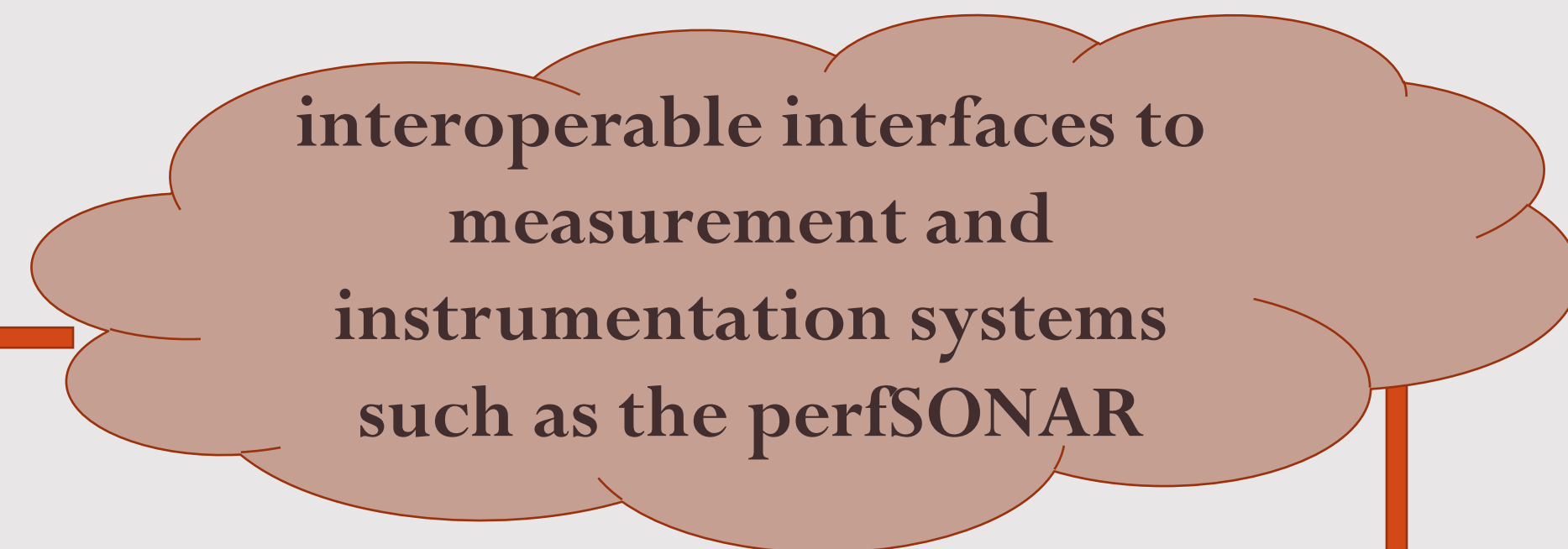
