



XOS MetroNetwork Service

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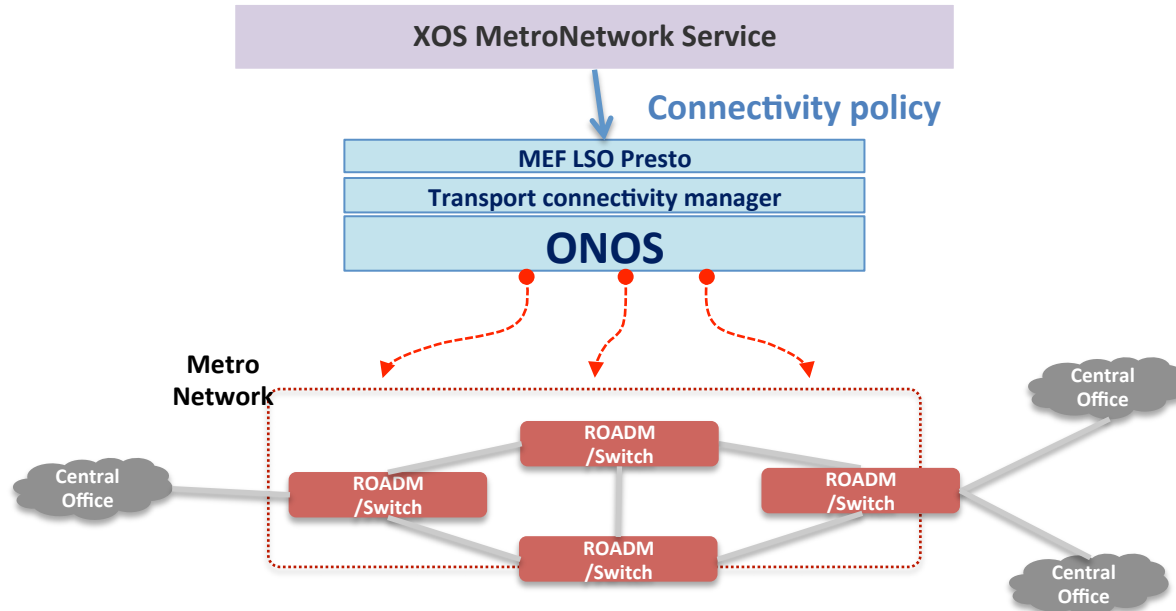


CORD
Central Office Re-architected as a Datacenter

XOS MetroNetwork Service



The 'Transport Network Control' implementation area (as shown earlier)



XOS MetroNetwork: goals



Goals:

- Introduce 'WAN' network model to the XOS Data Model – integrate together with the current 'LAN' oriented network concepts used in the Data Center
- Follow XaaS XOS doctrine: MetroNetwork functions are provided as XOS Service
- Use Cases priorities:
 - L2VPN Eline (point to point) and
 - L2VPN Elan (multipoint)
- Use existing MEF APIs for networking – augment with XOS NFV concepts - work on limitations and gaps in existing standards
- Provide a reference implementation

XOS MetroNetwork: current status



Current Work Status:

- XOS MetroNetwork Service built
- Extensions to core XOS model created
- ECORD Demo Gui from March 2016 integrated into XOS GUI Framework
- 'Synchronizer' for binding XOS Model to the real world – uses ONOS MEF API for Eline provisioning
- Tested with Mininet Simulator

XOS MetroNetwork: key issues



Key Issues:

- MEF API ONOS App – currently not officially part of ONOS – the XOS networking depends on these APIs
- Keeping up with XOS core development – a lot of change in the past few months (which is good!)
- Supporting XOS hierarchy whereby Metro XOS can ‘proxy’ NFV configuration and services into CORD (or other) XOS Domains
 - This will require more sophisticated modeling and the Metro XOS and alignment with CORD XOS APIs

XOS MetroNetwork: next steps



Next Steps:

- Complete L2VPN use case work – current phase
- Second phase:
 - Hierarchical XOS modeling and control semantics