

XOS ECORD/RCORD

VnoD:

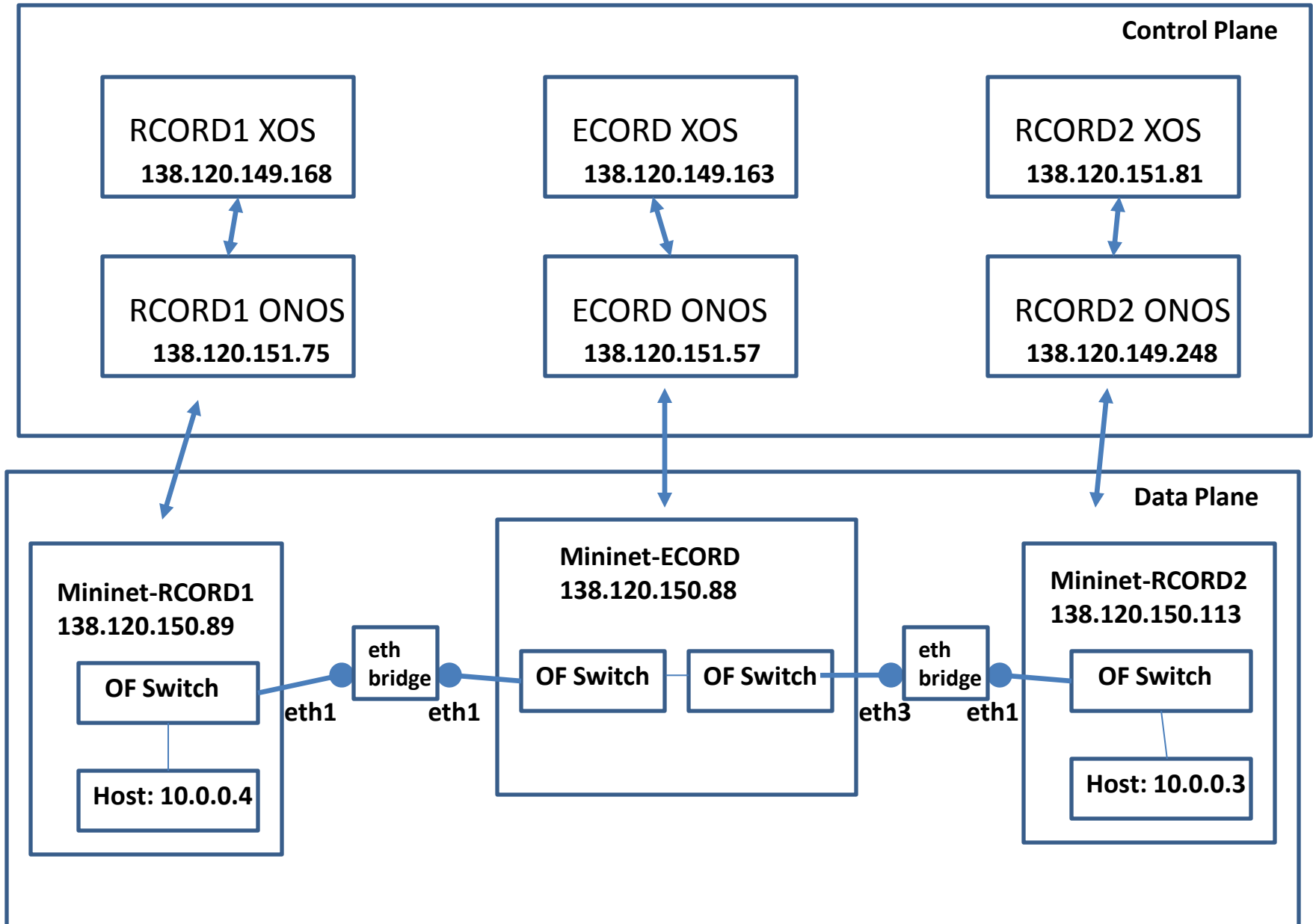
Demo of NOKIA components

Michael Best Oct 27/2016

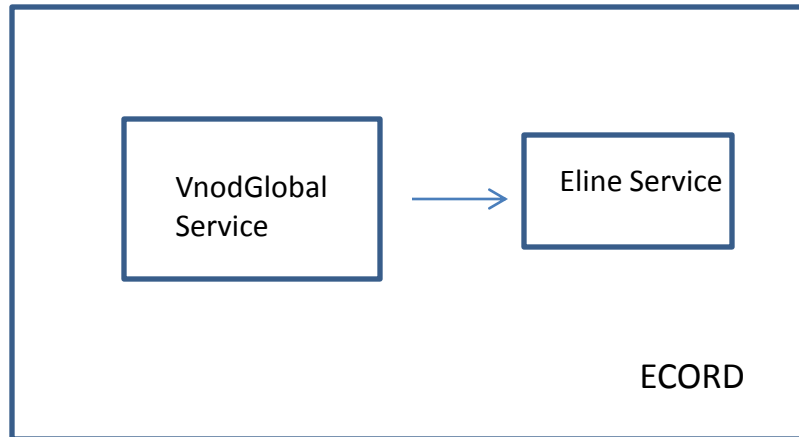
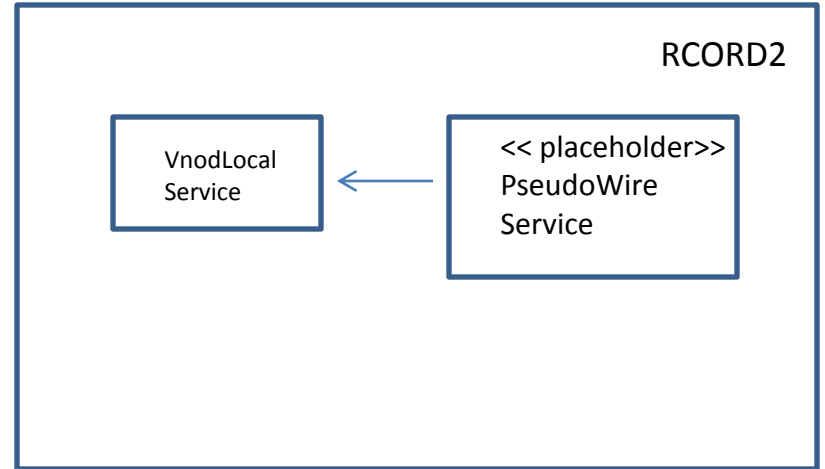
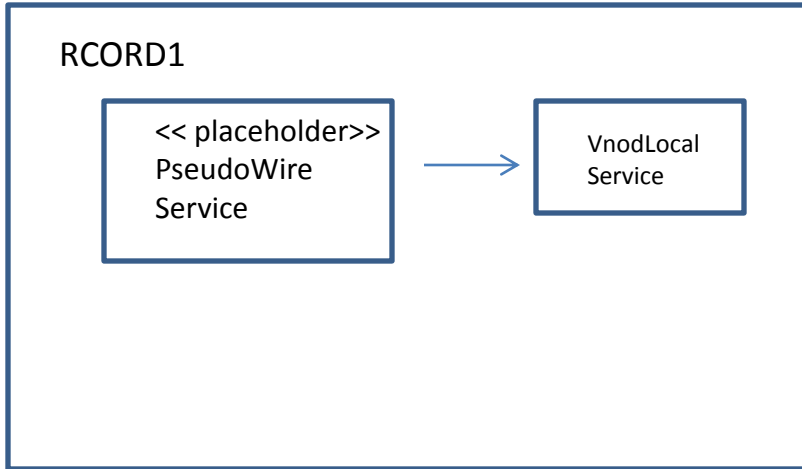
Intro

- Goal:
 - To provide a design overview on the NOKIA contribution to ECORD-VnoD Project
- Assumptions:
 - Familiar with ECORD
 - Familiar with VnoD Design
 - Familiar with RCORD

