



PARTNER SOLUTION BRIEF

# Unlocking the Potential of the Distributed Edge

Enabling cloud-like application operations in distributed edge environments is a critical business challenge for enterprises. By joining forces, AHEAD and ZEDEDA create a unique opportunity to help enterprises modernize operations and unlock new revenue streams at the edge.



## Joint Value Proposition

ZEDEDA is at the forefront of AI-ready management and orchestration for applications at the Distributed Edge—including stores, dealerships, oil rigs, utilities, factories, warehouses, vehicles, and ships. With ZEDEDA's solutions, enterprises and service providers can securely deploy, manage, and orchestrate their applications and fleet of connected assets at the edge across multiple industries, all while enhancing visibility, security, and control. This ensures a seamless continuum from cloud to core to edge.

Organizations that partner with ZEDEDA and AHEAD achieve a comprehensive approach to modernizing their IT and OT environments. ZEDEDA enables customers to deploy cloud-native applications at the edge while maintaining enterprise-grade security and control. AHEAD manages full-service integration and logistics for far edge deployments at scale. AHEAD's end-to-end services include systems integration, warehousing, kitting, supply chain transparency, asset lifecycle visibility, and warranty and support contract management, enabling customers to fully-outsource their edge infrastructure.

## ZEDEDA

- Provides SaaS-based orchestration and full lifecycle management of edge assets and applications, delivering a cloud-like experience at scale, supporting Zero Touch deployments from a handful to thousands of distributed edge nodes.
- Enables seamless deployment, updates, and monitoring of distributed infrastructure with the agility and scalability of cloud environments, ensuring enterprises can efficiently scale their edge operations.

## Edge Virtualization Engine (EVE)

- Delivers a data center-like experience at the edge, offering VM and container support for running diverse workloads with an open, flexible, and secured-by-design architecture.
- Is available as an open-source project under LF Edge, a part of the Linux Foundation, ensuring vendor-neutral development, broad industry adoption, and interoperability across diverse edge environments.
- Reduces vendor lock-in and fosters innovation by enabling seamless integration with existing IT and OT systems.

## Robust Ecosystem

- Includes solutions for security, network connectivity, runtime & data flow management, computer vision, IoT management, OT functions, and more, supporting a broad range of edge workloads.
- Supported by a diverse set of hardware partners, ensuring seamless compatibility and optimized performance.
- Collaborating with leading AI technology partners to enhance edge intelligence, enabling real-time decision-making and advanced analytics.

## Zero Touch

Remotely manage and provision distributed edge hardware through automated cloud-based downloads. This streamlined process eliminates the need for manual setup, allowing for effortless scaling of operations. Efficiently deploy thousands of systems across your fleet without on-site intervention, ensuring secure, reliable connectivity throughout your infrastructure.

## Zero Trust

Addressing the unique security challenges of edge infrastructure deployed outside traditional data centers, ZEDEDATA's security model offers robust solutions to prevent hardware spoofing, detect software stack anomalies, and ensure device integrity.

## Key Features



### END-TO-END MANAGEMENT

- API-first architecture
- Visibility into status of hardware and applications
- Detailed reports: Alerts, resources utilization, analytics
- SOC2 and ISO 27001 certified



### OPEN ECOSYSTEM

- Marketplace for native ZEDEDATA and partner-certified applications
- Bulk software deployment
- EVE-OS open architecture
- Pre-provisioned hardware from partners



### FLEXIBILITY

- Support for ARM, x86, and GPU-based architecture
- VPN connectivity
- VM, container, and cluster support
- Any cloud support



## AHEAD Foundry™

AHEAD centralizes the design, integration, and deployment of IT/OT infrastructure— from the data center to the edge, and beyond. AHEAD Foundry integration facilities offer over 30 years of engineering expertise in supporting infrastructure modernization initiatives on a global scale, and creating the rock-solid foundation needed to implement critical edge AI solutions as part of an infrastructure growth strategy.

