t e r n e t   n e u t r a l   e x c h a n g e



R.I.P. IRRToolSet  
1993-2009





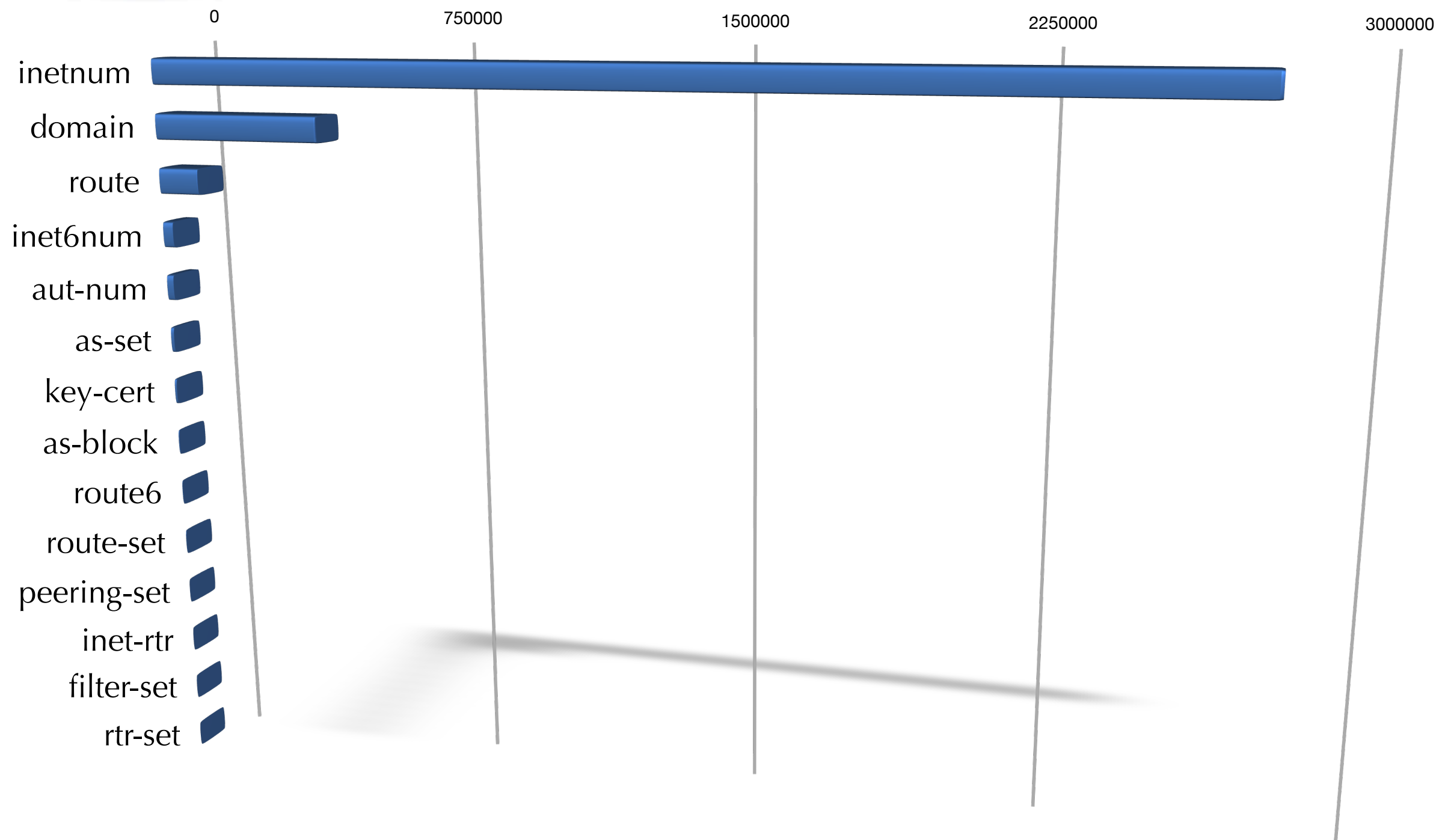
i n e x  
i n t e r n e t n e u t r a l e x c h a n g e

just a couple of words

about RPSL...