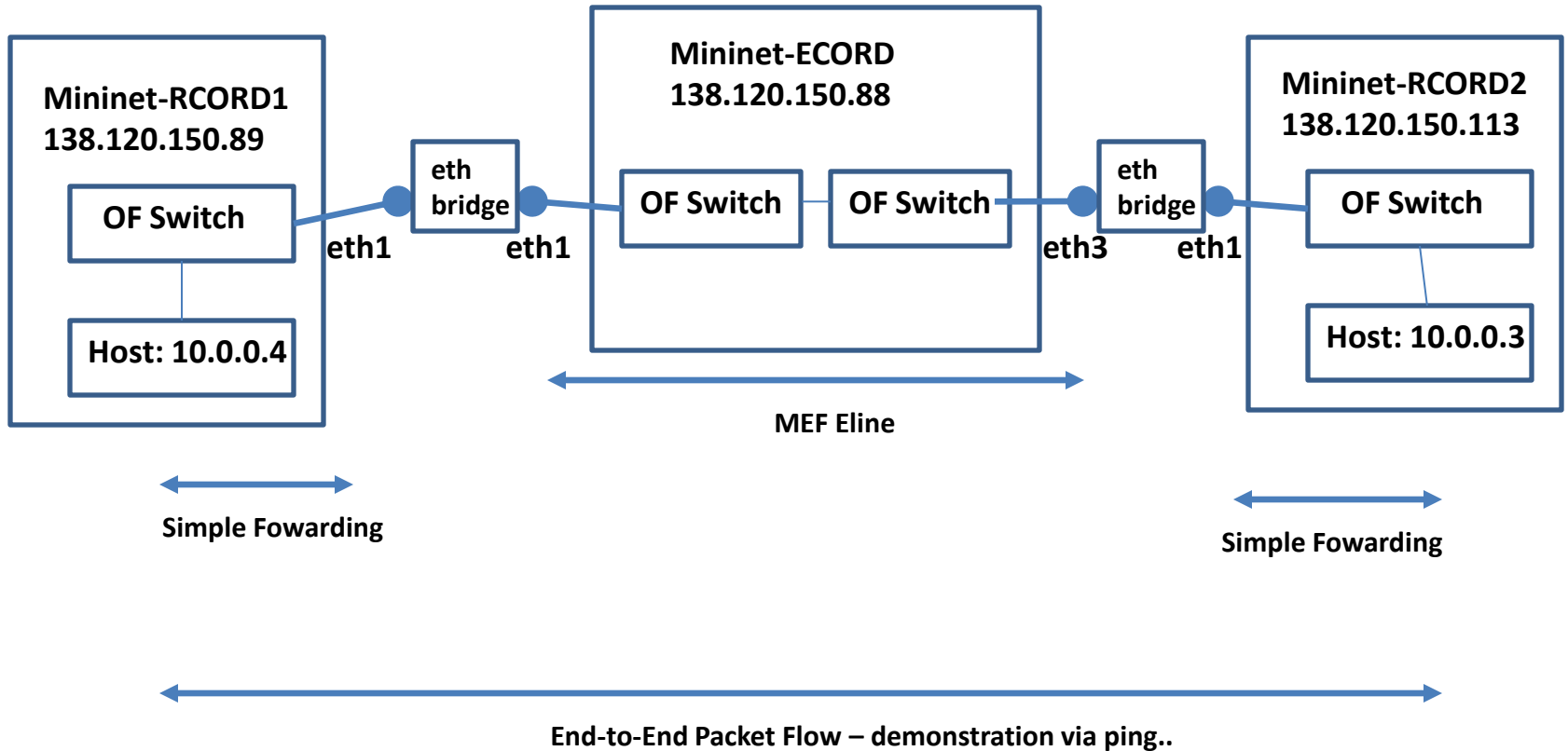
Prototype System



Demo Fast-Forward: XOS View



Demo Fast Forward: Data Plane



Vnod Eline Creation:

