



Data Management



Introduction

- Data Manager and Underwater Glider Technician
- UVI Alumni
 - BS Marine Biology
 - Minor in Data Science and Environmental Science
- Programming Languages: Python, SQL, R
- Trained with Microsoft Azure and Networking

Collaborations



Microsoft
Azure



softwareONE®



CloudBank

Research Goals And Objectives

Goal 1	Multi-home the internet connection and increase bandwidth capacity to 10 Gbps on and between both campuses	Goal 4	Expand public cloud services in support of research data needs
Goal 2	Upgrade fiber optic infrastructure and pathway system for research buildings from multimode to singlemode fiber to support 10+ Gbps building uplink speeds	Goal 5	Deploy on-premises research virtual server and storage environment with replication to MS Azure, and possibly other public cloud environments
Goal 3	Upgrade research related in-building wired and wireless services		

Results, Outcomes & Accomplishments

- ✓ Completed Network Assessment
- ✓ Internet Upgrades 1 gb to 10 gb
 - ✓ Core network equipment upgrades
 - ✓ Fiber Network Switches
 - ✓ 200 Wi-Fi Access Points to 500 Access Points
 - ✓ Increased user connection speed up to 800Mbps
- ✓ Research building network wiring upgrades
 - ✓ CMES Annex
 - ✓ Marine Science building
 - ✓ Simulation Center (STX)



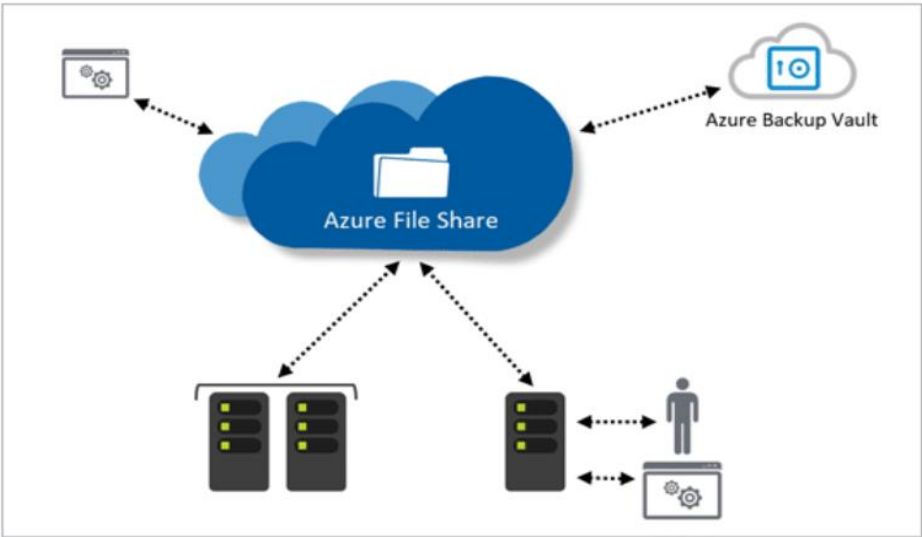
Results, Outcomes & Accomplishments

- ✓ Expanded public cloud services in support of research
 - ✓ Microsoft Azure Integration
 - ✓ Azure Hybrid Services
- ✓ Purchased HPC Dell servers & storage equipment
 - ✓ High Performance Computing Servers
- ✓ Participated in EDOCs development and testing
- ✓ Cloudbank Award
- ✓ CC* Grant
- ✓ NTIA Grant



Future Plans

Examine	Determine What Resources Researchers Need
Build	Build Virtual Resources and Connect the Azure Cloud to the High-Performance Computing Servers Through the Azure Hybrid Service
Optimize	Create a Procedure for Researchers to Upload and Organize Their Data





Thank you!

Travis Hamlin

EMAIL: travis.hamlin@uvi.edu

PHONE: 340-642-6858

