



## Transportation Firm Simplifies Data Center Management and Streamlines Virtual Environment

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PITT OHIO EXPRESS

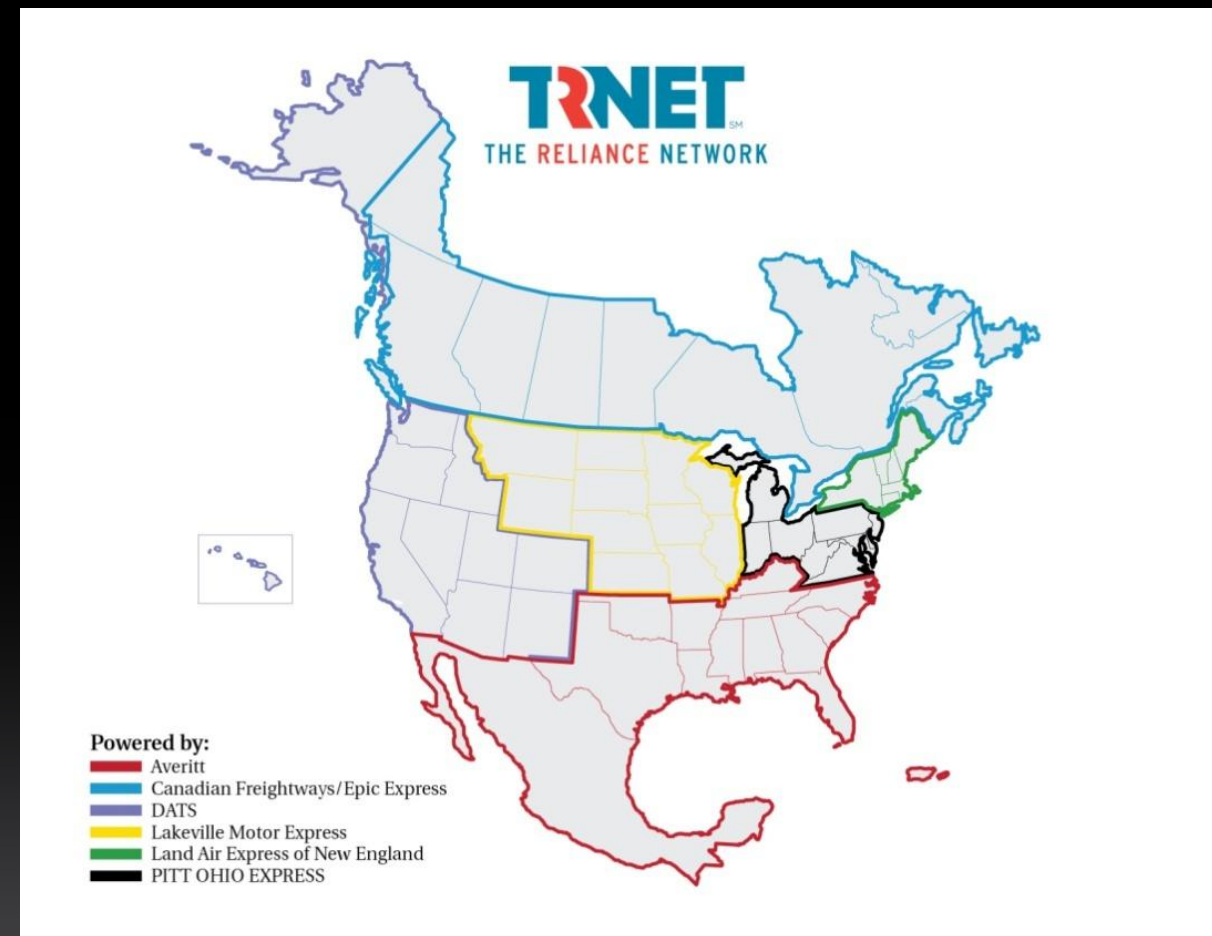


# PITT OHIO EXPRESS



- Specializing in Regional LTL (less-than-truckload) carrier
- Established 1979
- 10,000-11,000 shipments per day
- 98% on-time delivery
- Annual revenue 260-280 million dollars
- 2400 employees across 21 terminals
- Provides coverage to all of North America through the Reliance Network
- Currently have expanded into offering Ground Services & Supply Chain Solutions Services

# PITT OHIO EXPRESS - Coverage



# PITT OHIO EXPRESS – Built On Technology



- **Cisco Systems** – Servers / Network / VOIP
  - **VMware** – Virtualization
- **Symantec** – Netbackup Data Protection
- **Data Domain** – De-duplication / Backup
  - **HP** – Servers / Primary Storage

# PITT OHIO EXPRESS – Data Center Challenges

- Backup, Restore and Disaster Recovery of servers was time-consuming and complex.
- Full Datacenter Integration was more difficult and expensive with other proposed hardware solutions.
- Lacked a foundation for future scalability with network and storage communications.
- Lacked preparation for future server and application additions and improvements.