RCORD1

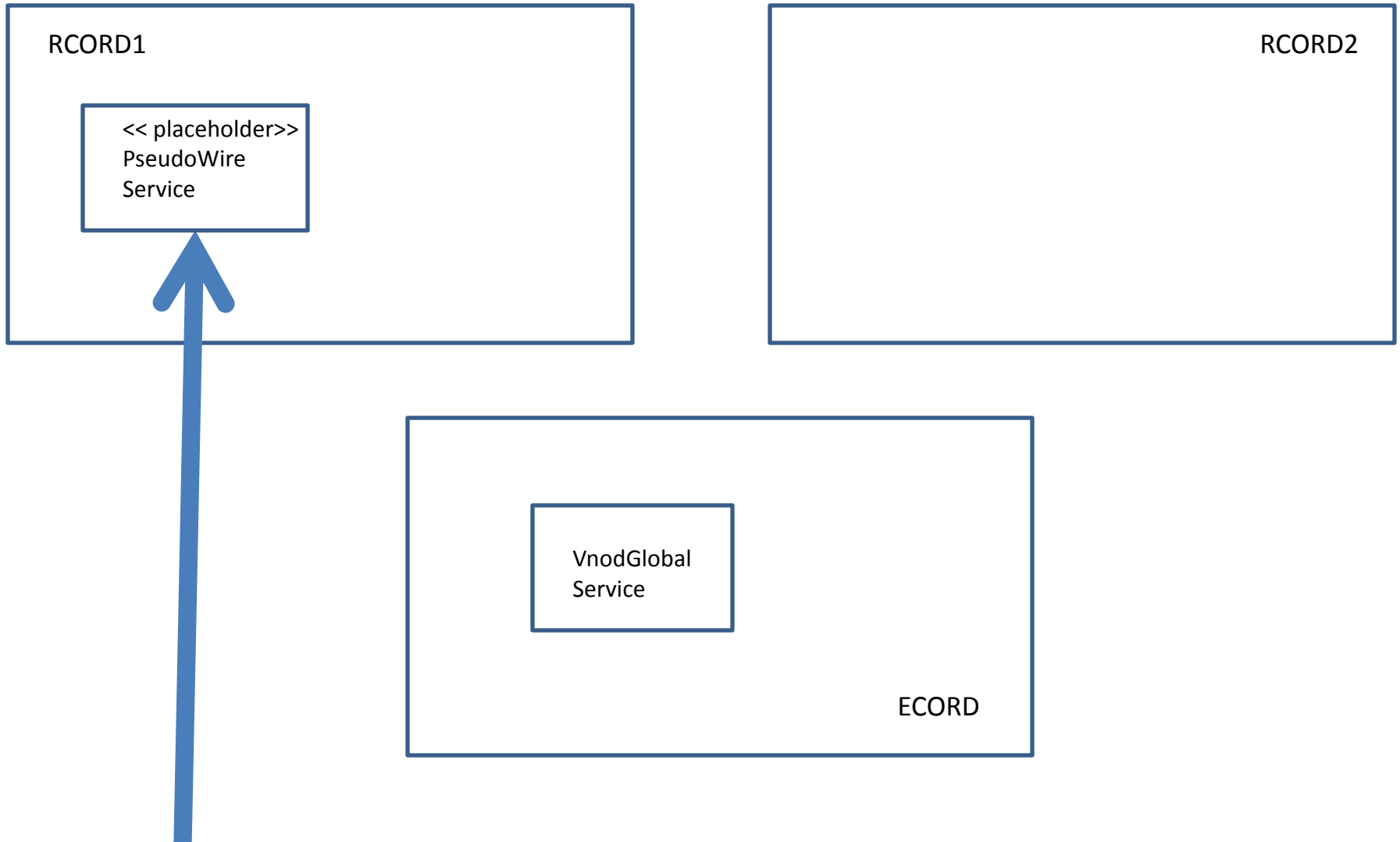
RCORD2

VnodGlobal
Service

ECORD

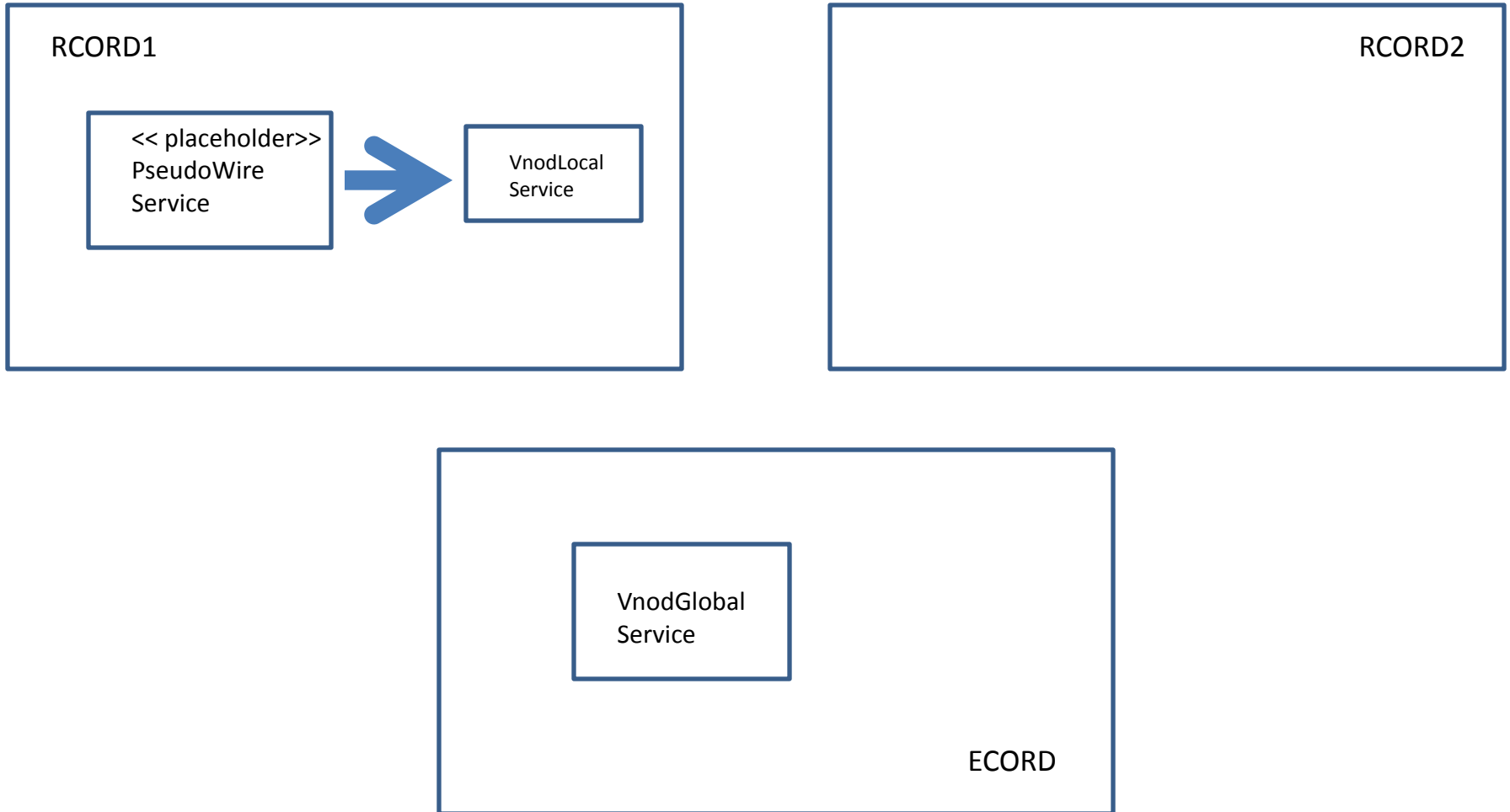
Step 1: In ECORD Create 'VnodGlobalService'
Params: "String: servicehandle", "Enum: Eline, Etree, Elan",
Array[Intended RCORD Sites].

