run:
ai

CASE STUDY

Zebra technologies effortlessly hops between on–prem and cloud model training with Run:ai's hybrid cloud support

Using Run:ai, Zebra Technologies, a global manufacturing powerhouse, is able to maximize usage of its on-prem GPU cluster, and scale to the cloud for additional compute resources when needed.

Customer Background

Founded in 1969 and active in over 100 countries, manufacturing giant Zebra Technologies empowers front line workers in retail/ecommerce, manufacturing, transportation and logistics, and healthcare. Its vast product line includes barcode scanning, mobile computing and rugged tablets, RFID and real-time location products and other computer vision-focused products. Developing cutting-edge AI / ML models to power the next generation of Zebra's innovative products is at the forefront of what its data science and research teams focus on.

After Implementing Run:ai's Platform

Hybrid AI infrastructure	❯ Boosting compute availability, shortening time to market, and controlling costs
Increase resource availability	❯ Better Data Science
Zero spreadsheets	❯ No more spreadsheets for resource allocation. Run:ai automatically allocates resources on-prem and in the cloud

Challenges

- **Improve GPU utilization and availability of compute resources.** Zebra's researchers, building computer vision AI models, wanted to increase availability of their GPU resources - both on-prem and in the cloud. When a usage spike happened (in case of additional model training, or unexpected prioritization of projects) they wanted to make sure their on-prem resources were exhausted before spooling up additional cloud resources.

- I**mprove the compute allocation process.** Researchers were using static Excel spreadsheets to manage resource allocation, an inefficient, manual process.

- **Hybrid cloud challenges.** The lack of centralized monitoring meant that users had to work with different tools to manage multiple clusters across cloud and on-prem, which further complicated resource allocation and cost calculations.

Solution

Run:ai's platform capabilities enabled Zebra to achie ve:

> The best of both worlds with a hybrid AI infrastructure: With Run:ai, it's easy, fast, and seamless to allocate and run compute resources across on-prem and cloud clusters. The upshot? usage maximization for the on prem GPU cluster, and enjoying the scalability and availability of extra cloud compute resources when needed. Researchers now always have the resources they need, when they need them, even during a spike.

> Unified and consistent user experience for resource management: Run:ai's centralized monitoring and control panel is a single pane of glass, with centralized and multi-tenant management of resources, utilization, health and performance across any aspect of the AI pipeline, no matter where the workloads are run. The Excel spreadsheets? Gone, forever.

" With Run:ai, we take full advantage of our on–prem cluster, and scale to the cloud whenever we need to. Run:ai helps us do that out of the box."

Andrea Mirabile, Senior Manager, Computer Vision, Zebra Technologies

About Run:ai

Make data science more productive with the compute power to run more experiments and deploy AI initiatives faster. Run:ai helps organizations accelerate their AI journey, from building initial models to scaling AI in production. Using Run:ai's software platform, companies streamline the development, management and scaling of AI applications across any infrastructure (on-premises, edge, cloud). Researchers gain on-demand access to pooled resources for any AI workload. An innovative, cloud-native operating-system helps IT manage everything from fractions of GPUs to large-scale distributed training.
Learn more at www.run.ai.