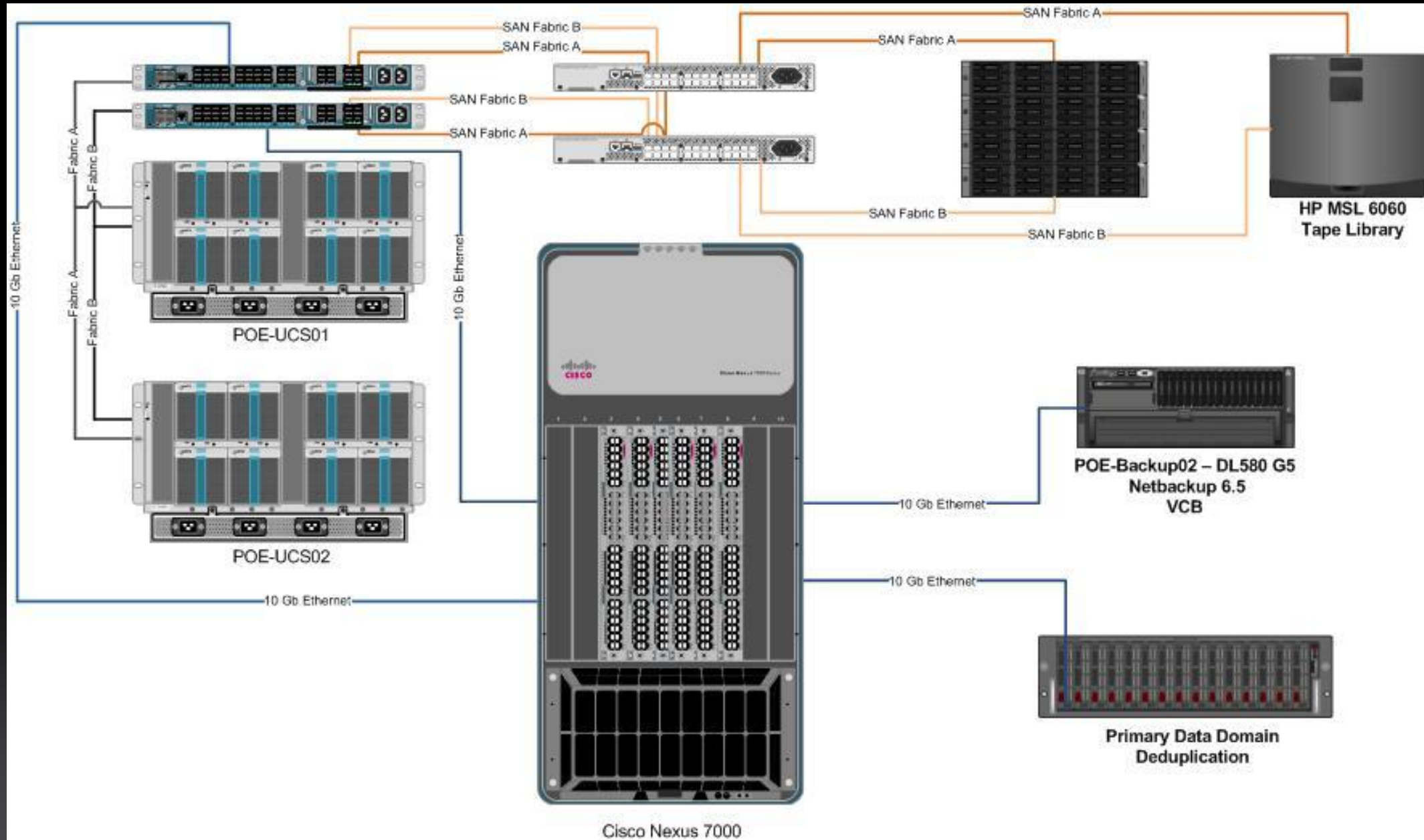


# PITT OHIO EXPRESS – Data Center Solutions

- Cisco Unified Computing System
  - 2 Blade Chassis
  - 8 Half Blades Configured (scalable to 16)
  - Running VMware Vsphere 4
  - 2 x 6100 Switches
- Cisco Nexus 7000 Series Switch
  - 10GbE
  - Production / DMZ VDC Setup
- EMC Data Domain
  - 10GbE to Nexus 7000



# Primary Site UCS Infrastructure



# PITT OHIO EXPRESS – Data Center Results

- Maximize server resources
  - Each Blade can handle 20 or more VMs without scaling down the resources required
- Significantly reduced support time
  - VMs can be restored anywhere from five minutes to an hour vs. eight to 12 hours depending on the size of the datastore
  - Full secured software and hardware management from anywhere with Internet connectivity. (from the comfort of your home couch)
- Simplified Connectivity & Integration
  - Network connectivity was reduced from 40 1Gb Links to six 10Gb Links
  - Fiber channel connections dropped from 16 cables to 4
- Reduced capex and opex costs
  - Saved thousands of dollars in cables and SFPs slots to support 10Gb
  - Cooling savings going to a smaller datacenter foot print (30 racks to 5 racks)



**CISCO**