



Getting Started with Online Computing for protoDUNE Single Phase

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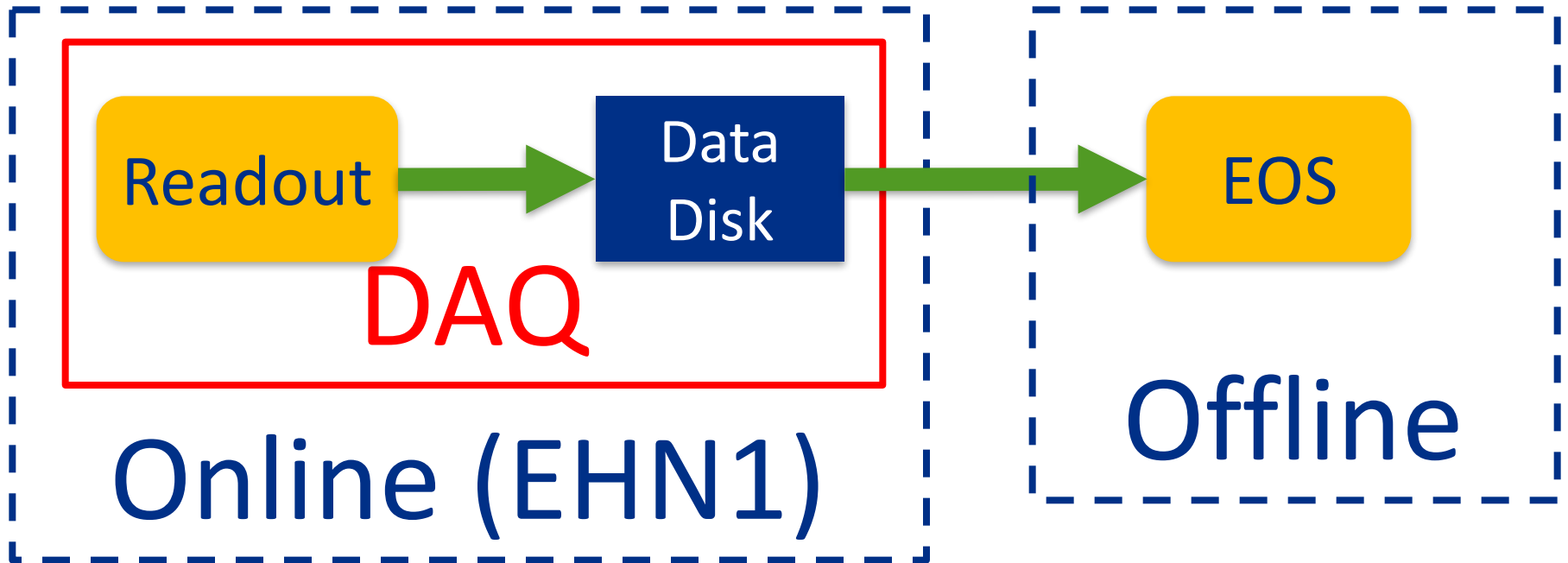
Installation / Testing / Integration

02-Feb-2017

Getting Started

- Safety
 - Filippo Resnati, EHN1 technical coordinator
 - Roberto Acciarri, ITI coordinator
 - Check in with them before any work at EHN1
- Cooperation with Neutrino Platform
 - Tier0 (Offline) = EOS, processing farm, CASTOR tapes
 - Marzio Nessi – As Project Lead, negotiated Tier0 resources
 - Nektarios Benekos – Resource Allocation, Admin
 - Online – continuing to specify requirements
 - Work closely with Nektarios
 - DAQ – Giovanna, Karol, Kurt
 - Slow Control – Giovanna, Flor
 - Infrastructure – security, storage (not data), logins, control room
- Meeting with CERN-IT
 - Tuesday 7th of February at 14:30 in Room 513-R-068

Online/Offline Interface



More diagrams in the works.

Schedule

- Goal
 - Fully operational computing systems for cold box testing
- Start by making generic lists of requirements
- Preliminaries (in parallel)
 - Requirements and design
 - Define procedures
 - Barracks with computing racks (at least 2 months)
- Installation at EHN1
 - Network
 - Online computing
 - DAQ computing
 - Server farm
- Operations

