



## Heavy SMB signing pressure causes high SMB3 latency from Network CPU domain



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### Applies to

ONTAP 9

SMB3

SMB2

### Issue

- High SMB latency from Unified Manager, Grafana, Perfstat/PerfArchive. In the latency breakdown section,

the bulk of the latency is from `CPU_network` or `CPU N-blade`, depending on the tools that are used to monitor performance

- The impacted Vservers have a big amount of SMB3 or SMB3.1 connections
  - `cifs:vserver_name:total_smb3_connections_count:100000`
  - `cifs:vserver_name:total_smb3_1_connections_count:100000`
- The impacted Vservers have signed sessions, as well as a significant amount of data being signed per second
  - `cifs:vserver_name:signed_sessions:50`
  - `smb2:vserver:bytes_signed_rate:20000000b/s`
- Network CPU is not necessarily saturated
  - Avg CPU util might NOT be high
  - `Nwk_Exmpt` CPU domain util might not be higg
- Other protocols might be impacted as well, such as NFS or iSCSI. As they have to complete for the same network threads with SMB signing workload
- The util of NwkThd threads isn't necessarily high in `ps`
- The average on queue time for NwkThd threads isn't necessarily high in `ps -s`

ID	RunCount	RunMax	RunAve	OnQMax	OnQAve	Pri	D	Name
272	2469043	2498	21	39726	3	100	N	NwkThd_00