Information Technology

Campus Network, Data Center And Student Portfolio Update



Topics

Campus Network update

• Upgrade of campus WiFi, network & internet connectivity

Data Center move update

• Enabling growth in research, academics & business

Student Portfolio update

• A step towards achieving a Competency-based Assessment model by the T.H Chan School of Medicine





Campus Network Upgrades



IT is halfway through a 5 year program to improve our campus network

Network Update

- Increasing internet connectivity by 3x
- Doubling WiFi access & upgrading system
- Increasing network jack speed **from 1Gb to 10Gb** in every building
- Laying out 100+ miles of new network cabling
- Reconfiguring **61** network closets
- Upgrading **581** ten year old+ switches

More than doubled campus wireless access points

Building	WAP Before	WAP After
Medical School	450	992
Lazare	140	324
Albert Sherman	220	450
Total	810	1,766



Campus Network Upgrades

Improving reliability, speed, enabling WiFi 6, 10Gb port speeds and 100Gb campus inter-connect

Timing of Upgrades



Wireless network

Phase I - FY2023

- GSN / GSBS offices in School Completed
- Albert Sherman Learning Communities Completed
- Library Completed

Phase II – FY2024

- Lazare Research Building floors 1-9 Completed
- Medical School floors 1-9 Completed
- Albie Sherman floors 1-3 Completed
- NERB Completed

Phase III - FY2024/2025

- Medical School floors A & B Completed
- Albert Sherman floors 4-9 July 2024

Phase IV – FY2025/2026

Rest of network (ACC, Shaw, Chang, Fuller, etc)

Physical network

- Lazare Research Building floors 7-9 Completed
- Lazare Research Building floors 5-6 April 6, 2024
- Albert Sherman Center March 2025
- Medical School June 2026

UMass Chan DataCenter Transformation

Approach and Strategy



Why Migrate UMass Chan's Data Center?

Business Drivers & Objectives

Investment and Strategy

• Significant investment is needed to support a modern-day DataCenter

UMass Chan is vacating the South St. property



- A colocation facility provides scale and capacity for infinite future growth
- The South St. DataCenter is 20+ years old

Customer Demand

- Meeting the infrastructure, performance and connectivity demands of our customers
- Aligning our organizational and technological growth trajectories

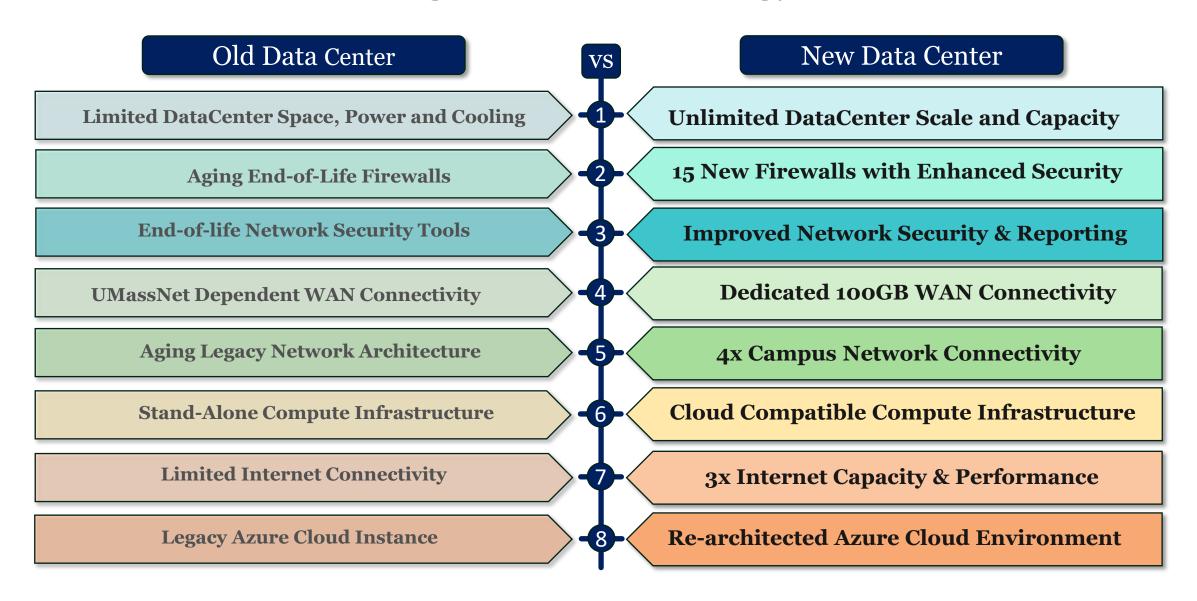
Security & Reliability

- Enhance our security posture
- Provide a more robust, sustainable and scalable environment

