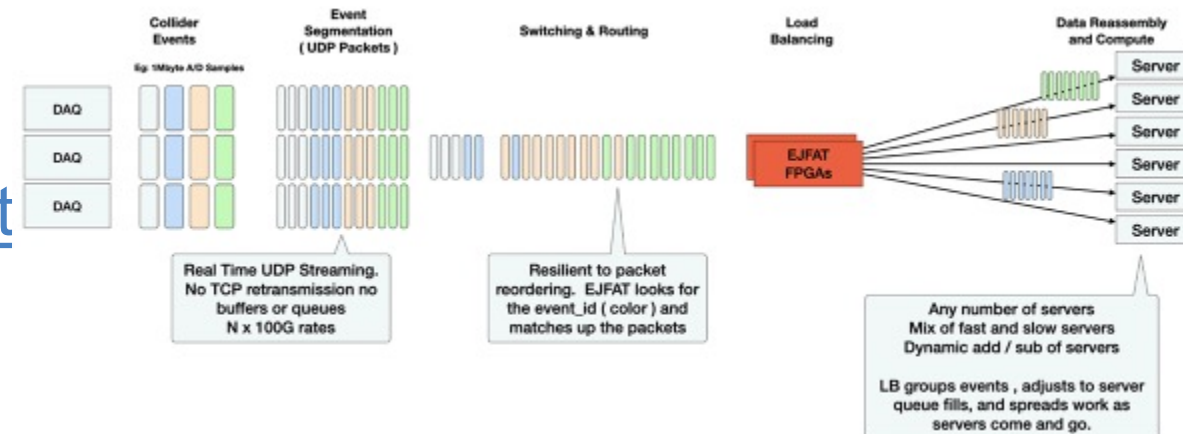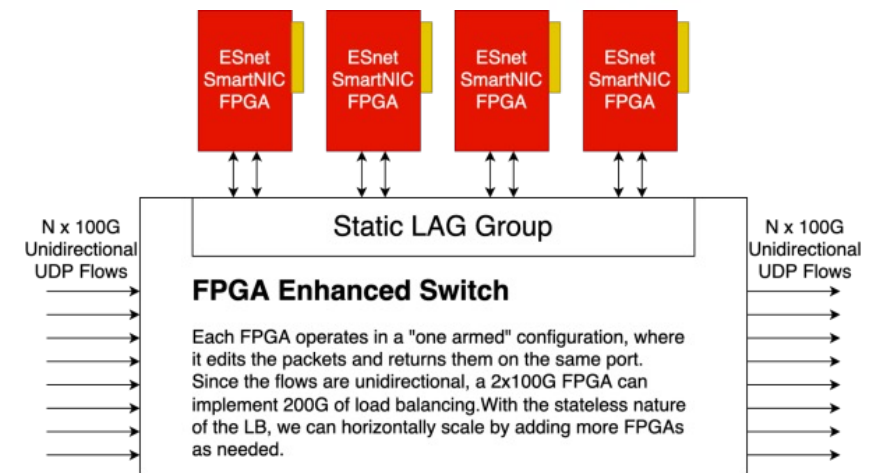# Demo Details

Transfer data between BNL (source) and Jlab (destination) > 5Gbs including processing at Jlab compute nodes