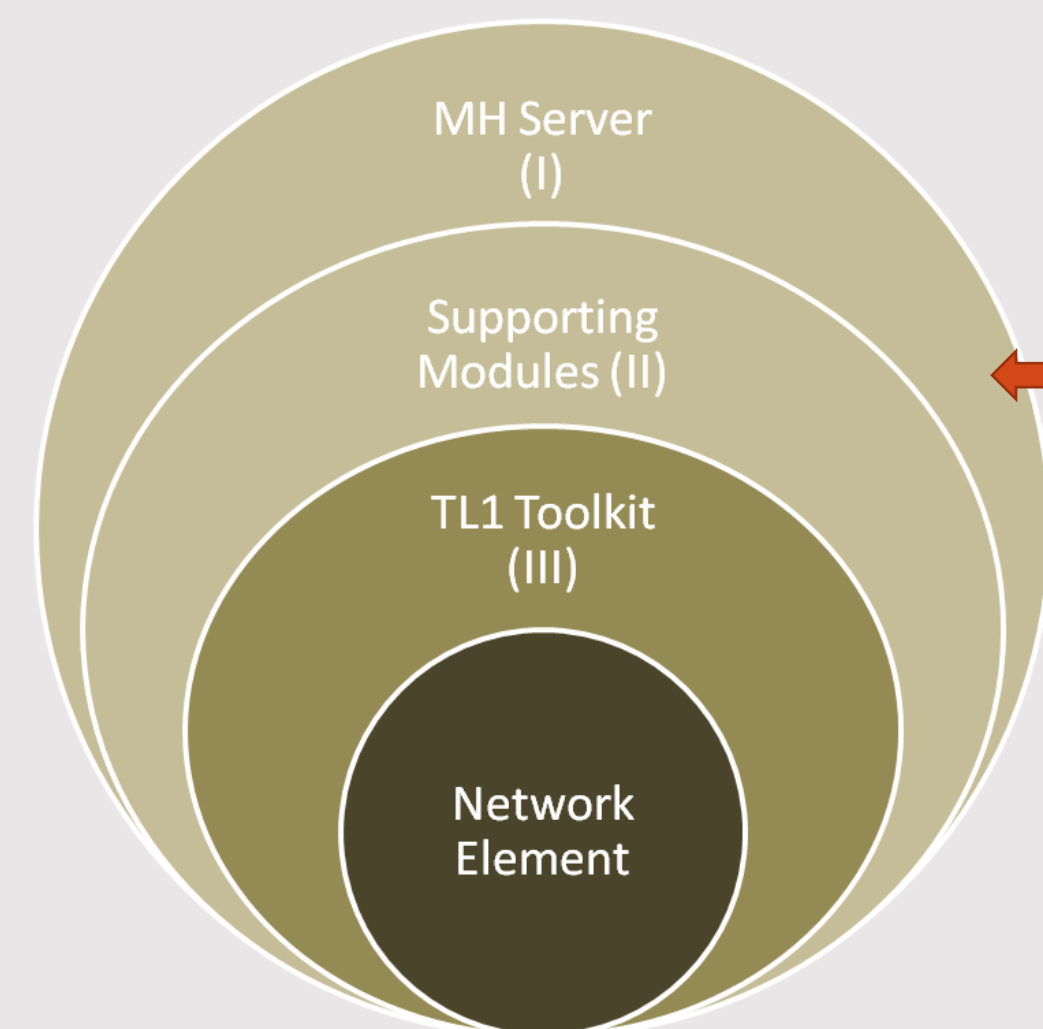