VnoD Eline Creation:



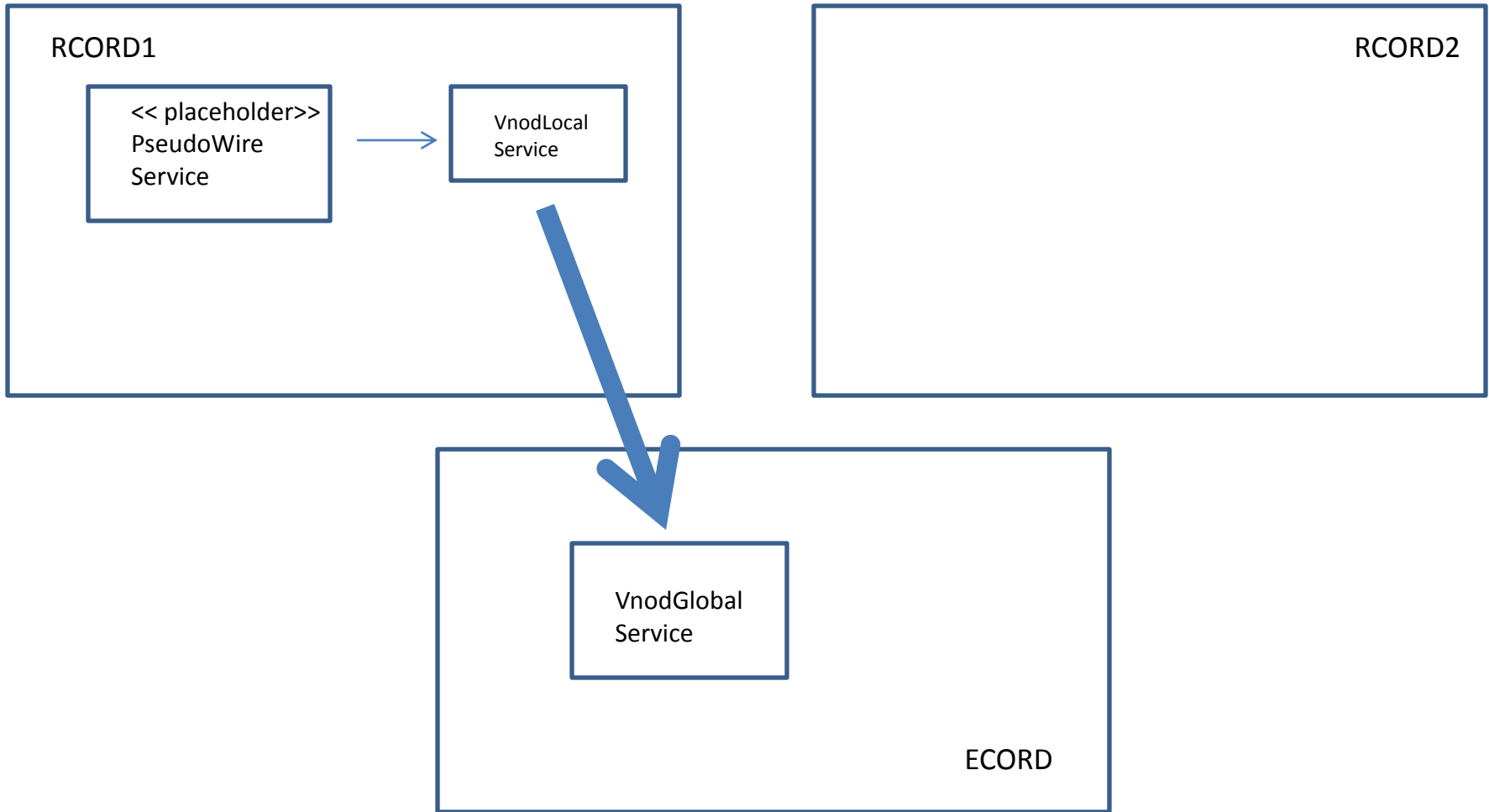
Step 2: In RCORD1, using 'serviceHandle' from ECORD and a local 'sourcePort' create 'PseudoWire Service' Service and request activation

