

Slash TCO for AI Workloads by over 50% with Juniper Ethernet and Apstra



Network performance is essential for all workloads, but it's especially **critical for AI and machine learning applications** to fuel the many accelerators and GPUs with data to maximize their utilization and accelerate results.

Many believe an Nvidia InfiniBand fabric is required for this task, but according to recent research from ACG, Juniper Ethernet with RDMA over Converged Ethernet (RoCE v2) and Apstra is a **better, high-performance choice**.

Significantly reduce costs with Juniper Ethernet and Apstra

Choosing Juniper Ethernet solutions managed by Apstra provides enormous cost reductions versus InfiniBand fabrics.

56%
OpEx Savings

55%
CapEx Savings

55%
TCO Savings

Ethernet advantages versus InfiniBand

With Ethernet connectivity currently reaching speeds up to 800Gbps, there is no longer an InfiniBand throughput advantage. And Ethernet delivers many important advantages versus InfiniBand.



Open, standards-based protocol



Broader ecosystem support and pool of expertise



Simpler operations



Vendor choice and highly available



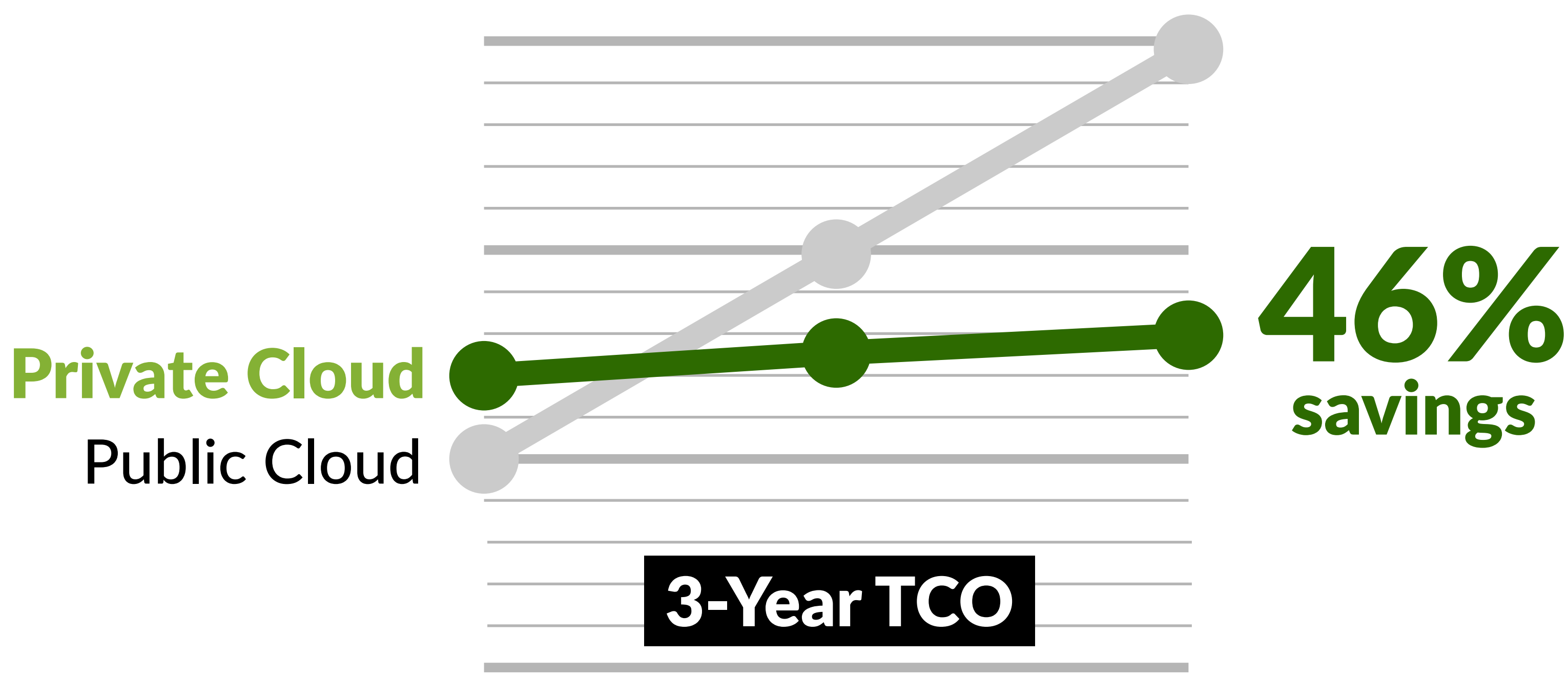
Resiliency – no single point of failure



Faster innovation, performance, and cost reduction

Why choose private cloud over public cloud?

While some organizations look to the public cloud to run their AI workloads, detailed analysis by ACG Research shows those organizations could realize significantly lower TCO running their AI workloads on a private cloud infrastructure.



Juniper Ethernet with RoCE and Apstra automation delivers a **55% TCO savings over three years** compared to InfiniBand. The rapid development and widespread familiarity with Ethernet technologies make it a **more cost-effective choice** for AI data centers.

Ray Mota, CEO and Principal Analyst, ACG Research

Learn more

Review the whitepaper for more details about how a Juniper Ethernet-based private cloud with Apstra automation can maximize your AI possibilities:



<https://www.juniper.net/us/en/forms/2024/acg-economics-of-ai-data-center-architecture.html>