

EJFAT connects large instruments to DOE supercomputers for real time DSP processing.

Currently deployed and usable.

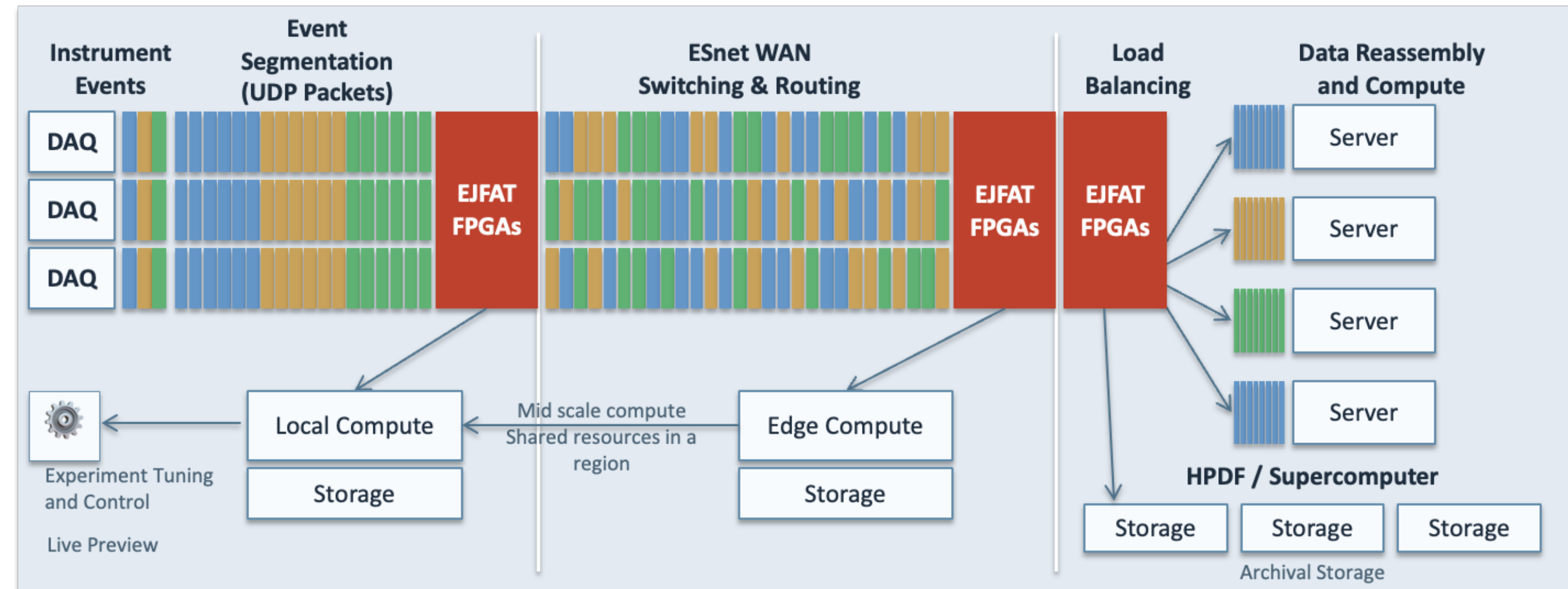
- no user hardware required
- robust implementation
(dozens of users and projects active)
- fully open source
- easy to use learning curve
Very similar to ZMQ

Currently being tested at:

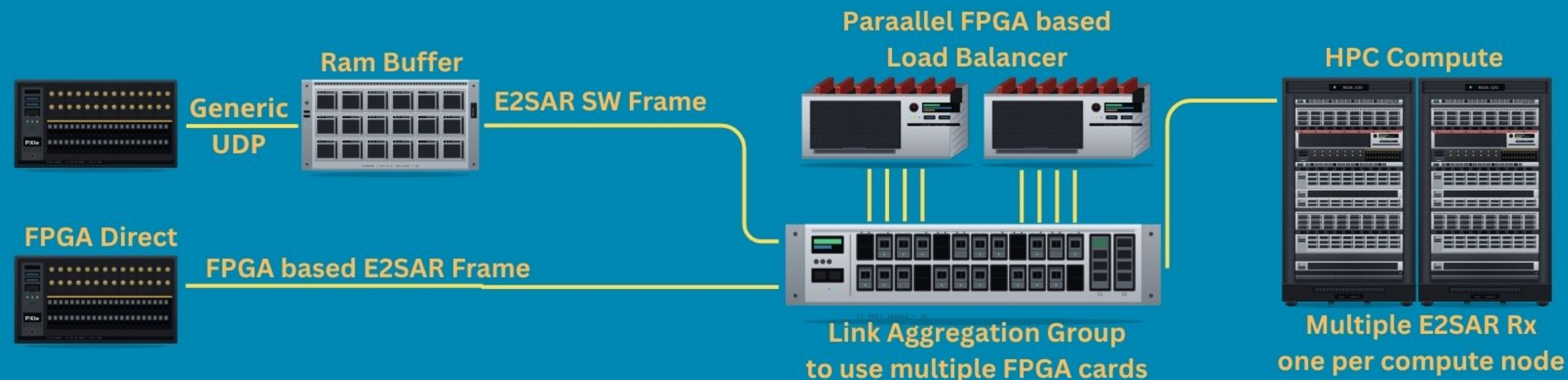
- JLab CEBAF
- SLAC LCLS
- ALS soft xray beamlines
- APS EPICs frameworks
- FRIB
- EIC

NERSC - Permuter
Oakridge - Lux
SCDF / JLab HPC

- Event aware data forwarding
- Separation of DAQ and Compute Ips
- Pre Integrated datapath with DOE supercomputers
- Nearly lossless packet transmission (RS Forward Error Correction)
- Scales to Tbps with parallel FPGA cards
- Active feedback load balancing , based on compute node consumption rates



1. Contact : yak@es.net to get started
2. International facilities are welcome
3. Aim to have data flowing with very little effort



100Gbps to Terabit speeds
DAQ FPGA framers (Verilog)
SW framers (C++ and Python)

100% Open Source