Will use ESnet – JLab jointly developed : **ESnet-JLab FPGA Accelerated Transport (EJFAT) Load Balancer**
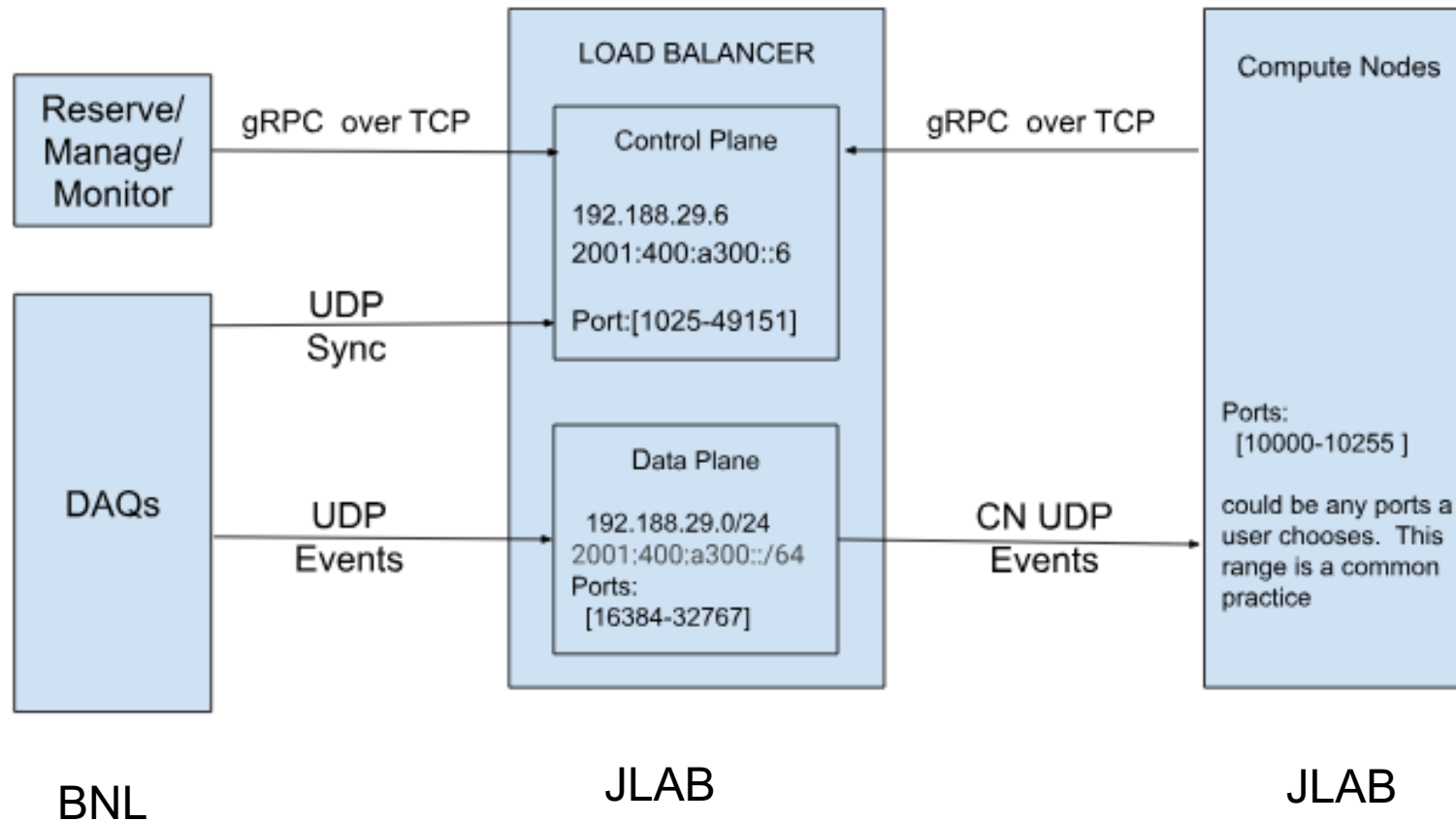
Data source at BNL

Load Balancer and compute at

5k small root files to be transferred

https://www.es.net/network-r-and-d/ejfat

Network configuration btwn BNL - JLab

Host to LB communications:

Reserve/ Manage/ Monitor — gRPC over TCP →

LOAD BALANCER

Control Plane

192.188.29.6
2001:400:a300::6

Port:[1025-49151]

← gRPC over TCP — Compute Nodes

DAQs — UDP Sync →

DAQs — UDP Events →

Data Plane

192.188.29.0/24
2001:400:a300::/64
Ports:
[16384-32767]

— CN UDP Events →

Ports:
[10000-10255]

could be any ports a user chooses. This range is a common practice

BNL   JLAB   JLAB

People involved (doing the work)

BNL networking connected new server in BNL Openshift instance
- Server to be used temporarily for this Demo running in a container running in Openshift pod

Robert Hancock (BNL) doing most of the work from the SCDF side
- Activities include: "Openshift infrastructure engineering, container development, comanage federated ID modifications, WAN networking, and storage administration"
- **Many thanks to Robert. His expertise is invaluable**

Ilja Baldin (JLab) – our technical partner from JLab
- providing the EJFAT client container
- helping to configure things on JLab end.
- Will perform initial transfer tests with Robert

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Current Status/Plans

Dry Run today 10am – 12pm copying the root files to JLab and start the processing there

Dry Run #2 1:00 – 2:00 pm Monday August 11th

Dry Run #3 12:30 – 1:30 pm Tuesday August 19th

Live Demo – 11:30am – 2:00pm Thursday August 21st

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