Hewlett Packard Enterprise | **intel.** | **C3.ai**

Solution brief

Check if the document is available in the language of your choice.

IMPROVING FEDERAL OPERATIONS WITH AI AT THE EDGE

Unleash the intelligent edge with solutions from HPE, C3 AI, and Intel

Ensure AI readiness at the edge with an intelligent solution that can do it all:

- Maximize the value of operational data

- Accelerate time-to-action

- Reduce complexity of developing federal AI applications

- Optimize asset maintenance and management

- Apply next-generation failure prediction AI algorithms

- Secure supply chains with cyber-resilient technology

Built on robust HPE Edgeline systems, the C3 AI® Suite makes it simpler for government organizations to harness AI at the edge

C3 AI software is layered on top of a container platform to build a comprehensive and adaptable solution. This creates a robust platform for quickly developing, deploying, and operating federal AI applications across remote locations.

TRANSFORMING GOVERNMENT OPERATIONS

In the federal sector, the ability to harness data instantly for strategic decision-making is changing how governments perform, innovate, and prepare for the future. With high-value data streaming from a rising number of sources, government organizations are leveraging artificial intelligence (AI) at the edge to effectively capture troves of information and convert it into insights. Deploying AI where data is generated and decisions must be made eliminates the latency between data collection, analysis, and action. As a result, agencies that span intelligence, defense, and safety can respond to events autonomously and even preemptively.

Hewlett Packard Enterprise, C3 AI, and Intel® have partnered to provide an AI platform that is expertly engineered and integrated to ensure success at the edge—in locations that range from federal headquarters, factory assembly lines, military installations, and equipment in remote areas. The solution is turnkey, allowing Government organizations to accelerate the deployment of AI applications in edge environments for increased uptime, greater operational efficiency, and faster results anywhere in the world.

This Edge AI platform enables immediate analysis of data where the data is created. Organizations can eliminate the time and cost constraints of sending data back to the data center or public cloud for processing, while mitigating security risks of transmitted sensitive information. Instead, they can capture data and uncover insights immediately to speed up data-driven decisions. Now,
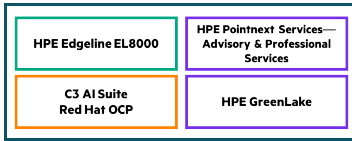
organizations can take action in real-time to optimize maintenance and management for overall equipment effectiveness (OEE), while upholding stringent data governance, compliance, and security requirements which are critical for federal operations.

The solution comes pre-configured, integrated, tuned, and tested with a combination of a market-leading AI software suite, a containerized development environment, and the most capable ruggedized, high-performance server system in the industry.:

- **Red Hat® OpenShift Container Platform (OCP):** Enterprise container development environment orchestrated and managed by Kubernetes.

- **C3 AI Suite:** A comprehensive hybrid AI platform for developing, deploying, and operating pre-built and highly configurable AI applications for any point in the federal value chain.

- **3rd Gen Intel® Xeon® Scalable processors:** A balanced architecture featuring advanced security capabilities that executes the most demanding workloads securely, from edge to cloud. As the only x86 with built-in AI acceleration and extensive software developments like Intel® Deep Learning Boost, the new processors make it possible to infuse AI into every federal application

Deploy AI at the Edge with a Turnkey Solution

HPE Edgeline EL8000	HPE Pointnext Services— Advisory & Professional Services
C3 AI Suite Red Hat OCP	HPE GreenLake

Our comprehensive AI platform offers significant advantages:

- Maximizing federal performance with AI-driven insights

- Identifying degraded systems, subsystems, or components through ML algorithm

- Increasing OEE across all assets

- Accelerating decision-making through near real-time access to AI applications

- Automating reporting and benchmarking of equipment reliability

Resources

hpe.com/edgeline

Intel newsroom: 3rd Gen Xeon Scalable Processors

Intel Deep Learning (DL) boost

Openshift.com/products/container-platform

C3.ai/c3-ai-suite

Make the right purchase decision. Contact our presales specialists.

Chat   Email   Call

Get updates

- **HPE Edgeline EL8000 Converged Edge systems:** Purpose-built for the edge/SWaP-optimized platform designed to perform high-performance AI and analytics tasks. Equipped with top-line Intel Xeon Scalable processors, these systems are the ideal choice for AI/ML model inference and analytics workloads, from routine tasks to the most rigorous mission-critical operations.

ENHANCING OVERALL EQUIPMENT EFFECTIVENESS (OEE)

Using AI and Machine Learning (ML) models to present actionable insights, the Edge AI platform aggregates data across supply chains from suppliers, equipment, tools, sensors, video cameras, and systems into a common dashboard. Capturing and analyzing relevant data in near real-time provides extensive visibility into all areas of operation. For organizations that implement computer vision technology, the AI platform delivers insights more rapidly and with higher accuracy. Now, instead of reacting to problems as they arise, governments can use these insights to anticipate potential operational and equipment issues and address them proactively, avoiding downtime.

Government organizations are utilizing AI at the edge for game-changing applications such as quality control, predictive maintenance, and asset management. These capabilities are transforming federal operations by enabling more informed decision-making, immediate and autonomous actions, and better overall performance. This AI platform equips organizations with the time-sensitive information required to power these capabilities, when and where they need it. As a result, organizations are able to streamline and improve OEE to remain highly effective, efficient, and competitive.

ADOPTING A PURPOSE-BUILT EDGE AI PLATFORM

HPE leads the industry in developing high-performance system that enable unmatched speed and resilience. Our proven solutions are designed to execute a variety of AI and analytics tasks with increased agility and ultra-low latency, so governments can transform from the ground up.

The Edge AI platform is built on HPE Edgeline EL8000 Converged Edge systems to meet the demands of diverse AI workloads and edge deployments, preparing organizations of every scope to innovate with ease. Based on Intel Xeon Scalable processors, the server architecture is engineered to deliver the right level of compute power to accelerate any federal workloads at the edge. This system provides remote access to the same applications used in core data centers, even in harsh environmental conditions. Customers can choose from a broad range of configurations—including a range of processors, multiple networking options, storage, and I/O—that come in a portable, airline carry-on case that you can easily transport out to the edge. For additional support, HPE solutions are backed by edge-optimized serviceability and remote systems management, so you can allocate valuable resources to your government initiatives.

CONCLUSION

The expansion of AI is revolutionizing the federal industry. Government organizations are hard at work to capitalize on this new era of intelligence by pursuing AI innovation at the edge that can scale.

At HPE, we understand that AI, data, and analytics are integral to achieving greater insight for superior outcomes. We offer industry-leading solutions and services with cutting-edge C3 AI tools in a comprehensive container environment to help modernize your operations with AI. We are committed to unlocking the full value of edge computing, where the most impactful insights can be gleaned. Let us help you transform at the intelligent edge.

LEARN MORE AT

hpe.com/edge

hpe.com/AI

Hewlett Packard Enterprise