



NSF VIRTUAL CAMPUS CYBERINFRASTRUCTURE PI WORKSHOP SEPTEMBER 19 – 21, 2022

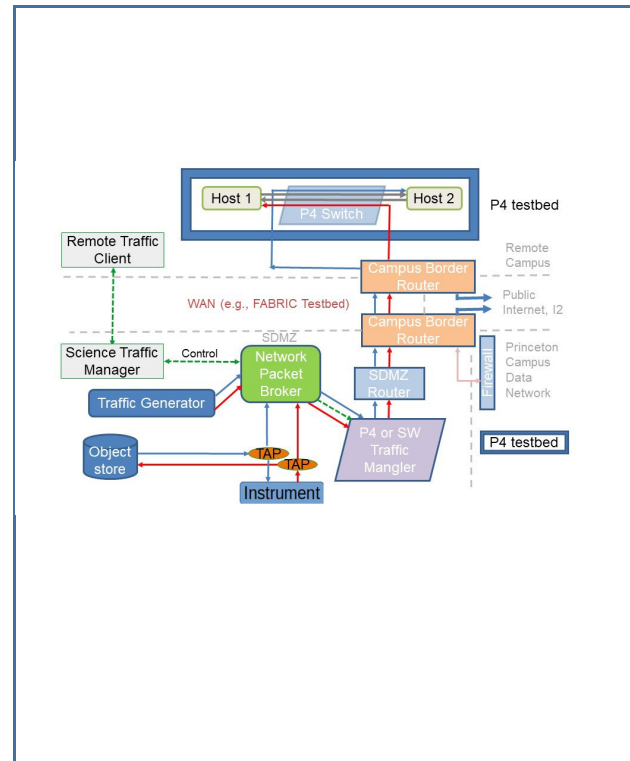
Quad Chart for: *Science Traffic as a Service (STAAS)*

Challenge Project Seeks to Address:

- Some experimental networking research infrastructures (e.g., FABRIC) carry no production traffic
- Experimenters burdened with creating test traffic at ever higher bit rates
- Goal – develop a safe, decentralized, scalable, campus-based traffic injection service to ease this burden

Solution:

- Source `offered' traffic on experimenter request from many edge nodes (i.e., campuses).
- Leverage existing campus networking infrastructure (e.g., monitoring frameworks, packet brokers)
- Dynamically connect to experiment container



Scientific Impact:

- Increasingly unrealistic to ask experimenters to generate traffic to study without more sophisticated tools and instrumentation support
- Allows experimenters to focus on innovative research

Learn more:

- <http://cs.Princeton.edu/~jbrasil/public/projects/staas/staas.html>