ZEDEDA Cloud Agility at the IoT Edge



The explosion of IoT data, coupled with bandwidth and network constraints, is driving the need for edge computing solutions that run closer to the source of data generation. Existing IoT edge solutions are complex due to a diverse mix of technologies, domain expertise and lack of standardized infrastructure, resulting in disparate and non-integrated solutions that are difficult to deploy, manage and secure at scale.

ZEDEDA eliminates the complexity of today's solutions through an open and purpose-built IoT edge orchestration framework that breaks down silos and delivers the agility customers need to evolve their connected operations with a multi-cloud strategy. Customers can now easily dropship hardware without onsite expertise for installation, add intelligence on-demand to any edge compute at scale, and instantly unlock the value of IoT data to make real-time decisions, maximize operational efficiency and drive new business outcomes.

Visibility, Control and Security for the Distributed IoT Edge



ZEDEDA is a simple and scalable cloud-based IoT edge orchestration solution that delivers visibility, control and security for the distributed IoT edge. ZEDEDA leverages EVE, an open edge computing engine (part of LF Edge), to simplify the orchestration of containers and clusters (Docker and Kubernetes) and virtual machines (VMs) for cloud-native and

legacy applications on any hardware (Arm, x86 or GPU). ZEDEDA also allows customers to connect to any cloud or on-premises systems. By enabling freedom of hardware, application and cloud at IoT scale, ZEDEDA provides a flexible foundation for customers to avoid vendor lock-in and consolidate workloads, while future-proofing edge deployments.

ZEDEDA Advantage



Zero Limits: Use any hardware, deploy any app and connect to any cloud—no vendor lock-in! Onboard and manage any number of nodes (IoT scale), consolidate workloads (run legacy and cloud-native apps simultaneously) and bulk deploy (or update) apps remotely with a single click of a button.



Zero Touch: Get devices up and running quickly. Dropship and instantly provision hardware remotely at scale, with all OS and system software automatically downloaded from the cloud. Upgrades are risk free (no bricking) with automatic roll-forward or roll-back and failover mechanisms (configuration, images, network and ports).



Zero Trust Security: Eliminate hardware spoofing, detect anomalies in your software stack, and ensure device integrity with hardware root of trust (e.g., TPM) while governing data flow across apps and nodes with a distributed firewall. Easily meet compliance and regulatory requirements, reduce data breaches and stop leakage with Role-based Access Controls (RBAC), cloud security and centralized management.



Key Features

Remote & Centralized Cloud-based Deployment and Management at Scale

- Deploy or upgrade apps and base OS of hardware
- Visibility, reports and status of all hardware and apps
- Alerting, events, resource utilization, and analytics

Security and Privacy

- Hardware root of trust (e.g., TPM)
- Measured boot and remote attestation
- Crypto-based identification (no username/passwords)
- Data encryption at rest and in-flight
- Distributed firewall for every app
- Physical security port isolation
- Role-based access control (RBAC)

IoT Edge Application Orchestration

- Marketplace for ZEDEDA and partner-certified apps
- Visibility, reports and status of all hardware and apps
- Alerting, events, resource utilization, and analytics

Freedom of Choice

- Any ARM, x86, or GPU-based hardware
- Support VMs, containers & clusters (Docker & Kubernetes)
- Any cloud (AWS, Microsoft Azure & Google Cloud Platform)
- One-click VPN connectivity to any cloud
- Overlay network for intra-edge compute node connectivity
- Policy-based network failover; ethernet, LTE, satellite & Wifi

