

A vertical, narrow photograph of an industrial factory floor, showing complex machinery, pipes, and electrical conduits. The image is oriented vertically and has a red-to-white gradient overlay on its right side. The background of the entire page is white, with a solid red horizontal bar at the bottom.

SOLUTION BRIEF

# Unlock the Power of Edge Computing in Industrial Automation

## Revolutionizing Industrial Manufacturing

Digital transformation has become a key driver in the industrial automation sector, with businesses seeking to leverage the power of data and increased automation to optimize operations and gain a competitive advantage. One of the significant challenges in this transformation journey is the increasing amount of data generated from the factory floor. The traditional method of processing data in a centralized data center is no longer sufficient, as the need for real-time insights and low-latency decision-making becomes critical. This massive amount of data can be managed locally by deploying edge architectures to process data onsite rather than sending to the cloud.

Moving to an edge architecture allows real time feedback from new technologies like edge computer



Manufacturers can provide a solid foundation for their edge efforts across their entire organization by leveraging edge orchestration to minimize the complexity and deploy projects across physically distributed locations, securely, and with full visibility.

vision, predictive maintenance, and edge AI, unlocking new opportunities for businesses to leverage real-time insights and intelligence, boost efficiency and drive down costs in an increasingly competitive environment. It also allows new potential revenue streams for OEMs and machine builders through new applications and use cases.

When moving to an edge architecture, businesses need to ensure the security, privacy, and governance of their data, as they need to protect their intellectual property (IP) and comply with numerous industry regulations. Also, with a widely deployed base of legacy equipment: connected instrumentation, control systems, and even robotic process automation, it is often challenging for manufacturers to modernize their operations while keeping costs down.

### Successfully implementing an edge architecture strategy requires solving issues like:

- **Highly distributed environments**  
Multiple locations, often geographically dispersed, require any solution to be easily managed remotely and securely with no onsite IT staff.
- **App management**  
Keeping applications up to date with the latest software patches and deploying new applications can be time-consuming and resource intensive.
- **Real time monitoring**  
Industrial businesses need to continuously monitor the status and health of their processes and equipment to ensure smooth operations and timely maintenance.
- **Data integrity**  
Meeting regulatory requirements and passing audits to ensure data security, privacy, and governance can be demanding for industrial businesses.
- **Security**  
Protecting distributed and physically exposed systems and data from cyber and physical threats to ensure secure communication between devices and the cloud is a critical concern for industrial businesses.

## Management and Orchestration for the Distributed Edge

ZEDEDA delivers an open, distributed, cloud-native edge management and orchestration solution, simplifying the security and remote management of retail edge infrastructure and applications at scale.

ZEDEDA features:

- **Zero Limits** for edge infrastructure options, guest operating systems, applications, network configurations and clouds.
- **Zero Touch** for deployments of edge infrastructure and applications, simplifying installation and bringing the experience of the cloud to distributed locations.
- **Zero Trust** security model addressing the unique, perimeter-less security challenges of edge ZEDEDA is ZEDEDA ensures extensibility and flexibility by utilizing an open partner ecosystem with a robust app marketplace. ZEDEDA allows you to run modern containers and applications side by side with legacy applications on the same edge device.

ZEDEDA reduces the cost of managing and orchestrating retail distributed edge infrastructure and applications, while increasing visibility, security



**ZEDEDA is delivered as a service and includes 24/7/365 support for the open source EVE-OS. ZEDEDA is available to enterprise customers, SIs, and OEMs, with flexible deployment options.**

and control. This results in increased operational excellence and enhanced customer experience, ultimately improving the bottom line and ensuring retailers stand out from the crowd.



### Want to Learn More?

Visit [zededa.com/product](https://zededa.com/product) to learn how ZEDEDA can transform your industrial operations today.



### About ZEDEDA

ZEDEDA makes edge computing effortless, open, and intrinsically secure – extending the cloud experience to the edge. ZEDEDA reduces the cost of managing and orchestrating distributed edge infrastructure, while increasing visibility, security and control.

ZEDEDA ensures extensibility and flexibility by leveraging a partner ecosystem, and EVE-OS, open-source Linux-based edge operating system.



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