Next Generation Platforms & Innovation

- Enabling future technological growth and requirements with speed and scale
- Positioning UMass Chan for future success

Investing in our Technology Future



Data Center Migration











Move









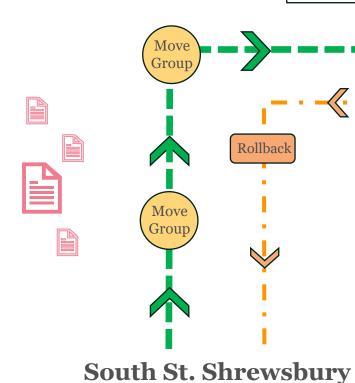


Create Affinity Mappings

Build Move Groups

Plan & Migrate

Test & Validate



Virtual "Move Groups" will be built from affinity mappings and migrated "Over the Wire"

- Physical Infrastructure and non-redundant services will be transported in 3 Physical Move Groups
- Migration timing, scheduling and testing with be coordinated with application teams and owners
- All virtual Move Group migrations can be "Rolled Back" if any issues are detected

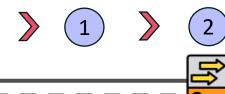
Markley Lowell

Rollback

Move

Group

Physical Move Groups

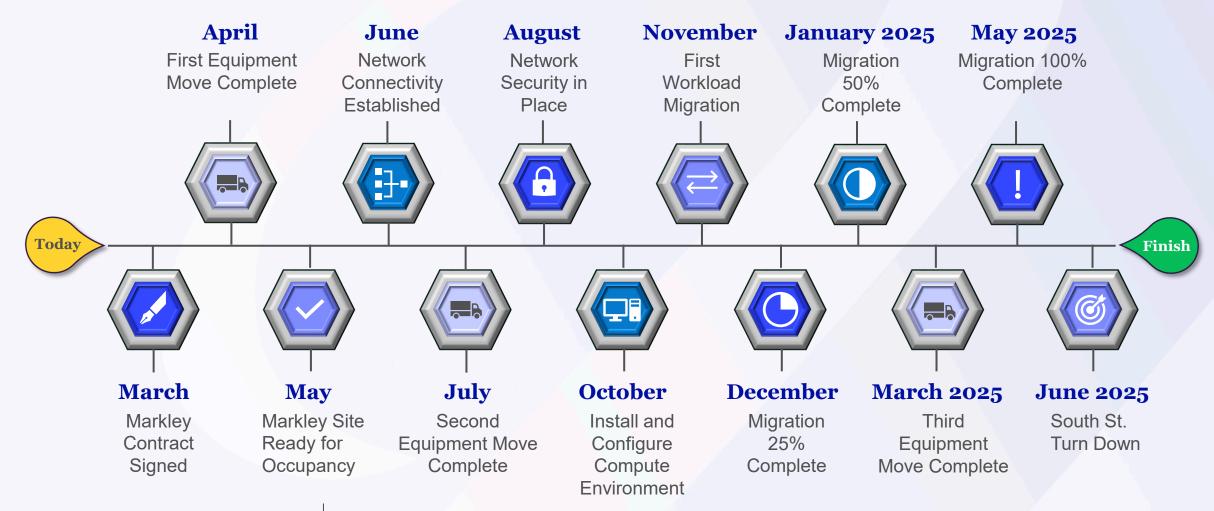








DataCenter Migration Milestones





Student Portfolio

April 2024



Student Portfolio

- A step towards achieving a Competency-based Assessment model by T.H Chan School of Medicine
- Central point for students and mentors to find formative and summative assessment results for all four undergraduate years
- Documents student progress through Discovery blocks, Exploration clerkships, and Horizons blocks (ex. WBAs, Exam results, etc.)
- Milestone tracking for student formative development by each school competency and as a summary analysis for peer comparison

Demo

