

Draft Geneve update

IETF 99, NVO3 WG meeting, Prague, Czech Republic

Geneve Authors

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Draft Geneve -04 update

- Draft Geneve was updated for IETF 98 meeting to reflect the recommendations of NVO3 Encap Design Team
 - [draft-ietf-nvo3-geneve-04](#)
- Section 4.2 Constraints on protocol features
 - 4.2.1 Constraints on Options
 - Control plane can limit the number of Option TLVs, TLV ordering, and size of TLVs between tunnel end points to accommodate data plane implementations in software or hardware
 - For example, a Control plane may negotiate a subset of Option TLVs, certain ordering, as well as total number of options to accommodate HW capable of processing fewer options
 - A control plane should have the ability to describe supported TLVs, etc., to the end points
 - In the absence of a control plane, alternate configuration mechanisms may be used for this purpose

Design team recommendations based on NVO3 WG discussions at IETF 98 and mailing list

- Follow fragmentation recommendations in overlay services like PWE3 and L2/L3 VPN to prevent fragmentation: guarantee larger MTU for tunnel overhead
 - Best practices to prevent fragmentation is outlined in draft-geneve section 4.1.1
- Recommend to add requirements for OAM considerations, two bits for alternate marking for performance measurements, and clarify the need for OAM bit
 - Further discussions on the OAM proposals/use cases needed before effecting a change

Design team recommendations based on NVO3 WG discussions at IETF 98 and mailing list

- Recommendation to provide additional text clarifying the usage of critical bit processing
 - Critical bit is helpful in options processing in HW
- Recommend to increase single TLV option to 256 for a telemetry use case
 - This was discussed during at the WG meeting and there was no consensus regarding this use case and alternate solutions suggested for telemetry options, as this will limit other options to be carried in Geneve

Next Steps

- Consider further discussions on comments in the mailing list on dt-encap draft & geneve draft and update as needed