Optical Networking Physical Layer Measurements and GENI ORCA Integration with LEARN

MHS (Measurement Handler Software): Tool to fetch physical layer measurements from Infinera DTN



MHS:
pre-FEC BER
post-FEC BER
opticalPower } Infinera DTN (TL1 interface)

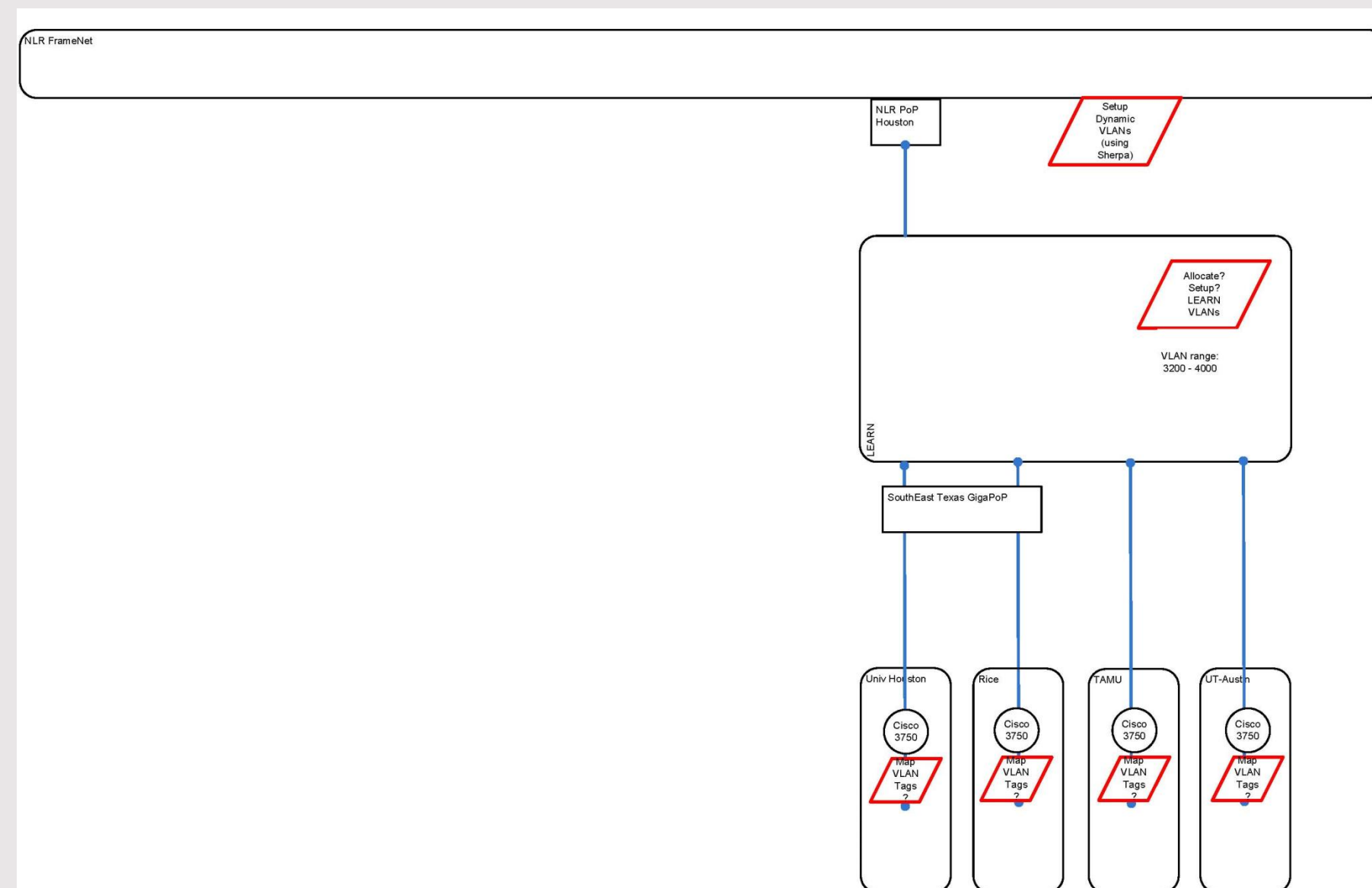


The measurements are displayed through the XML-RPC Publish-Subscribe module.

