multiONE and NOTED update

LHCONE virtual meeting

13th of May 2020

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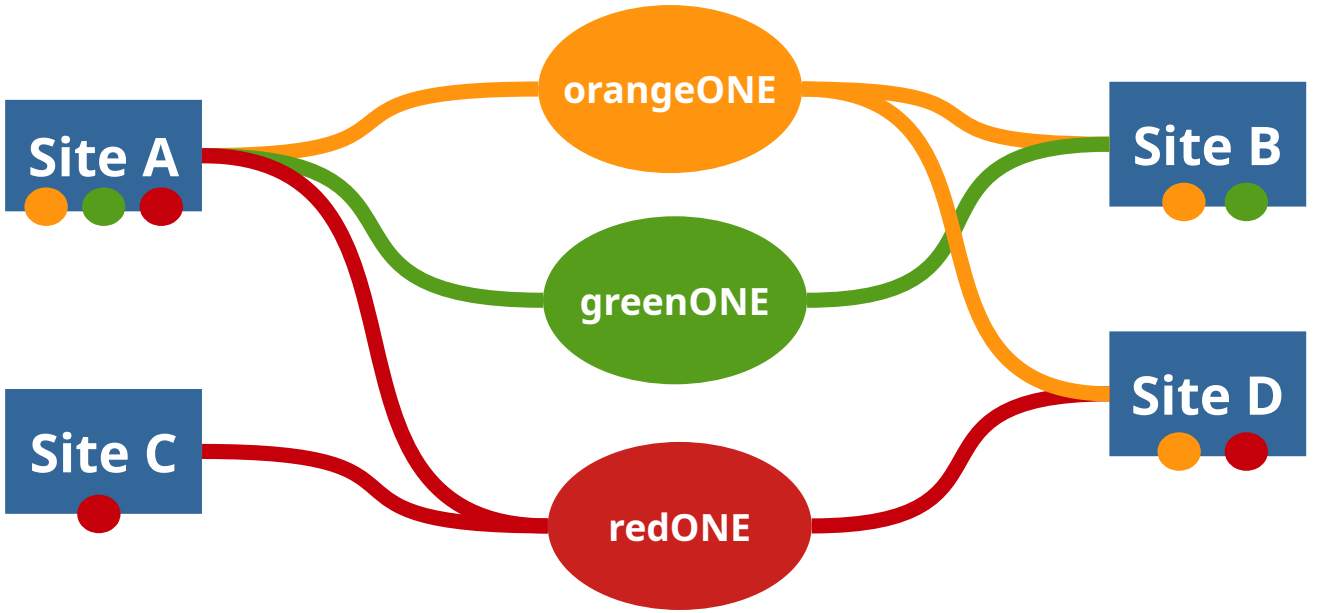
multiONE

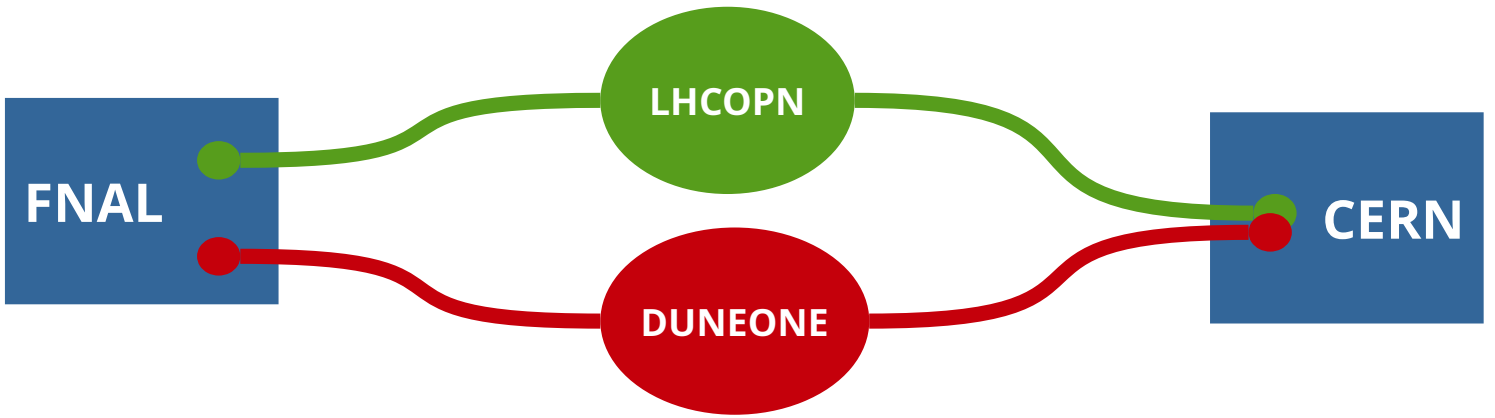
Recap: multiple “ONEs”

