Array Networks Announcement About DNS Flag Day

Announcement Date: February 1, 2019

Update date: February 15, 2019; Rev 1.1

What Is DNS Flag Day?

DNS main software and service providers will update their codes to remove accommodations for non-compliant DNS implementations from their software or services, on or around February 1st 2019, which is called DNS Flag Day.

After February 1st 2019 major public DNS resolver operators will disable workarounds that the requester will resend the DNS queries without EDNS extensions when the DNS server fails to respond to DNS queries with EDNS extensions. This means that the DNS authoritative servers must return DNS replies when the requesters send the DNS queries with EDNS extensions. Otherwise, requesters will not resend DNS queries without EDNS extensions and DNS service failure thus will occur.

For more information, please refer to https://dnsflagday.net/.

Are APV Series Products Affected?

The DNS Flag Day has NO impact on APV series products, no matter whether SDNS is used as your DNS authoritative servers or SLB is employed to provide load balancing for your DNS servers.

No matter whether you are using SDNS to answer DNS A, AAAA and CNAME queries or using SDNS together with Full DNS to answer all types of DNS queries, SDNS in APV 8.6 and 8.6.1 can properly return DNS replies on receipt of DNS queries with or without EDNS extensions. On occasions of DNS queries with EDNS extensions, SDNS will ignore these extensions and return DNS replies without EDNS extensions. What's more, beginning with ArrayOS APV 8.6.1.15, SDNS can correctly process DNS queries with the DNSSEC and Client Subnet extensions and return DNS queries with corresponding EDNS extensions. To enable this capability for SDNS, you just need to enable the SDNS DNSSEC function. For details on how to enable this function, please refer to the APV User Guide.

If you are using SLB to provide load balancing for DNS servers, you do not need to add any extra configuration other than DNS SLB. No matter whether the DNS queries or responses have the EDNS extensions, DNS SLB can correctly forward them without any block or drop. However, there is a known limitation that the DNS SLB cannot forward

DNS replies larger than 512 bytes. If you are facing the DNS service failures due to such reason, you can change to use UDP SLB instead as a workaround.