# MEET AIRI YOUR COMPLETE AI DATA CENTER IN ONE

#### THE ERA OF AI IS HERE

Enterprises will tap the power of Al for faster innovation and a competitive edge. Yet Al requires a completely new infrastructure, and the complexities of legacy solutions are holding enterprises back from moving into the new era of intelligence.

#### "DO-IT-YOURSELF" OFTEN YOUR ONLY OPTION

Al requires new, modern technologies like GPUs, scale-out flash, and RDMA fabric to move tremendous amounts of data. Unfortunately, too many Al initiatives are stalled with the complexities of a "do-it-yourself" approach using legacy technologies, leading to months of delays and idle time.



NEVER-ENDING CYCLES OF COMPILING & TUNING OPEN SOURCE SOFTWARE



MONTHS OF SYSTEM BUILDING RENDER OF RACK OF DGX A100'S



LEGACY SOLUTIONS FULL OF DATA BOTTLENECKS, FROM STORAGE TO GPU TO APPS

## AI-AT-SCALE MADE SIMPLE AND FAST

AIRI™ is the industry's first complete AI-ready infrastructure, architected by Pure Storage® and NVIDIA® to extend the power of NVIDIA® DGX™ systems. Powered by FlashBlade™ storage and NVIDIA DGX A100 servers, AIRI offers enterprises a simple, fast, and future-proof infrastructure to meet their AI demands at any scale.



## AIRI AI SOLUTION

ARCHITECTED BY PURE STORAGE AND NVIDIA, ENABLING AI-AT-SCALE FOR EVERY ENTERPRISE

# **HARDWARE**

4x NVIDIA® DGX A100™ SYSTEMS 20 PFLOPS of Al Performance PURE FLASHBLADE 15x 17TB Blades 1.5M NFS IOPS MELLANOX 2x 100Gb Ethernet Switches with RDMA

#### **SOFTWARE**

NVIDIA DGX SOFTWARE STACK NVIDIA Optimized Containers





#### **AIRI SIMPLIFIES AI-AT-SCALE**

- Reduces racks of complexity into a complete solution
- Data scientists can focus on algorithms, not infrastructure

#### AI-AT-SCALE IS AN ADVANTAGE

- More compute = faster training, more data = higher accuracy
- AIRI makes it simpler to run multi-node training

#### AI IS DIVERSE AND EVOLVING

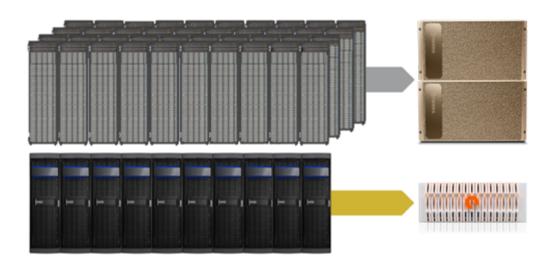
- From CNNs to GANs, Al is constantly changing
- Al is a data pipeline, requiring an integrated platform

#### ONE PLATFORM FOR ALL AI WORKLOADS

Traditional approaches to Al infrastructure result in silos of servers and storage that are over-spent on capacity or starve Al workloads. Al data centers need a new platform suited to the unique demands of analytics, training and inference. Built on DGX A100 as the compute building block, AIRI flexibly adapts to business demand as Al models move from prototyping to deployment, with one universal Al system that offers right-sized resources for every workload, and consolidates silos into a single elastic Al infrastructure.

#### **25 RACKS UNDER 50 INCHES**

Al pushes beyond the reach of legacy technologies like serial CPUs and spinning disks. At the core of AIRI are NVIDIA® DGX A100™ servers and FlashBlade, industry-leading solutions architected for AI. Each replaces the performance of racks of legacy technology, offering data scientists the power of a large supercomputer for any AI initiative.



#### **DATA BOTTLENECKS, ELIMINATED**

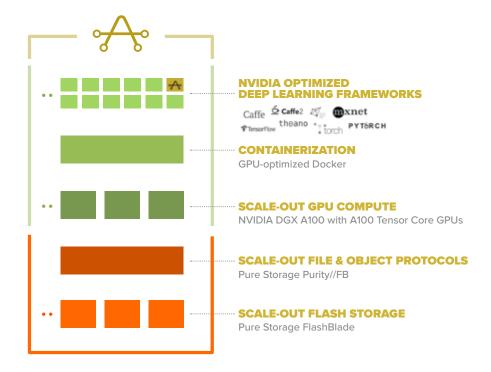
"Do-it-yourself" infrastructure requires constant tuning. As one bottleneck is resolved, another often shows up somewhere else in the system, resulting in weeks to months of lost productivity. AIRI is a complete infrastructure, tuned from software to hardware to keep the GPUs busy for workloads at any scale.





#### **AIRI TECHNOLOGY STACK**

EXTENDING THE POWER OF NVIDIA DGX A100 SYSTEMS FOR AI-AT-SCALE



AIRI is built with a

complete software

stack enabling data
scientists to get up and

running in a few hours, not weeks or months.

# **CUSTOMER HIGHLIGHT**

# LEADING SOLUTIONS PROVIDER BRINGING AI TO ALL ENTERPRISES

ElementAl is an artificial intelligence solutions provider that gives organizations unparalleled access to cutting-edge technology. It is founded by leading Al experts, including Yoshua Bengio, who is widely considered to be one of the three pioneers of deep learning.

"Our team at Element AI is already benefiting from the AIRI architecture and how it simplifies implementing more efficient AI Infrastructures for the enterprise," "Together with the NVIDIA A100 GPU and the PureStorage FlashBlades—AIRI takes building a scalable but also very flexible infrastructure to the next level,"

- Ludwig Gamache, Director of IT at Element AI





