Supercharging High Performance Analytics

Eliminating Bottlenecks with the World’s Fastest Converged High-Speed Network Attached Storage & Compute Appliances
Legacy Architectures Render **Big Data Useless**

Today’s analytics systems were *never architected to deliver* instant insights from fast data.
Big Data—Meet the Power of the Ryft ONE

Patented converged SSD-based Network Attached Storage (NAS) & hybrid FPGA/x86 compute

- Real-time analytics performance without transformation & indexing
- Flexible complex data mining interfaces
- Built-in library of algorithmic primitives
- Open compute API (www.ryft.com/api)
- Linux front end
- Designed for easy migration & integration
- Dedicated remote management
- Versatile & easy-to-manage scale-out architecture

- Compact 1U rack-mountable appliance form factor
- 12-48 TB of All-Flash SSD storage
- Encryption & Decompression with no performance loss
- 1/10/40 GbE & InfiniBand network interfaces
- NAS protocols including NFSv4
- Ultra high efficiency at less than 750 watts

- 100 node Ryft CLUSTER delivers
  - Single file system & global namespace
  - 200+ GB/second throughput
  - 4.8 PB storage in only 2.5 racks
Ryft Eliminates All Bottlenecks—at the Edge, in the Data Center & in the Cloud

Deliver **instant insights into any data** without transformation & indexing
Ryft Renders Big Data Relevant Now

Competitive benchmarks prove Ryft dramatically outperforms AWS high performance clusters

- **Performance**: Up to 10 GB/second; no ETL or indexing latency
- **Storage**: 12-48 TB in 1 rack unit (1.75”)
- **Energy**: 750 Watts

- **Performance**: 100- to 200-node Spark cluster to match Ryft speeds, based on workload
- **Storage**: 64-128 TB in 5–10 racks
- **Energy**: 110,000 to 220,000 Watts
Thank You
Backup Slides
Ryft Products Are Used in a Broad Range of Use Cases Across High-Growth Vertical Markets

**FINANCIAL SERVICES**
- Correlates data in milliseconds to stop non-compliant transactions
- Speeds fuzzy search to analyze massive volumes of uncertain data to detect & prevent fraudulent charges

**CUSTOMER VISIBILITY**
- Analyzes streaming & batch data together for a complete customer view
- Enables remote analytics without moving data for a more personalized customer experience

**CALL CENTER RECORDS**
- Speeds searches of large & complex data for immediate & personalized responses
- Leverages the most accurate fuzzy search to catch all variations of customer data

**SECURITY & DEFENSE**
- Scales analysis of Petabytes of raw text, audio, video & other data to 200 GB/second speeds
- Enables the most accurate intelligence gathering

**E-MEDICAL RECORDS**
- Enables instant patient identification & matching by accelerating the broadest possible fuzzy matching on raw unstructured data
- Reduces medical errors & administrative costs

**GENOMIC RESEARCH**
- Speeds DNA searches to just seconds to advance research discoveries & precision treatments
- Compresses entire data pipeline & enables multi-purpose analytics

**IOT SENSOR & DEVICES**
- Analyzes & thins fast data the instant it’s captured
- Informs in-the-moment decisions at the edge & powers new data-driven services

**SUPPLY CHAIN LOGISTICS**
- Accelerates end-to-end visibility across many forms of data to inform split second decisions
- Optimizes inventory management with faster & more accurate predictive analytics

Confidential & Proprietary
The Ryft ONE Is the First Appliance to Leverage a Hybrid x86/FGPA Architecture