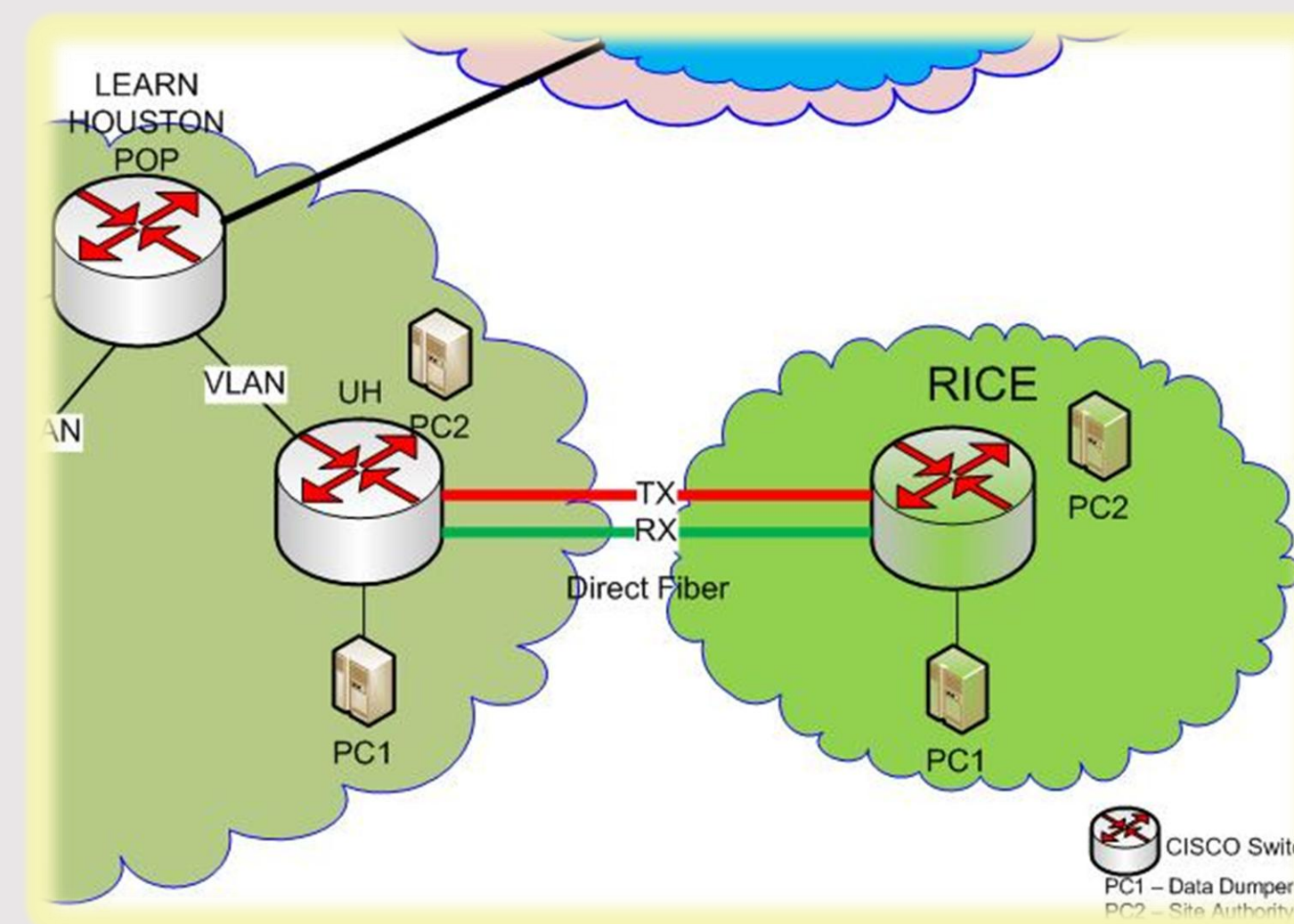
- Milestone LEARN: S2.h Draft measurement data file format
- Milestone LEARN: S2.i Implement and integrate Measurement Handler
- Milestone LEARN: S2.j Deliver release of Measurement Handler
- Milestone LEARN: S2.k List of measurement handlers for GENI