VnoD Eline Creation:



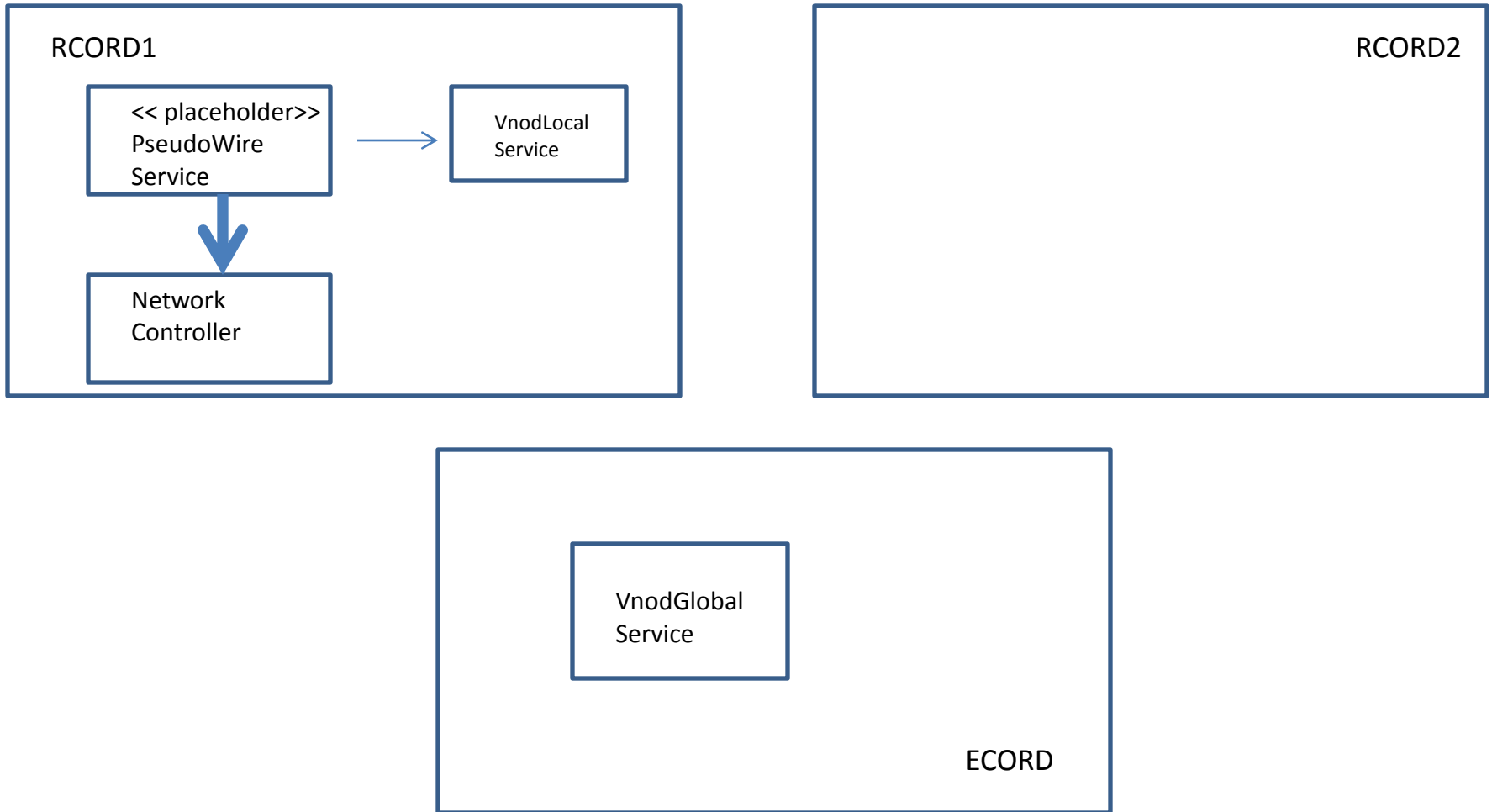
Step 3: In RCORD1, 'PseudoWire Service' creates a 'VnodLocal Service' providing the 'serviceHandle'

