

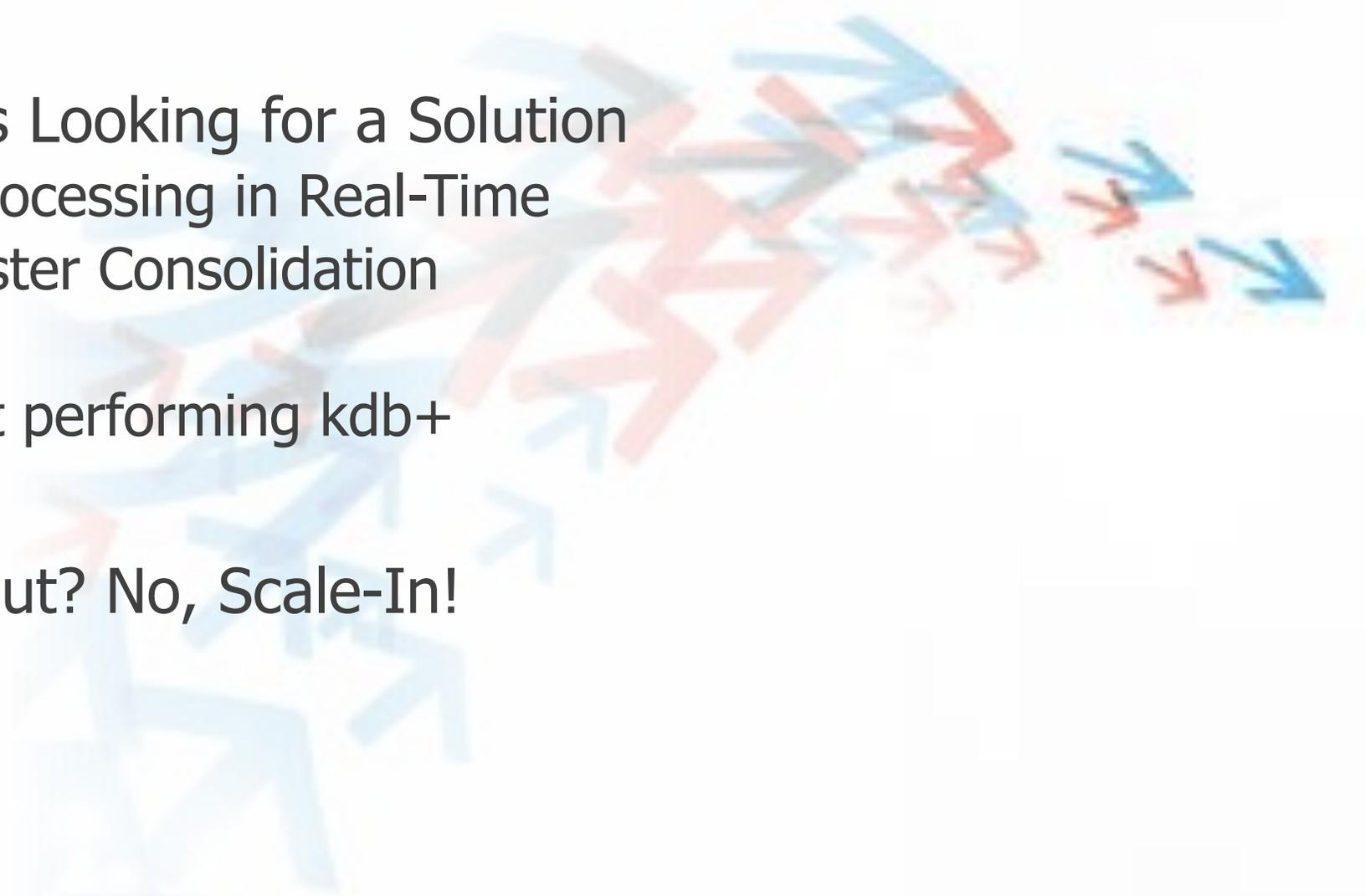


Axellio Edge Computing System

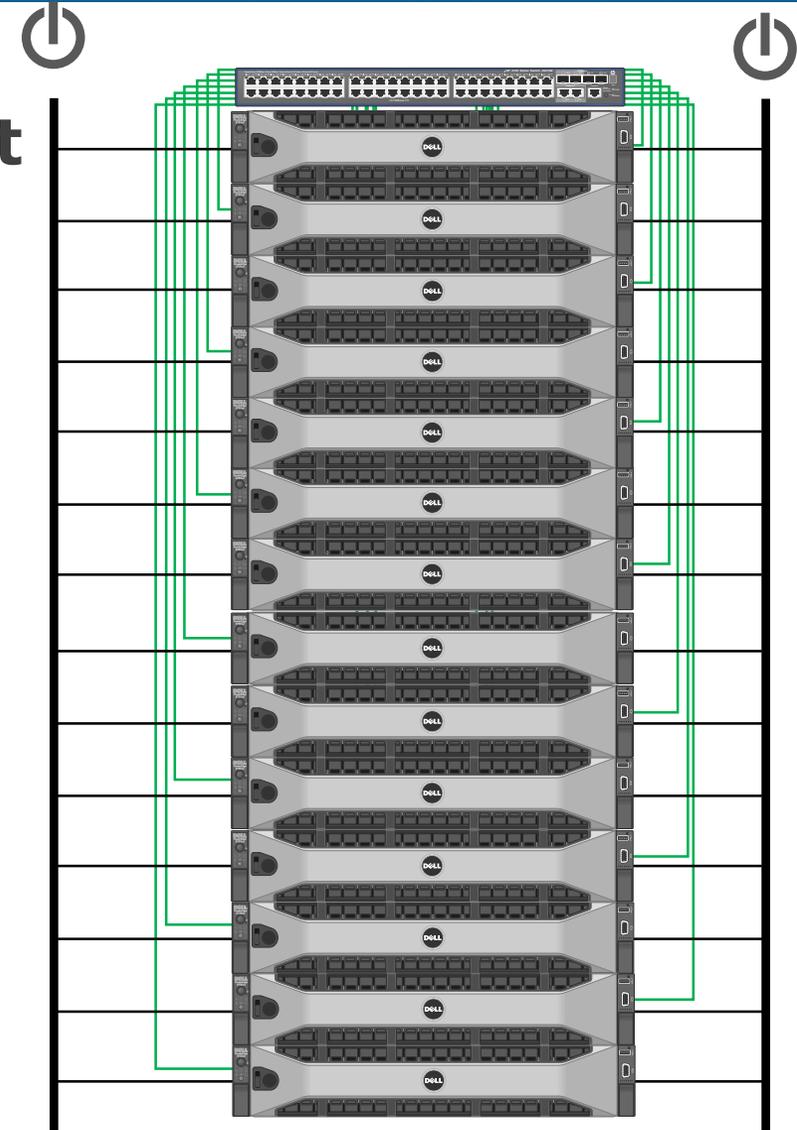
Hollis Beall

Director, Performance Engineering

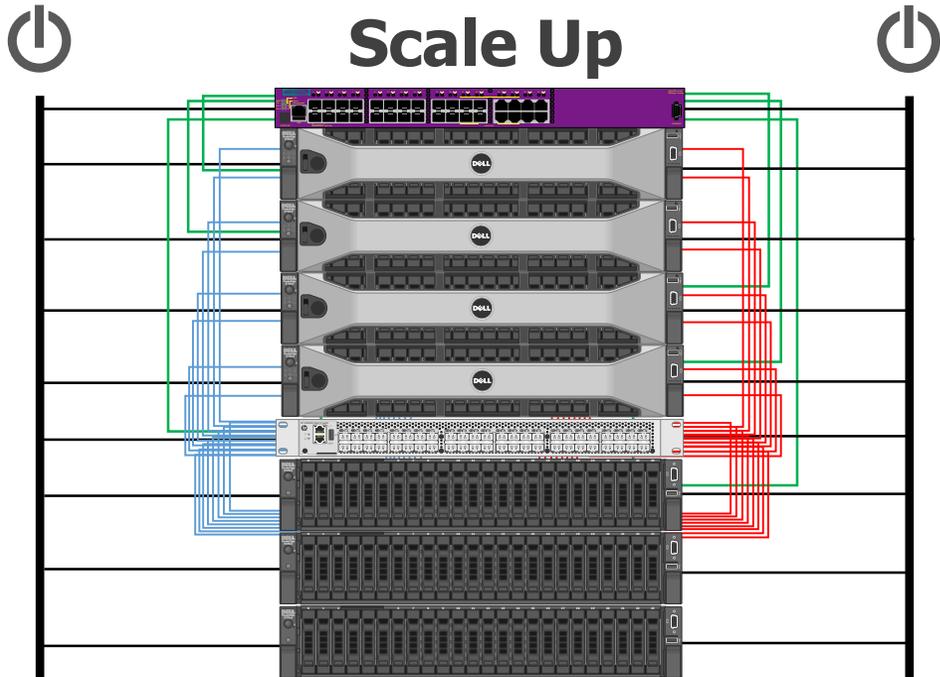
- Business Problems Looking for a Solution
 - Event/Stream Processing in Real-Time
 - Hyper-Scale Cluster Consolidation
 - Latency Issues
 - Need for highest performing kdb+
- Scale-Up? Scale-Out? No, Scale-In!



