ipv6 - Task #10239

Recursive DNS, visible on IPv4, acting as a proxy to enable visibility of data from IPv6 only DNS servers

01/31/2022 01:27 PM - Moris Jones

Status:	New	**Start date:**	01/31/2022
Priority:	Normal	**Due date:**	
Assignee:		**% Done:**	0%
Category:		**Estimated time:**	0.00 hour
Target version:			
PM Check date:			

Description

In order for a DNS server on an IPv6-only VM to be useful in the still-on-IPv4 real world, it needs to be able to make its data available to the IPv4-only world. Unlike HTTP, but in somewhat similar fashion to SMTP, this requires not just a pass-through but an actual DNS server, recursing its queries to the IPv6 server. This is most easily understood in a diagram

IPv4 client <-> IPv4-visible Ungleich Recursive DNS server <-> IPv6 DNS server

Domain registry records:

mydomain.com
ns1.mydomain.com myVM-ip6-address::blah::blah
ns2.mydomain.com ip4-address-of-ungleich-recursive-IPv4-to-IPv6-dns-proxy

Discussions were held regarding this some time ago, but no progress has been made.
The absence of a solution for DNS visibility of IPv6 VMs is holding them back as a useful product and forces their users to really on third-party DNS providers, or simply not to use them for any kind of world-visible service.

I am at this time willing to attempt an implementation of this, which if successful can be copied and made official. I'm not a BIND whizzkid, so I cannot do it blind. To do so I will require an IPv4-visible environment. Options include a VM dedicated to this purpose (I think this makes the most sense), or temporarily assigning an IPv4 address to my current VM.

History

#1 - 01/31/2022 01:49 PM - Nico Schottelius

- Assignee deleted (Nico Schottelius)

Not working on this atm, removing assignee.

Moris, thanks for the suggestion.