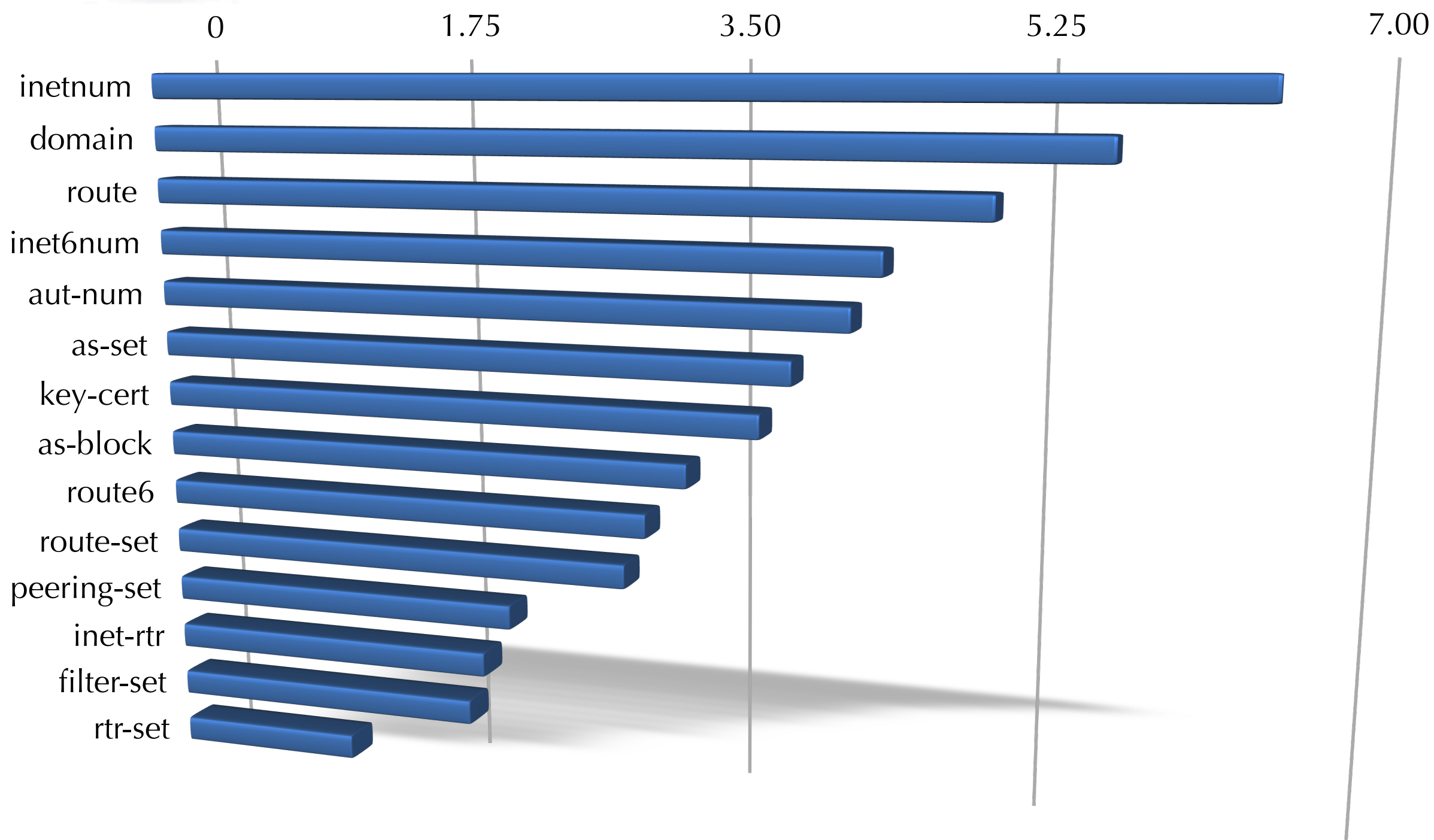


i n t e r n e t   n e u t r a l   e x c h a n g e





i n t e r n e t   n e u t r a l   e x c h a n g e







this shows that **IRRDBs**  
is a **SUCCESS** but maybe not in the  
way that was **originally** envisaged



inbound prefix filtering works  
very well because it depends solely  
on third party **route: / route6:** objects  
(and your own aut-num and as-set objects)



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i n t e r n e t n e u t r a l e x c h a n g e

outbound prefix filtering is **horrible**

because rtconfig looks up

**third party** routing policies

(and you have no control over these)





internet neutral exchange

[illegible]





i n t e r n e t   n e u t r a l   e x c h a n g e

[illegible]



so where does this leave RPSL?





discussion?