Scale Out



Scale Up



Scale In



AXELLIO™



Converged Server Storage Appliance

Stream/Event Processing

Where the value of data degrades rapidly with time

Financial Market Data Streams

Packet Capture and Analysis (Advanced Security)

Social Media Sentiment Analysis

Algorithmic Trading

Regulatory Compliance (Time-Stamping)

Hyper-Scale Cluster Consolidation

When the network is the problem, get rid of the network

Back-testing trading strategies, needle in the haystack

Risk Analysis

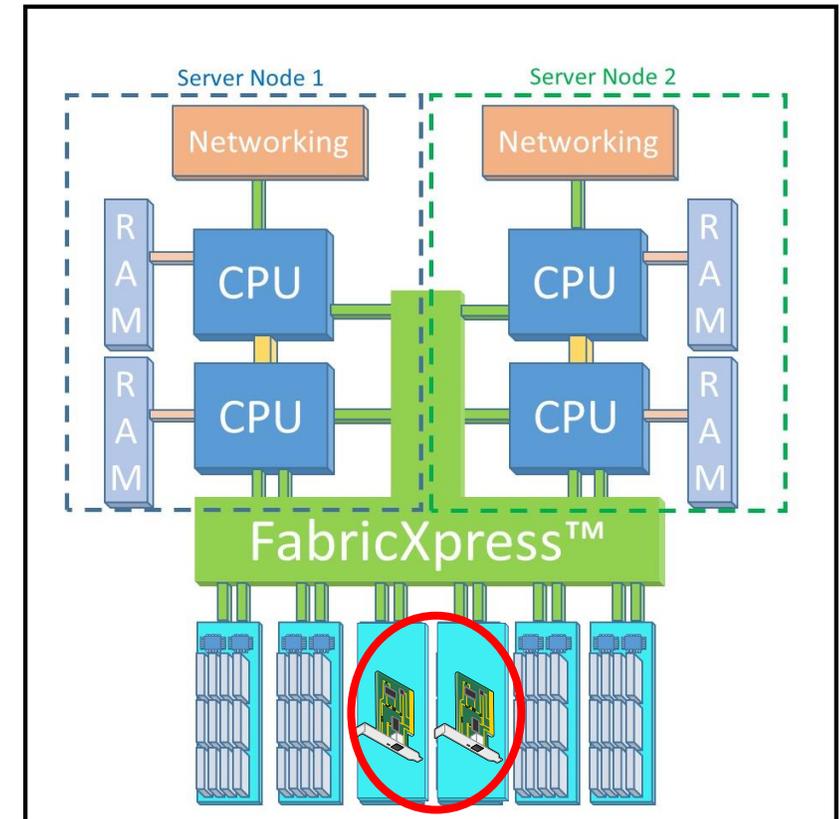
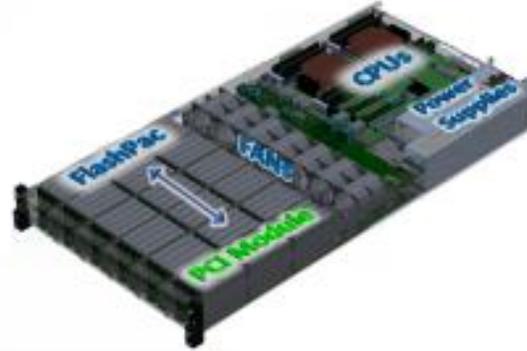
End of Day/Month/Quarter/Year Processing

Creating Customer Information Products

Training Models

20-30:1 Consolidation

- 2U form factor
- 4 socket intel e5-26xx v3 & v4 CPUs
 - Up to **88 cores/176 threads**
 - Upgradable as Intel releases new CPUs
- 32 DIMMs, 16GB – 2TB
- Enterprise Grade, Industry-Standard NVMe Storage
 - 12 to 72 x 2.5" Dual-Port NVMe SSDs
 - Up to **1PB** of ultra high performance flash with 16TB NVMe SSDs (2017)
 - >12 Million IOPS, as low as 35 μ s latency, 60 GB/s sustained throughput
- Optional PCIe offload and expansion modules
 - 2x Intel Phi – CPU extension for parallel compute
 - 2x Nvidia GPU – Machine Learning, Real-Time Video Processing
 - Precision Timing Protocol (PTP) Packet Capture (PCAP) offload





SUT ID: KDB171020:

kdb+ 3.5 Time Series Database
Single (2u) Axellio Edge Computing System
88x Cores, 1TB RAM, 70x NVMe SSDs
CentOS 7.3



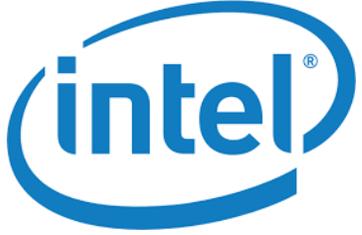
NewRecords!

- Beat each publicly reported solution in **> 50%** of baseline benchmarks in head-to-head comparisons with each
- **> 70%** if you exclude the one Optane-based solution

- Of solutions that submitted to both baseline AND scale tests, this solution beat them in 11 of 17 baseline benchmarks

See www.STACresearch.com/XIO





Ranked #1 on Cybersecurity 500



Thank You!

X-IO Technologies

Please visit us at the STAC Exchange