Vnod Eline Creation:



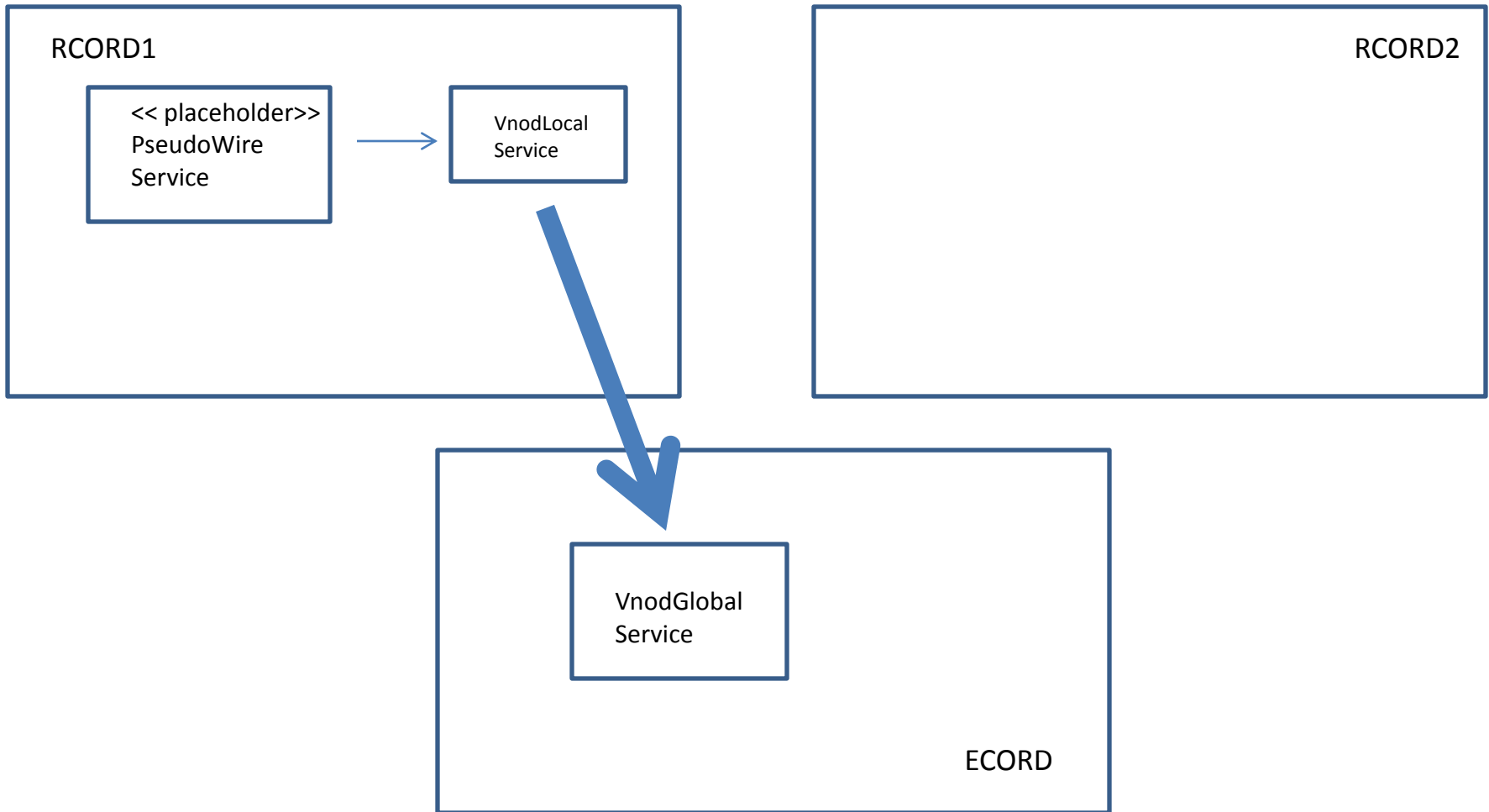
Step 4: In RCORD1, using the ECORD REST API with the 'serviceHandle' parameter the 'VnodLocal Service' retrieves NNI Port and VLAN configuration from ECORD

VnoD Eline Creation:



