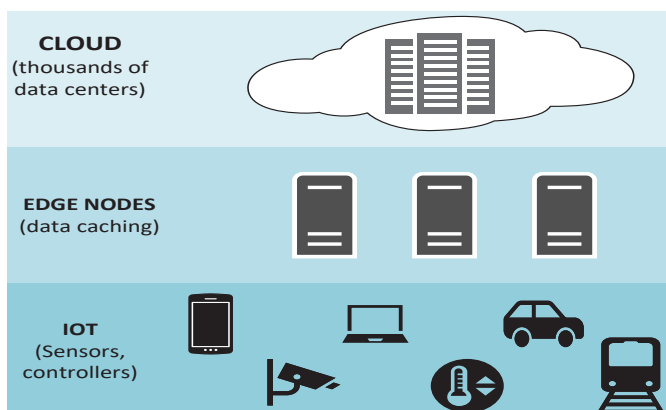# NORSEMAN
DEFENSE TECHNOLOGIES

AI at the
Edge

Norseman is a Small Business Solution Provider, partnered with more than 300 OEM's and Service Integrators to provide our Federal, State & Local Government and Education customers with solutions that solve their business problems within their real-world constraints and challenges. We will help you succeed faster.

CHALLENGES

Companies without access to edge computing face challenges in processing data in real-time, leading to delays in critical decision-making for applications like autonomous vehicles, industrial automation and healthcare. Relying solely on centralized systems increases latency, bandwidth, costs and security risks as sensitive data is transmitted over networks. Gaps in existing tools include:

› Vulnerabilities in securing containerized environments during deployment.

› Limited visibility into real-time analytics capabilities in traditional centralized systems.

› As edge computing adoption rises, organizations face challenges in balancing scalability, security, and portability in increasinlgy complex environments (centralized cloud systems).
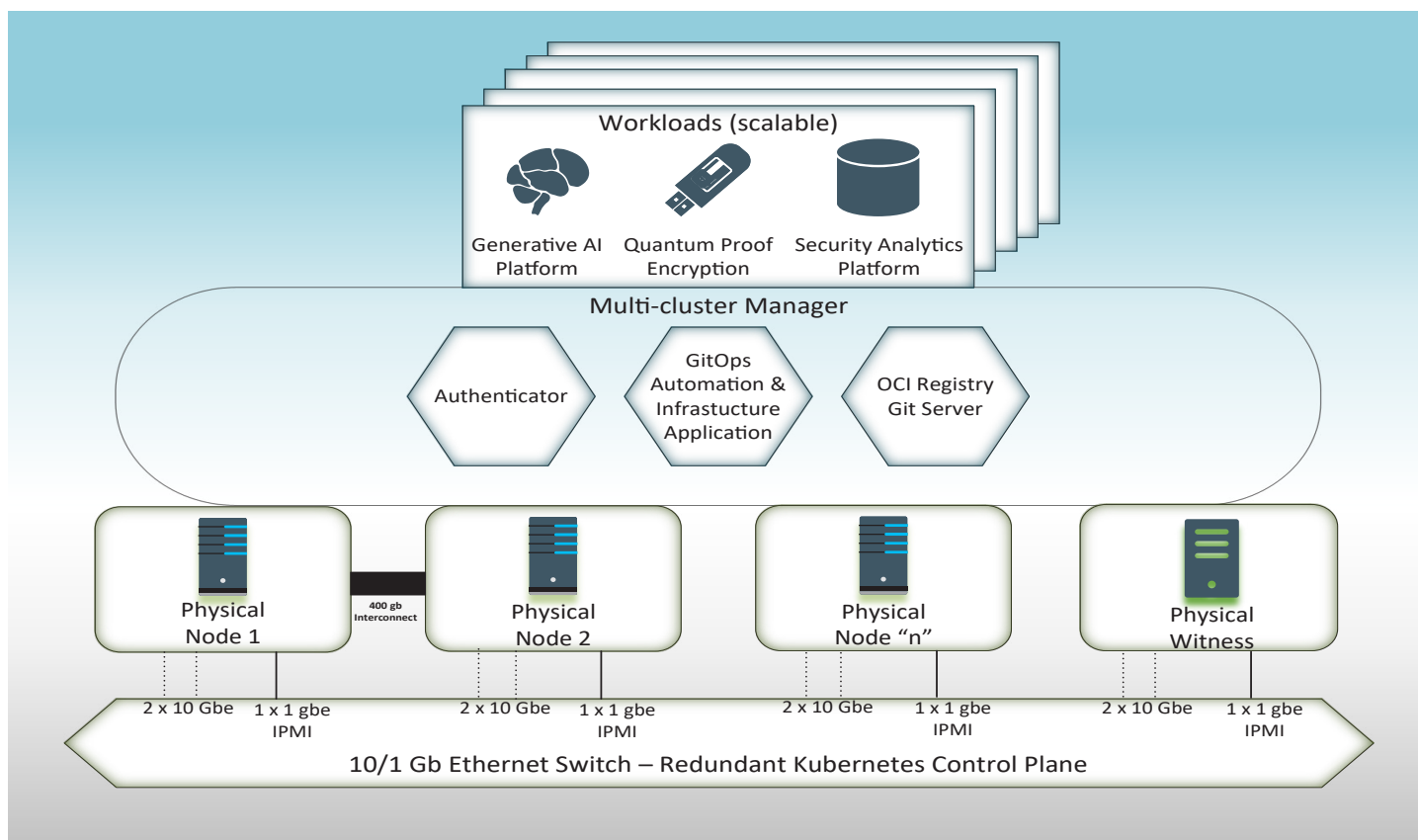
CLOUD
(thousands of data centers)

