



# Simplify AI at Any Scale

Introducing AIRI//S™—Modern AI Infrastructure  
for the Modern Enterprise

NVIDIA DGX A100 system  
features eight NVIDIA GPUs and  
two 2nd Gen AMD EPYC processors



# Accelerate Your AI Workflows with AIRI//S™

Across all industries, enterprises are investing in artificial intelligence (AI) to drive business transformation. No longer limited to academic institutions and scientific research projects, AI is used to accelerate enterprise imaging workflows and genetic research, advance AI analytics in the automotive industry, streamline supply chains, and create better customer experiences. These enterprises want to power AI insights and speed the time to market for innovative breakthroughs.

The problem? The legacy infrastructure to support these efforts can't keep up. In an [IDC survey](#) from earlier this year, respondents noted that the lack of purpose-built architecture often caused AI projects to fail.

If your organization is ready to start using AI or take it to the next level, your infrastructure should support, not stall, your efforts. It should also make collaboration across teams easier and enable you to meet your organization's AI initiatives.

Now, you can invest in a cost-effective end-to-end AI solution that can support all your teams' needs. You can enable IT teams to be more strategic and support data scientists and engineers to run experiments and build great models. And DevOps teams can industrialize the AI pipeline and get models into production faster.

In this ebook, discover why AIRI//S™—the next evolution of complete AI-ready infrastructure from Pure Storage® and NVIDIA—is an easy-to-use, scalable, and future-proof solution you can use across your organization to give your business a competitive edge with AI.



“Oftentimes storage can become one of the most complex parts of the infrastructure. Having storage as one of the least complex parts of our infrastructure—the it-just-works part—is something very valuable to me.”

**JIM BENEDETTO, CHIEF DATA OFFICER,**  
CORE SCIENTIFIC [“Core Scientific Advances AI-Enabled Applications With AIRI”](#)



## **Simplify AI Infrastructure Complexity**

One of the major challenges when it comes to deploying enterprise and infrastructure is a lack of simplicity. As the world of AI continues to evolve, so do the systems needed to support it. AI Infrastructure can be complex to implement and manage, making it a challenge for infrastructure teams and a source of frustration for data teams. Designing and configuring do-it-yourself (DIY) infrastructure requires an investment of time and resources that may result in unplanned delays, bottlenecks, and downtime.

AI generates a massive amount of data and requires an environment that can manage it efficiently and support rapid deployment. To power enterprise-level applications and solutions, you need an enterprise-ready technology stack to match.

AIRI//S accelerates and simplifies the process of deploying and running complex AI-ready infrastructure. This ensures that your IT teams aren't overwhelmed with increasing AI requirements and data teams spend more time running experiments and building models rather than worrying about infrastructure.

## **Meet AI Performance Demands at Any Scale**

Your infrastructure should support the vast amounts of data that feed your AI initiatives. As your business and customer base grows, you need the ability to scale operations quickly. AIRI//S is optimized out of the box to deliver multi-dimensional performance for all types of GPU-powered workflows. It offers the stability to support multiple AI data science initiatives and pipelines simultaneously.

The high-performance infrastructure found in AIRI//S efficiently processes large data sets that your data scientists can quickly analyze, alleviates potential bottlenecks, and supports fast read and write speeds required for complex AI calculations. Data scientists are now able to quickly analyze massive amounts of data on a scale that was not possible with legacy IT systems.

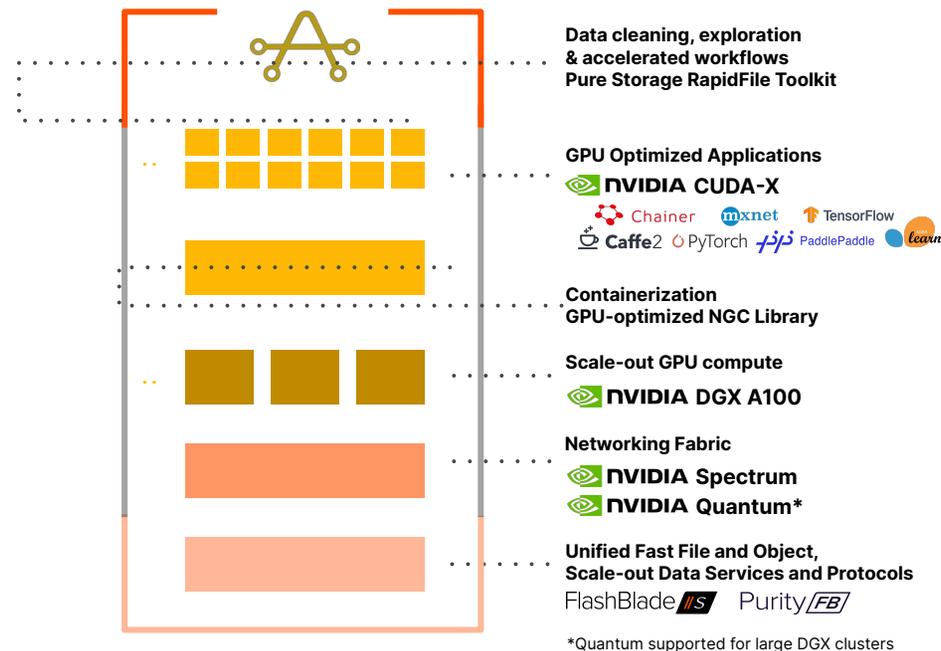
With AIRI//S, you can start your AI journey at any scale and grow at your own pace with a simple, scalable architecture to facilitate faster innovation.

