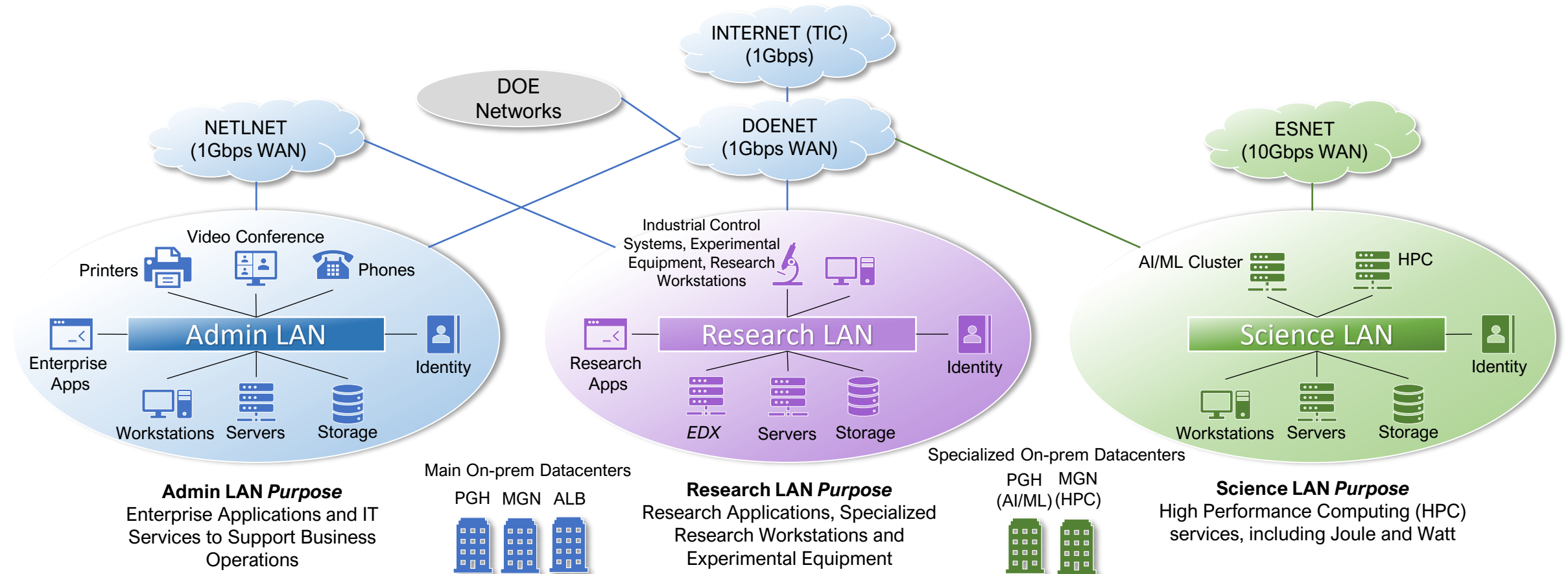


# Current State

## IT Environments

Business and Research technical and cyber security requirements have historically been very different, which drove the creation of 3 separate IT environments built for its specific purpose.

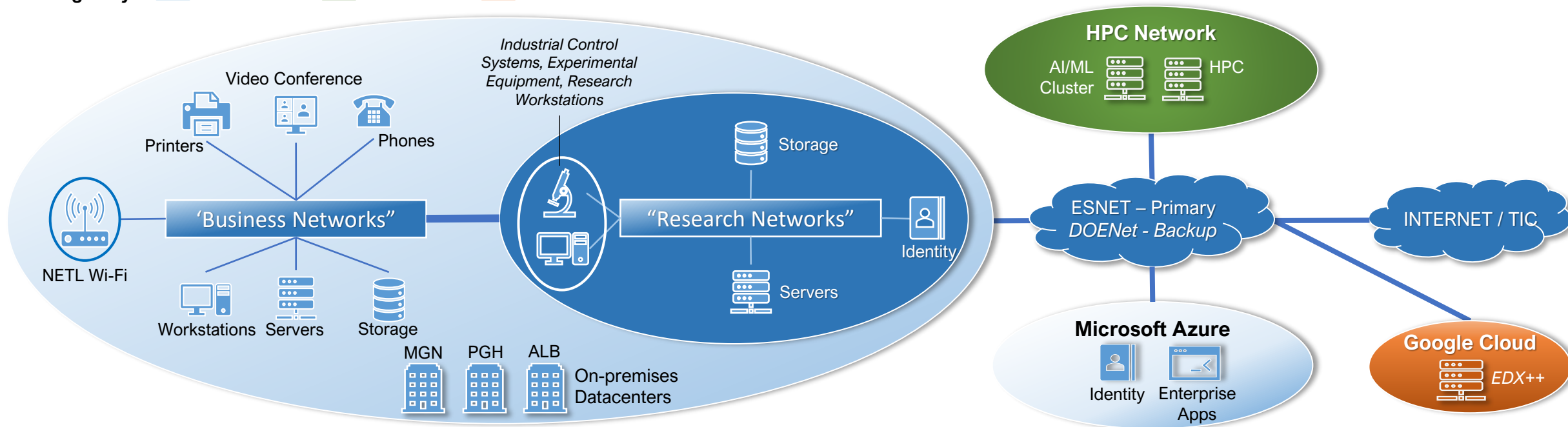


# Future State

## Transforming into a Dynamic & Integrated Hybrid-Cloud Architecture

- Implement an integrated architecture to enable improved connectivity and collaboration
- Transition into a hybrid-cloud infrastructure
- Establish new capabilities and adopt new technologies to better meet business & research objectives, such as
  - High speed networks to support *big data* transfers
  - Increased user mobility both on-site and remotely to enable *Anywhere Operations*
  - Centralized identity & access management solution to provide secure access to different user types
- Implement **Zero Trust Architecture** to increase cybersecurity capabilities to better protect NETL's data assets

Managed by: ■ CLIN 00002 ■ CLIN 00006 ■ CLIN 00007



# Technologies

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- Microsoft Products
- Linux Products
- Azure Cloud
- Amazon Web Services (AWS)
- Google Cloud Provider (GCP)
- VMware
- HP Data Center Hardware
- Cisco Networks and Juniper Networks
- Cisco VoIP
- Palo Alto Products

# Hardware Asset Count

Asset Type	Count
Workstations	2,350
Servers	450
Switches	300
Firewall Devices	16
Routers	14
VPN Devices	6
Wireless Access Points	95
VoIP Phones	2,200
Mobile Devices (iPhones/iPad)	340
Printers/Plotters/MFPs	300
Cisco Video Conference Units	40