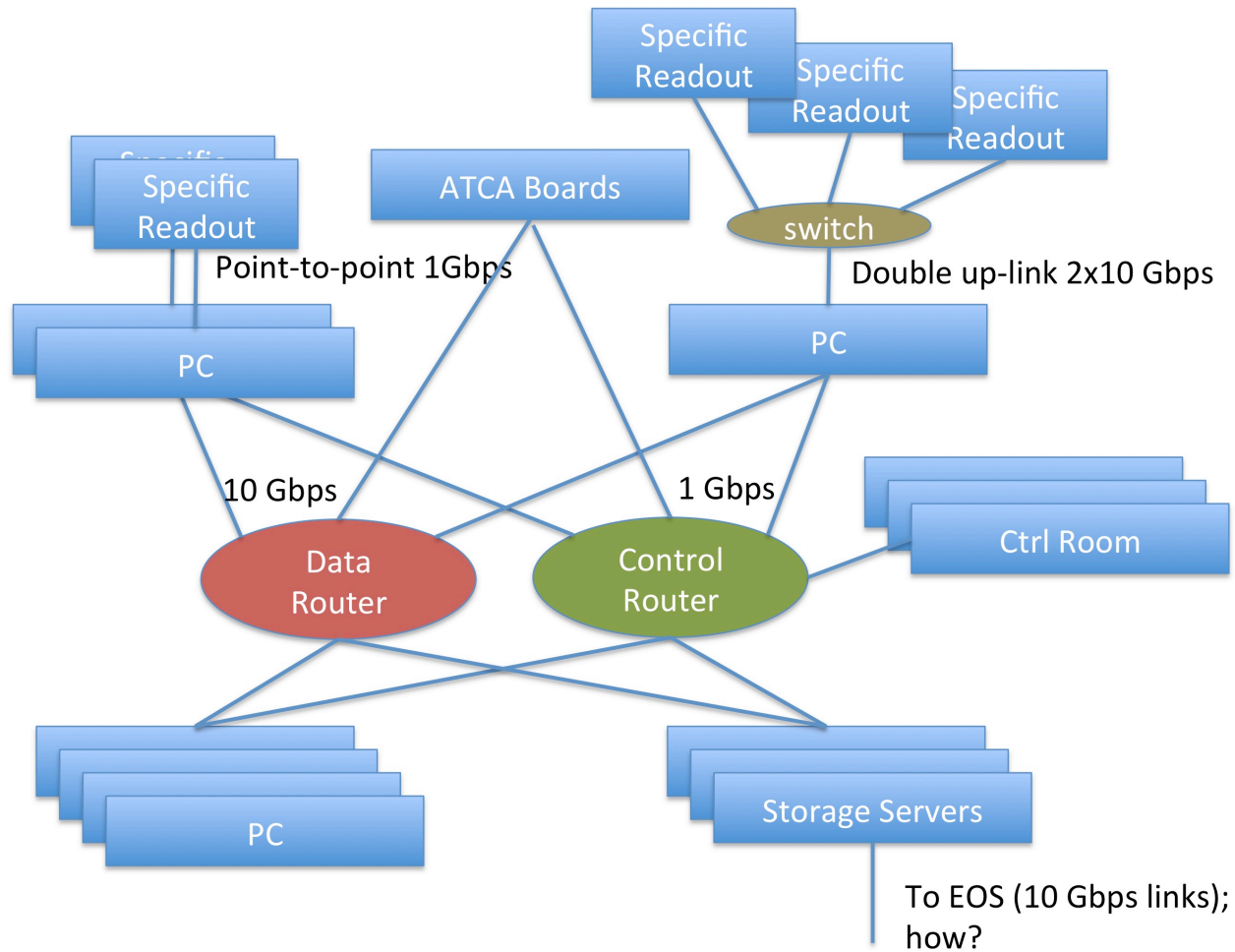
Define Online Computing Procedures

- Procedures requiring specification and development
 - Independent of architecture
 - These are the typical procedures needed for operating an experiment
- Secure access
- Grant user access to resources
- File storage and backup – source code, configurations
- Operational accounts
- Resource allocation
- Report problems / issues / suggestions
- Insure stable operations

Resources and Services

- Resources
 - Network
 - Network attached storage (NAS) – NFS
 - Control room computers
 - Security – gateway computers
 - Interactive computing – login
- Services
 - Web server
 - DHCP
 - DNS
 - Ganglia
 - Backups
 - Group accounts
 - pLappd readout through PCI card

DAQ Network (from Giovanna)



Next Steps for Online Computing

- Nektarios allocated 1 TB of space in EOS for files from the DAQ testing at Bldg 4
 - Working on a fuller understanding of the role of EOS
- Actively working on requirements and design
 - Close cooperation with Nektarios
 - Break the broader picture into smaller chunks
 - Consulting with CERN-IT
- Officially request requirements from the protoDUNE collaboration
 - DAQ computer discussions on going
- Regular reports through the ITI meeting