GENI-ORCA Integration with LEARN

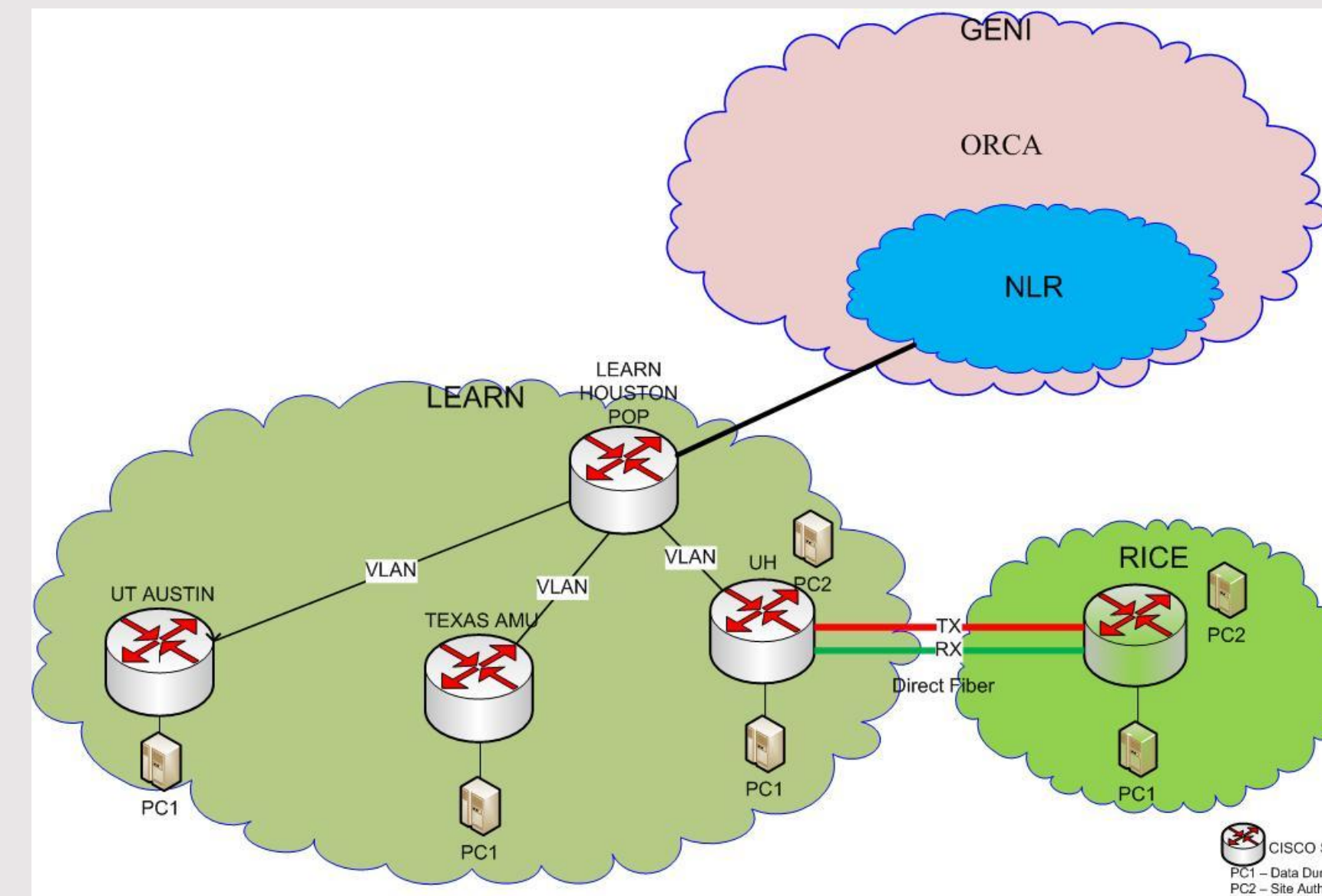
Connectivity Goal



1st Phase



2nd Phase



- Milestone LEARN: S2.a Cluster plan for VLANs between testbeds
- Milestone LEARN: S2.b Plan for VLANs on LEARN
- Milestone LEARN: S2.c Establish ORCA framework
- NEXT: Milestone LEARN: S2.d Initial integration LEARN into ORCA

perfSONAR Interface with Physical Layer Measurements

- Create New Namespaces
- Metadata for Measurements
- Discover Available Measurements
- Fetch Real Time Measurements

- Metadata - eventType
- Metadata - subject
- Metadata for storage in database - data

No physical layer measurements are represented in perfSONAR schema library yet. Real-time measurements are also explored in collaboration with IMF, ERM, and ORCA/BEN teams.