

High Scale Networking

DriveNets is a rapidly growing software company that has created a radical new way for service providers and hyperscalers to build their networking infrastructure.

While the transition to software-based, cloud-native architectures has grown, most networks and AI networking infrastructures have remained hardware-centric, based on complex and monolithic systems, and, in some cases, proprietary technologies. These infrastructures do not take advantage of the latest technologies enabling greater architectural flexibility and performance at scale.

DriveNets Network Cloud and DriveNets Network Cloud-AI are new innovative networking solutions that apply the cloud architectural approach to high-scale networking. They bring together the scalability of standard Ethernet Clos architecture with the high performance and reliability of service provider networking, delivering optimal networking performance, scale and cost structure for service providers and hyperscalers.

Innovative Networking Solutions

DriveNets networking solutions uniquely support the complete virtualization of network resources. This enables service providers and hyperscalers to meet growing service demand more efficiently than today's monolithic routers and more reliably than traditional Clos switches. DriveNets' software runs over standard white box hardware supplied by multiple ODMs, elastically scaling network capacity by adding additional white boxes into physical network clusters. Its software architecture ensures that all these white boxes act as a single network entity or one elastic lossless network fabric.

For service providers, DriveNets Network Cloud disaggregated network model enables the physical infrastructure to operate as a shared resource supporting multiple networks and services – from core and aggregation to peering and edge use cases.

For cloud providers and hyperscalers, DriveNets Network Cloud-AI offers the highest performance at scale – up to 32K GPUs (800 Gbps) per cluster. Based on the largest-scale DDC (Distributed Disaggregated Chassis) architectures in the world, Network Cloud-AI provides predictable, lossless back-end cluster connectivity and 10%-30% improvement in JCT (job completion time) of high-scale, high-performance AI workloads. It maintains a GPU-, ASIC- and ODM-agnostic architecture and supports over 100% return on investment (ROI) at day one.

DriveNets at-a-glance

- **Founded:** 12/2015
- **Headquarters:** Israel
- **Mission:** Transform service providers' and hyperscalers' infrastructures by removing monolithic barriers and accelerating network performance to drive scale, innovation and business growth
- **Vision:** Accelerate networking innovation to empower a future of new connected experiences
- **Funding:** Total to date \$587 million

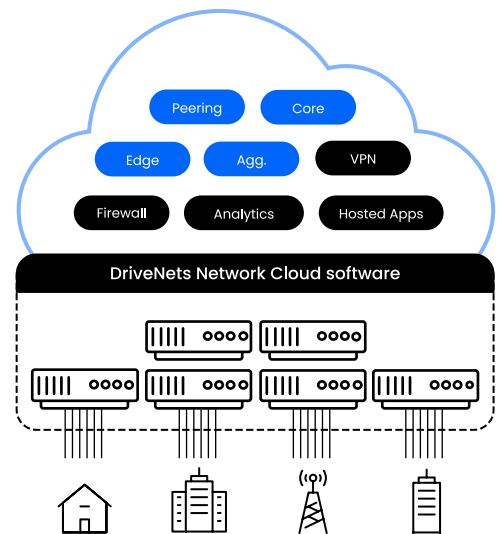
High-Scale Routing

Build Networks Like Cloud

DriveNets Network Cloud is a software-based networking solution for any network use case – from core and peering to aggregation and edge. The solution is based on microservices and containers running on a shared infrastructure – a cluster of standard networking white boxes.

- **Fast innovation:** software-based architecture allows for faster feature development and time to market of new use cases
- **Cloud economics:** disaggregated shared infrastructure supports lower total cost of ownership (TCO) based on commoditized hardware, optimal port utilization and simplified operations
- **Elastic scale:** dynamic and efficient scaling from a single 2.4TB standalone box to an 819TB cluster, with dozens of white boxes operating as a single routing entity and high port density (1G-800G)

DriveNets Network Cloud



"The part that DriveNets we're using is in our core backbone. We are carrying 590 petabytes every day. That's a lot of traffic on our core backbone. Already over 50% of the traffic is running on an open disaggregated architecture, where the network operating system was DriveNets"

Yigal Elbaz, CTO of Network Services, AT&T

AI Networking Fabric

Performance at Scale

DriveNets Network Cloud-AI is a software-based networking infrastructure that provides the highest performance at scale with standards-based Ethernet – delivering highest performance without vendor lock-in.

- **Best job completion time (JCT) performance:** predictable, lossless back-end cluster connectivity and 10%-30% improvement in JCT (job completion time) of high-scale, high-performance AI workloads.
- **Tier-1 ecosystem:** field-proven solution, supported by a large industry ecosystem of leading hardware vendors (including chip manufacturers, white box ODMs, and optical equipment producers), system integrators, and software providers
- **Optimal scaling:** uniquely scaling to clusters of hundreds of white boxes (2.5 Pbps), supporting up to 32K GPUs (800 Gbps)

DriveNets Network Cloud-AI