### Edge AI Solutions at Scale

- Deep engineering acumen, paired with fine-tuned hardware and AI models, creates a seamless edge experience.
- Comprehensive end-to-end IT asset management for IT/OT teams simplifies designing and managing edge hardware.
- Hardware integration and pre-loading ZEDED A EVE at scale.
- Depot services streamline edge fleet management, including smart hands and break/fix support with manufacturers.

### Driving Value Across the AI Journey

- End-to-end AI services span use case identification to inference, and managed services after day two.
- Strong partnerships with AI industry leaders like ZEDED A, NVIDIA, and more accelerate time to value throughout the enterprise AI journey.
- AHEAD manages the load of edge infrastructure implementation, effectively reducing edge project timelines from years to months.

### AHEAD Hatch® Platform for IT Asset Intelligence

- Organizations using AHEAD's Hatch software for IT product lifecycle and fleet management achieve consistency across their infrastructure, from cradle to grave.
- Hatch provides a single pane view and real-time visibility for asset management across staged rollouts, including procurement orders, logistics, and inventory by site.
- Hatch facilitates automated field updates over the lifecycle of the technology, to reduce site management overhead and improve quality and safety.

## AHEAD + ZEDED A: Enabling Scalable, Secure, and Efficient Edge Operations

By collaborating with AHEAD, enterprises can leverage ZEDED A's edge orchestration platform alongside AHEAD's expertise in modern infrastructure and cloud transformation. Contact [AHEAD](#) or [ZEDED A](#) for more information.

## Customer Pain Points and How We Solve Them

Pain Points	Solution
Complexity of managing large-scale edge deployments	ZEDEDA's cloud-based orchestration ensures seamless, zero-touch provisioning, full lifecycle management, and updates, reducing manual intervention and operational overhead.
Security vulnerabilities in distributed environments	Real-time analytics and centralized monitoring enhance operational control.
Integration challenges with existing IT & OT systems	Open APIs, vendor-agnostic architecture, zero-touch deployment capabilities, and full lifecycle management enable easy interoperability and simplified edge management.
Connectivity challenges in distributed environments	ZEDEDA ensures secure, seamless edge connectivity across diverse network environments, including air-gapped sites and locations with intermittent connectivity, enabling reliable operations over any network transport.

## Business Benefits and Revenue Opportunities

Edge solutions are inherently bespoke, industry-specific, and demand high levels of customization and integration. Additionally, the networking SLA requirements and the need for multi-channel IP connectivity (broadband, mobile, satellite) create unique revenue streams for managed service providers. Deploying DC-like computing power at the edge is a critical capability that enterprise customers require.

This complexity presents significant sales and revenue opportunities for collaboration in:

- **Consulting Services:** Modernizing edge environments and designing end-to-end solutions.
- **Professional Services:** Integrating and deploying edge solutions with infrastructure software, hardware, and applications.
- **Managed Services:** Providing ongoing support and operational management of edge environments.

## Markets



### Retail

- Support smart stores, supply chain automation, and AI-powered customer insights.
- Real-time inventory tracking, improved customer experience, and shrinkage prevention.



### Manufacturing & Industrial

- Consolidate workloads by running legacy applications in virtual machines alongside modern applications in containers.
- Enable predictive analytics, real-time monitoring, robotics integration, reducing downtime and increasing operational efficiency.



### Energy & Utilities

- Remote asset management, grid modernization, AI-based anomaly detection.
- Optimizing field operations and maintenance improving safety and reducing the need for local resources.



### Automotive & Transportation

- Autonomous vehicle infrastructure and fleet/logistics management.
- Provide turnkey secure edge infrastructure to enable automated software updates for new and legacy cars managed entirely from the cloud.

## Executive Summary Benefits

By leveraging ZEDED A's orchestration capabilities and AHEAD's deep expertise in IT infrastructure, organizations can unlock:

- **Scalability** – Deploy, manage, and orchestrate thousands of edge devices with ease.
- **Security** – Built-in Zero Trust security model to protect applications and data.
- **Operational Efficiency** – Reduce complexity, streamline operations, and lower costs.
- **Interoperability** – Open ecosystem that integrates seamlessly with existing IT & OT systems.

## Ready to Learn More?

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