



Performance Testing

NetApp Solutions

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Table of Contents

Performance Testing 1

Performance Testing

We performed a simple performance comparison as part of the creation of this solution. We executed several standard NetApp AI benchmarking jobs by using Kubernetes, and we compared the benchmark results with executions that were performed by using a simple Docker run command. We did not see any noticeable differences in performance. Therefore, we concluded that the use of Kubernetes to orchestrate containerized AI training jobs does not adversely affect performance. See the following table for the results of our performance comparison.

Benchmark	Dataset	Docker Run (images/sec)	Kubernetes (images/sec)
Single-node TensorFlow	Synthetic data	6,667.2475	6,661.93125
Single-node TensorFlow	ImageNet	6,570.2025	6,530.59125
Synchronous distributed two-node TensorFlow	Synthetic data	13,213.70625	13,218.288125
Synchronous distributed two-node TensorFlow	ImageNet	12,941.69125	12,881.33875

[Next: Conclusion](#)

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