



NSF Campus Cyberinfrastructure PI and Cybersecurity Innovation for Cyberinfrastructure PI Workshop

September 24-26, 2018 | University of Maryland, College Park, MD

NSF Program: Campus Cyberinfrastructure (CC)

Program Area: CC*DNI

Award Number: 1827098

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Project Title: CC* Networking Infrastructure: Jackson State University (JSU)-Research Network



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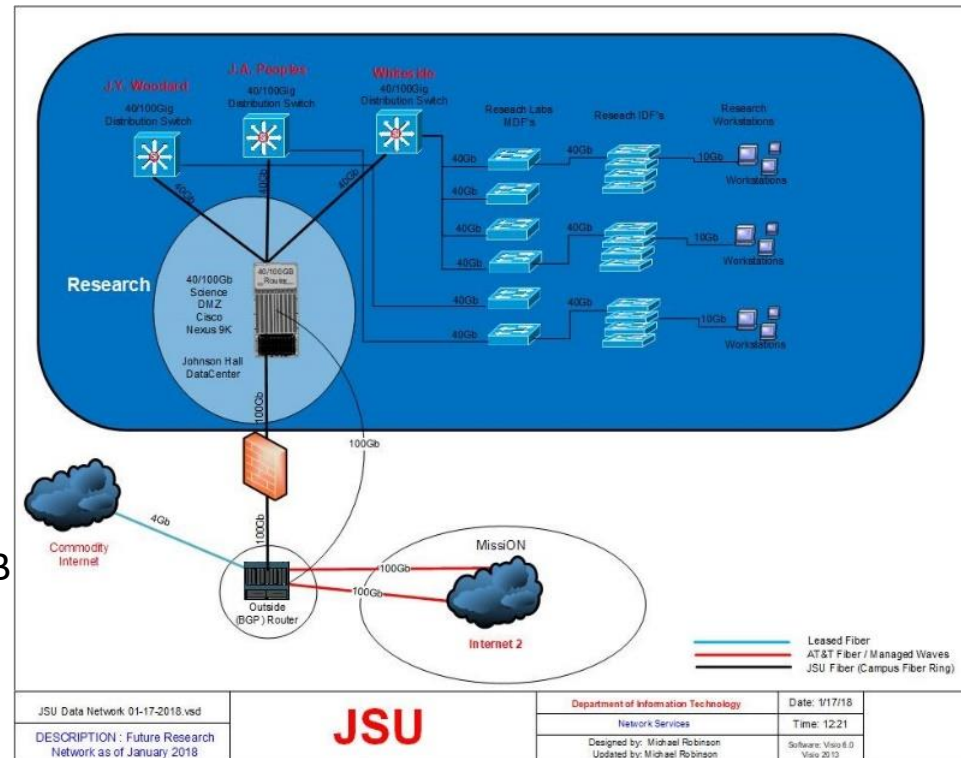
Quad Chart for: #1827098 CC* Networking Infrastructure: Jackson State University (JSU)-Research Network

Challenge:

- To expand bandwidth needed for big data and other network intensive collaborative research
- To develop a platform for other HBCUs, colleges and community colleges in state and around the nation to implement similar research data networks

Deliverables:

- Proposed:
 - Science DMZ
 - 4 Core nodes with 40/100GB
 - 40 GB uplink to access switches
 - 10 GB to Research labs and workstations



Scientific Impact:

- US ARMY ERDC Big Data Analytics Tools
- Predicting Stock Price with a Deep Learning Technique Using Big Data
- Complex Network Analysis
- Advanced Visualization Instrumentation for Collaborative Exploration of Big Data
- Remote Teaching, Collaboration and Data Visualization
- Interdisciplinary Center for Nanotoxicity (ICNototox)
- Interdisciplinary Data Science Program
- Centrally pooled High-Performance/Throughput Computing (HPC/HTC) resources