EDGE NODES
(data caching)

IOT
(Sensors, controllers)

Introduction to
Edge Computing

In today's fast-evolving landscape, the need for real-time data processing and actionable insights at the edge has become a critical priority for mission-critical operations. Odin's Edge, powered by Norseman Defense Technologies, is designed to address these demands by delivering scalable, high-performance computing solutions in ruggedized, portable environments. This solution brings unparalleled flexibility, enabling data-driven decisions at the tactical edge while ensuring robust security and seamless scalability.

Use cases

Our solution supports a variety of edge AI inferencing use cases, including

› **Smart Surveillance**: Implement intelligent surveillance systems that can detect and respond to security threats concurrently.

› **Predictive Maintenance:** Monitor and analyze equipment in actual time to predict & prevent failures, reducing downtime and maintenance costs.

› **Healthcare Monitoring**: Monitor patient vitals and conditions in real-time, enabling prompt medical interventions.

› **Autonomous Vehicles:** Enable instantaneous decision-making for autonomous vehicles, improving navigation and safety.

Solution benefits

Collaborative Approach
Odin's Edge is a result of collaboration between Norseman Defense Technologies, SuperMicro, Rancher and other industry leaders. This partnership integrates engineering expertise to create tailored solutions for specific operational needs.

> **Real-Time Insights:** Achieve immediate, actionable insights at the edge, enabling timely decision-making.

> **Low Latency:** Reduce latency with edge-based processing, ensuring faster data analysis and response times.

> **Scalability:** Easily scale your AI workloads across multiple edge devices with Kubernetes Management Stacks.

> **Advanced Analytics:** Gain deeper insights and improved data retrieval with an open-source search and analytics engine, showcased through tailored demos.

Conclusion

Odin's edge sets a new standard for edge computing by delivering robust, scalable and secure solutions tailored to meet the demands of mission-critical environments. By combing cutting-edge technologies, seamless integration and real time data processing, NDT continues to empower organizations to operate smarter and faster at the edge. As the future of computing evolves, Odin's Edge ensures readiness for the challenges of tomorrow.

Advanced Capabilities

Tactical edge servers

1 Featuring the latest Intel "Sierra Forest" CPU and high-performance NVIDIA GPUs, providing the necessary computational power for real-time AI inferencing.

Kubernetes Cluster Management

2 Offers an air-gapped HCI and Kubernetes Management Stack, simplifying the deployment and management of Kubernetes clusters to ensure seamless orchestration of AI workloads across edge devices.

Leveraging AI

3 Utilizes a low-code/no-code software platform and advanced sensor technology to collect information at the edge. Its platform processes data in real-time to deliver actionable insights to the user.

SIEM

4 Security Information and Event Management. Provides a full stack for enhanced data search and analytics capabilities, enabling rapid data retrieval and visualization, with demos showcasing their performance on this hardware.

FHE - Quantum Proof Encryption

5 Implements Fully Homomorphic Encryption (FHE) for secure data processing at the edge.

8172 Lark Brown Rd Suite 201, Elkridge, MD, 21075

Phone : (410) 579-8600 | Email : sales@norseman.com