- Each site joins only the VPNs it is collaborating with, to reduce the exposure of their data-centre/Science-DMZ
- If doable, each Collaboration funds its own VPN



DUNEONE prototype

ProtoDUNE and DUNE identified as possible use case to build a multiONE prototype



Status

- Not identified a solution to easily separate traffic, yet
- Explored traffic marking for policy routing with router vendor. Not possible with existing network processor, but it may be possible with upcoming ones
- ESnet is ready to implement a L2 circuit between CERN and FNAL. L3VPN will be considered when necessary at a later stage
- Analysing protoDUNE traffic to check if it could be identified by src and destination addresses

DUNEONE - Milestones

1 - Implementation of DUNEONE VPN by ESnet
2 - Successful migration of CERN <=> FNAL protoDUNE traffic over to DUNEONE
3 - Implementation of DUNEONE VPN by GEANT (and other NRENs, where necessary)
4 - Connection of participating DUNE storage sites to DUNEONE
5 - Evaluation at scale of DUNE data movement over DUNEONE

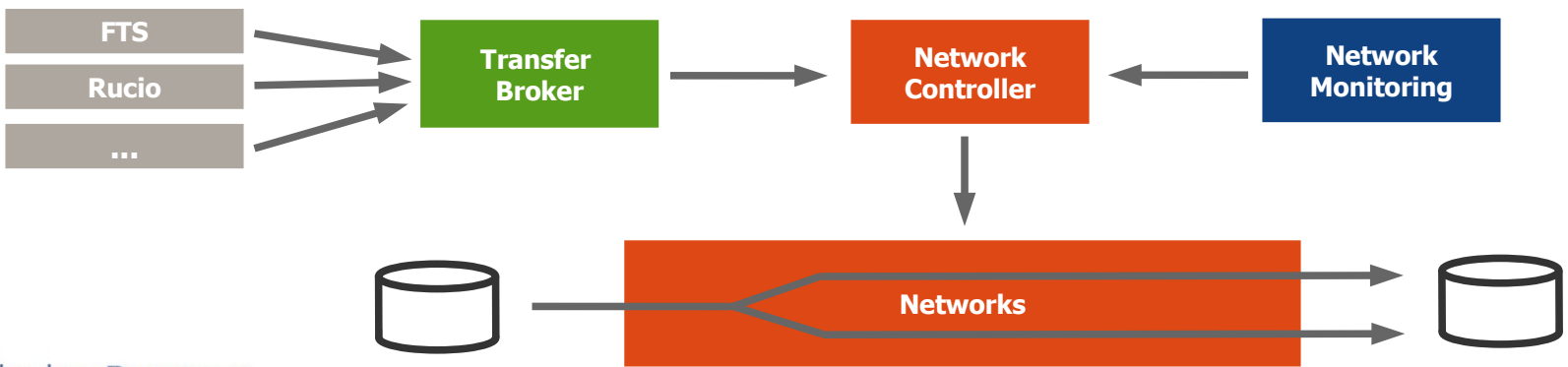
NOTED

Recap: NOTED

Network activity in the WLCG DOMA contest

Implement a **Transfer broker:**
- Identify upcoming and on-going substantial data transfers
- get information from transfer services (FTS, Rucio …)
- map transfers to network endpoints
- make transfers info available to network providers

Demonstrate a **Network Controller:**
- takes input from Transfer Broker
- modify network behavior to increase transfer efficiency
- take into account real-time network status information



NOTED: status update

Coralie (main developer) completed her contract in December 2020

A new Technical Student (Joanna) has been hired. Started in March 2020

Now focusing on producing an open Transfer Broker service

Questions?

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