NVO3: VPN Interactions
(Some initial thoughts)

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What’s this about?

• Draft NVO3 charter:
  “Finally, some work may be needed in connecting an overlay network with traditional L2 or L3 VPNs (e.g., VPLS).”

• These slides: Some initial thoughts
  – 3 examples of overlay-VPN interactions
Basic Diagram

Network Virtualization Edge [NVE] integrated into end systems and gateway router

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Two Data Centers, One Admin Domain (1)

Connectivity unspecified: Single overlay transported over inter-data-center connectivity (e.g., VPN)

That was easy... What if the overlay is not end-to-end?
Two Data Centers, Two Admin Domains (2)

Map VNIDs between the two overlays here (two NVEs)

Connectivity unspecified
Left overlay transported over inter-data-center connectivity (e.g., VPN).

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**Opportunity:** Map VNIDs to/from VPN IDs

**Result:** Single logical network (2 VNs + VPN)

**Connectivity unspecified,**
Baseline: Separate overlay domains, separate virtual virtual networks.
Comments? Questions?