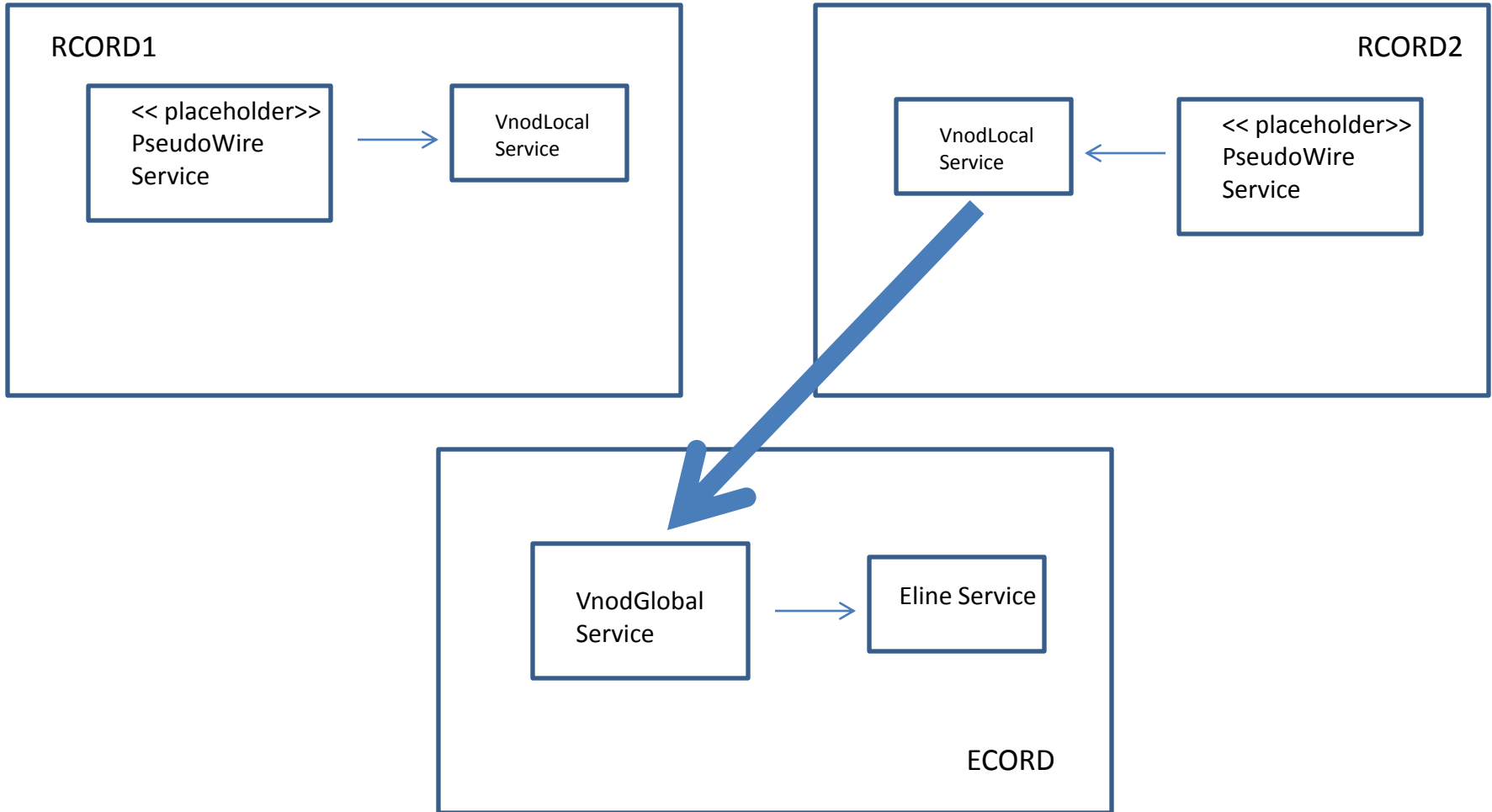
Step 5: In RCORD1, the 'PseudoWire Service' uses its sourcePort and the NNI/Vlan info from the VnodLocal to activate a PseudoWire via the Network Controller

VnoD Eline Creation:



Step 6: In RCORD1, using the ECORD REST API with the 'serviceHandle' parameter, the VnodLocal Service Activation is reported to the VnodGlobal Service object in ECORD. The VnodGlobal Service notes the Spoke state change.

VnoD Eline Creation:



Step 7: In RCORD2, same procedure as Steps 2-5, using the ECORD REST API with the 'serviceHandle' parameter, the VnodLocal Service Activation is reported to the VnodGlobal Service object in ECORD. The VnodGlobal Service notes the Spoke state change. Since both Spokes are Activated an Eline Service is created – bits flow!!

Status

- ECORD:
 - VnoDGlobal Service Implemented – we will push to Gerrit soon
 - Some additional changes to Eline/Etree/Elan services are pending
- RCORD:
 - VnodLocal Service Implemented – integration into RCORD requires coordination with RCORD Design
 - PseudoWire Service Implemented – this is a placeholder for testing and demonstration, we will need to adjust based on RCORD posture
 - We can push these to Gerrit ‘as is’ if that will help