Simplify the Deployment and Operation of New AI Data Centers

Faster time to value for enterprise AI projects

Learn more about how Apstra empowers organizations to automate and manage their AI data center networks.

Learn more →

Accelerate enterprise transformation through AI

Efficiently manage AI workloads in the data center

Juniper Apstra can help you navigate the challenges associated with new AI data center architectures. Apstra's data center fabric management and automation software guide you at every step along the network life cycle, from Day 0 design to Day 1 deployment through Day 2+ ongoing operations.

The capabilities you need

Intent-based networking for AI data centers

Maximize utilization of expensive GPUs and minimize job completion times to optimize the economics of your AI DCs.

AI data center template designer

Quickly and easily create an optimized AI fabric design tailored to your specific resource requirements and workloads

AI data center fabric auto-tuning

Auto-tune your AI fabric in minutes to minimize packet loss and maximize throughput

Expanded visibility within and beyond the fabric

New pre-defined probes and dashboards and new compute agents deployable on NVIDIA servers to collect telemetry, all with additional granularity and context

The answer: Juniper Apstra

Apstra runs AI data centers

AI traffic patterns require new data center architectures and new operational practices. Fortunately, Juniper Apstra handles these new AI DC architectures and fabric tuning challenges with ease, from fabric design with Apstra's AI DC blueprints to auto-tuning AI training networks to save you countless hours and frustration.

How it works

Address operational challenges

AI data centers introduce new levels of complexity to the typical enterprise organization. Use Apstra to design, build, and operate scalable AI data center fabrics. Deploy in days, not weeks, so you can start realizing ROI sooner.

Idle GPU investments

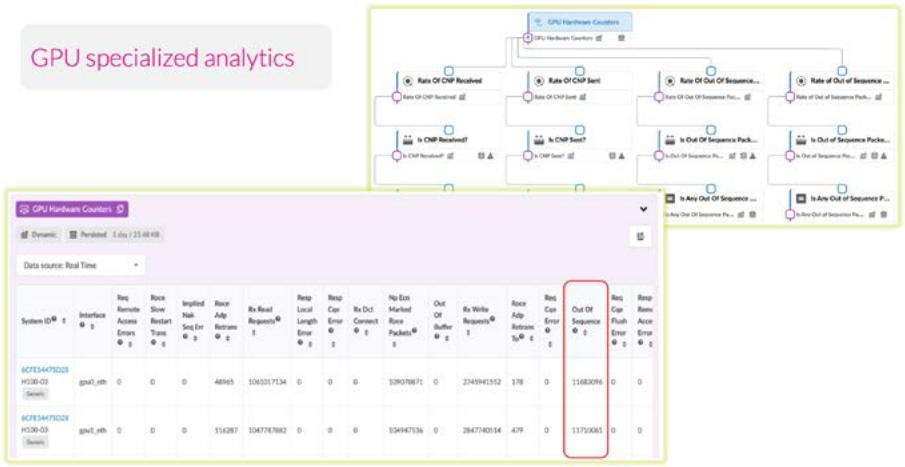
Don't let your GPUs sit idle while you spend weeks deploying the infrastructure. Apstra lets you pre-stage your entire network before your infrastructure arrives in the warehouse.

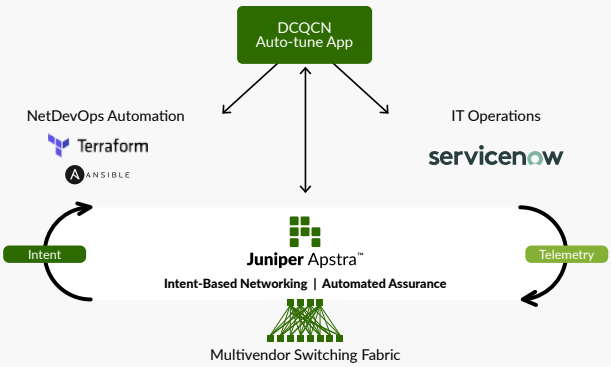
Cabling the AI data center

AI training environments' many connections make them complicated and error prone. Apstra blueprints provide a cabling map for rapid and high accuracy cabling work.

Configuring host GPU NICs

Automatically configure the GPU NICs with the correct IP address and routing information derived from the GPU network blueprint.





Our advantage

Juniper's AI data center operations solution

Apstra is part of Juniper's data center solution—the fastest and most flexible way to deploy high performing networks and the simplest to operate with limited IT.

Why Juniper

Juniper Networks: Driven by experience

Juniper Networks believes that connectivity is not the same as experiencing a great connection. Juniper's AI-Native Networking Platform is built from the ground up to leverage AI to deliver exceptional, highly secure, and sustainable user experiences from the edge to the data center and cloud. Additional information can be found at Juniper Networks (www.juniper.net) or connect with Juniper on X (Twitter), LinkedIn, and Facebook.

More information

Take a deep dive into Juniper Apstra for AI data centers

To learn more about Juniper Apstra, visit our website at https://www.juniper.net/us/en/products/network-automation/apstra.html

For technical data sheets, guides and documentation, visit https://www.juniper.net/documentation/product/us/en/apstra/

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