Florida LambdaRail Overview for Researchers

As Florida's Research and Education Network, Florida LambdaRail (FLR) operates a statewide 100 Gigabits per second network that connects Florida's universities and research centers to peer organizations and scientists throughout the country and the world. We connect to national and international research and education networks including Internet2, ESNet, globus, and XSEDE. FLR supports the work of campus scholars and scientists by providing the network infrastructure and services that are designed to speed and enhance research and education.

How can FLR facilitate your research?

- **Real-time Data Sharing**. FLR facilitates the caching, tramsmission and storage of very large volumes of research data between and among collaborators in Florida, across the nation, and around the world.
- **High Performance Computing**. An integral part of FLR, the Sunshine State Education and Research Computing Alliance (https://sserca.flrnet.org/) coordinates the use of their members' campus-based HPC resources across the state, such as UF's new HiperGator3 AI. Our strategic partnership with Internet2 enables connectivity to national and international research laboratories, including National Center for Supercomputing Applications, NOAA, NSF, NIH and dozens of other research supporting agencies.
- **Science DmZ**. FLR has created a Regional Science DmZ, a high-bandwidth, high-security, low-latency network environment dedicated to precise computational and data transfer needs. A Science DmZ supports research by separating science traffic from regular internet traffic. Any FLR member that has a local science DmZ and is an Internet2 member already peers with the FLR Science DmZ.
- **International Research Network Connectivity.** FLR provides two (2) 100G waves in direct support of NSF's International Research and education Network Connections (IRNC) program & the Atlantic Wave from Mlami to Jacksonville then hands off that traffic to Internet2. IRNC supports the high-performance research connectivity required by international science & engineering research projects and supports education collaborations involving the NSF research community.
- **Cloud Service Access**. FLR provides high-speed access to major cloud services including Microsoft Azure, Amazon Web Services, Google Cloud Platform, and Oracle Cloud. See our contact information below for more information.
- **Long-Term Data Storage**. The ability to secure on premise long-term storage for $25/terabyte/year;
- **Collaboration**. In addition to your campus-based video conference service, FLR member researchers enjoy free access to FLR's video conferencing service from BlueJeans.

Why should you be using FLR and the Regional Science DmZ?

- You need to collaborate with colleagues at other institutions across the state, nation, or world;
- You need to move and share big data;
- You have technical instrumentation that generates large volumes of data;
- You need access to global scientific instrumentation;
- You need to process large datasets at off-premise locations.

Where can you get more information about FLR, the Regional Science DmZ, and related services?

- See the FLR website (www.flrnet.org), or send us an email at info@flrnet.org.