## Simplify AI Infrastructure Complexity

An always modern AI platform requires a future-ready solution that can process massive amounts of data in various formats and at high speeds. Meet your AI workload requirements today and adapt your infrastructure as your data science and customer requirements change. AIRI//S is an end-to-end AI pipeline solution. Powered by the new Pure Storage FlashBlade//S™ and the latest NVIDIA DGX™ systems AIRI//S is built with future innovations in mind.

FlashBlade//S™ offers higher performance and increased capacity and is built with a modular architecture where storage is disaggregated from compute. For example, if you want to add new workloads with more data, or power new AI applications, you can build up AIRI//S with more compute power or more capacity seamlessly with non-disruptive updates to your FlashBlade//S. You can also add NVIDIA DGX systems as needed to scale GPU performance.

## AIRI//S Technology Stack



## Pack Performance and Capacity into a Small Footprint

As sustainability efforts become a higher priority, you can help meet your organization's environmental goals by minimizing waste and using less power and space. AIRI//S is a sustainable and efficient AI infrastructure. FlashBlade//S provides higher density, greater capacity (up to 1.92PB/chassis) and higher performance (greater than 2x increase over the previous-generation FlashBlade®), all while also consuming 48% less power (compared to alternative scale-out NAS platforms). Additionally, the Multi-Instance GPU (MIG) technology inside DGX A100 enables administrators to assign dedicated resources that are right-sized for specific workloads.

# Helping Customers across Multiple Industries with Their AI initiatives

## Chang Gung Memorial Hospital: Overcoming the challenges of AI and deep learning

Chang Gung Memorial Hospital (CGMH) is the largest medical center in Taiwan, offering professional medical services and holistic health care. CGMH founded the Center for Artificial Intelligence (AI) in Medicine to strengthen clinical applications of AI and deep learning. As medical data and projects quickly ramped up, the center realized it needed a more stable infrastructure to handle increased workloads. Maintaining the original size of the data while ensuring data integrity was also critical.

After the Center for AI in Medicine installed Pure Storage FlashBlade and AIRI into its infrastructure, training time has been reduced from seven days to one day, increasing computing efficiency by seven times. It now has delivered over 3:1 data reduction ratio for massive unstructured data. The single storage platform supports the computing power of over 10 AI servers.



嘉義長庚紀念醫院  
Chang Gung Memorial Hospital, Chiayi



CHANG GUNG MEMORIAL HOSPITAL (CGMH),  
the largest medical center in Taiwan

## Results after Adopting AIRI: Chang Gung Memorial Hospital



Training time has been reduced from 7 days to 1 day, increasing computing efficiency by 7 times



Over 3:1 data reduction ratio for massive unstructured data



A single storage platform supports the computing power of over 10 AI servers

# Helping Customers across Multiple Industries with Their AI initiatives

## NavInfo (Europe) Drives Real-time AI Analytics

NavInfo (Europe) produces advanced mapping and simulation models for navigation purposes. One of its biggest challenges is accurately interpreting camera images. NavInfo uses data from the many sensors that are in cars to train AI models, which greatly increases their accuracy.

**When NavInfo needed a high-performance infrastructure to scale up and accelerate advanced AI analytics, it chose AIRI.**

Now, highly complex AI models run efficiently to power navigation services, and AI tasks can run transparently on any available server at >80.000 IOPS. As a result, NavInfo innovates and develops new navigation services faster.

“Thanks to the AI power of AIRI, we can provide customers in the automotive industry and other domains such as smart cities and asset management with advanced custom solutions,

**FRANK GEUJEN, PROGRAM MANAGEMENT OFFICE DIRECTOR, ADVANCED RESEARCH LAB, NAVINFO (EUROPE) B.V.**



# Enable AI Success with AIRI//S from Pure Storage and NVIDIA

Take the next step in your AI journey with the confidence of a proven solution that's optimized for future innovation built on two industry leaders. Pure Storage is the market leader in all-flash storage, and NVIDIA is the market leader in AI hardware and software.

AIRI//S accelerates time to competitive advantage by minimizing design complexity while providing an agile, efficient, and future-ready AI platform. Simplify AI deployment and scale quickly and easily so your teams can focus on discovering critical insights and outcomes faster instead of managing infrastructure.

Take your organization's AI efforts to the next level with simple, scalable AI infrastructure from Pure Storage and NVIDIA.

**Explore AIRI//S**

## Additional Resources

[Discover More About AIRI//S](#)

[Learn about the Pure Storage and NVIDIA alliance](#)

[Explore More AIRI Case Studies](#)

[Learn More About FlashBlade//S](#)

