Centurion: The Legion Intelligence Platform, Deployed to the Edge

Executive Summary

Centurion is Legion Intelligence's agentic AI delivered as an integrated edge deployment. Centurion can run disconnected from the internet and remain operational in denied, degraded, intermittent, and limited (DDIL) environments. Centurion extends Legion's core capabilities - agentic workflow orchestration, governed tool execution, sensitive data and system of record integration, auditability, and rapid model updates - into portable, resilient devices that can operate at the tactical edge and integrate across multiple edge nodes when networking is available.

This form factor augments tactical operations centers and command posts, operations and intelligence fusion cells, and activities in sensitive or denied environments to provide persistent cloud-independent AI capabilities where work actually happens. The Department of War's recently released "AI-first" strategy memo explicitly sets expectations that agentic systems are first-class, model parity is mandatory, and compute resources must be available from datacenters to the edge. Centurion is a direct implementation of that posture: AI workflows that keep running when the network fails, and that can synchronize with cloud and enterprise environments when conditions allow.

Centurion also fits squarely within the Department's first Critical Technology Area - Applied Artificial Intelligence (AAI) - because it operationalizes AI for decision superiority by embedding AI into workflows and command-and-control contexts, including at the edge.

Legion Intelligence supports national security users across USSOCOM, the U.S. Army, the U.S. Air Force, and DOE in secure AI-enabled workflows. In operational evaluations, Legion reduces end-to-end cycle time for Situation Report (SITREP) processing by 88% and Intelligence Summary (INTSUM) creation by 99% compared to baseline manual workflows. Legion has accelerated target system analysis by 15x and audio analysis by 10x. Together, these metrics reflect performance improvements across planning, intel analysis, and current-operations

execution. Centurion extends these gains to DDIL environments with multiple configurations tailored to where warfighters operate.

Centurion Is Legion—Packaged for DDIL Reality

The Legion Intelligence platform is an agentic workflow orchestration layer: it connects authoritative data sources, coordinates tool-using agents, governs execution, and produces auditable outcomes that reduce operational cycle time and cognitive load. Centurion is Legion deployed as a portable, edge-native product line, built for environments where the internet is unavailable, bandwidth is constrained, or transmitting is operationally risky.

Centurion is an operational AI system that governs agent behavior, coordinates workflows across humans and machines, and preserves continuity across edge and higher-echelon environments. It is not a collection of on-device agents or a point solution for inference at the edge.

Centurion's distinguishing attributes come from *where* it runs and *how* it survives constraints:

- Local execution: agents, workflows, tools, and models run on the edge node so the workflow does not collapse when cloud access is lost.
- Federated mesh operations: Centurion nodes are designed to operate as a federated mesh, coordinating agent execution, sharing context, and redistributing workloads when connectivity allows. This enables distributed operations across forward nodes without reliance on centralized infrastructure, preserving tempo and resilience even as network conditions fluctuate.
- Cloud as accelerator, not dependency: Centurion is designed to extend Legion deployments downward (cloud → on-prem → edge) while preserving mission function when disconnected—explicitly rejecting "cloud-only" fragility.

The Threat Environment Makes Connectivity a Liability

The modern battlefield produces more information than commanders and staff can process; the limiting factor is human attention and decision speed. Across domains, these teams are drowning in sensor feeds, operational messages, intelligence reporting, logistics signals, and public data—often arriving faster than a staff can triage, correlate, and brief. Meanwhile, peer adversaries deliberately contest the assumptions of "perfect connectivity" through jamming, cyber operations, physical attacks on infrastructure, emissions tracking, and deception. In this

environment, architectures that quietly assume persistent cloud access externalize risk onto the warfighter: they work in permissive conditions and fail at the moment bandwidth is constrained, links are denied, or transmitting becomes operationally risky.

The core operational claim is simple: if AI cannot function when communications are disconnected, degraded, intermittent, or denied, it is not a warfighting capability. It becomes a peacetime analytics convenience—useful for back-office workflows, but unreliable for maneuver, sustainment, and decision-making under threat. DDIL is not an edge case; it is the operating condition that determines whether advanced automation helps the force or creates another fragile dependency.

Centurion is built on that premise. It pushes agentic workflows to where decisions happen—forward C2 nodes, expeditionary maintenance and logistics elements, ISR cells, and tactical operations centers—so AI assistance does not disappear when the network does. Centurion's edge form factor enables local execution of workflows and models, with governed tool use and auditable outputs, and can federate across forward nodes when connectivity permits. The result is resilient decision support that preserves tempo: local units can continue to analyze, plan, and act without waiting for reach-back.

This isn't only about resilience; it's also about velocity. In high-tempo operations, every additional tab, portal, manual correlation step, and copy/paste handoff consumes scarce cognitive bandwidth and slows the OODA loop. Agentic AI at the edge compresses complexity into fewer, higher-quality decision options grounded in authoritative data—surfacing what matters, when it matters—so humans spend their time deciding rather than searching. Just as importantly, by keeping processing local, the force reduces unnecessary data movement, lowers latency, and limits exposure that comes with constant "phone-home" dependencies, strengthening both operational security and continuity under pressure.

Aligned with the Department of War's AI-First Strategy

Centurion operationalizes the Department's AI-first strategy memo: AI advantage is measured by deployment speed, DDIL survivability, and cycle-time reduction in real workflows, not polished demos in permissive environments. The memo prioritizes agentic systems, mandates rapid model parity, and directs compute expansion "from datacenters to the edge," alongside federated data access and barrier removal to accelerate fielding. Centurion is designed to support mission command under contested conditions by preserving decision

advantage when connectivity is denied. It enables decentralized execution by ensuring AI-enabled workflows remain available, governed, and auditable at the point of decision

Agentic systems are first-class requirements

Agent Networks (AI-enabled battle management and decision support) and Enterprise Agents (rapid, secure deployment of agents to transform workflows) are two of the seven initial Pace-Setting Projects (PSPs). Centurion is Legion's agentic runtime delivered to the edge, enabling both categories:

- Operational agent networks: workflow agents that support planning-to-execution loops when comms are contested.
- Enterprise-to-field continuity: enterprise workflow agents that keep working at forward nodes rather than stopping at the enclave boundary.

Compute expansion "from datacenters to the edge"

The Department will invest in compute infrastructure "from datacenters to the edge". Centurion is the platform manifestation of that mandate: a repeatable, governed packaging of Legion for edge deployments that can operate fully offline and federate when connected.

AI model parity and rapid updates within 30 days

Warfighters "cannot be working off models that are months or years old," and directs a cadence enabling the latest models to be deployed within 30 days of public release as a primary procurement criterion. Centurion inherits Legion's upgrade pathway and applies it to disconnected deployments: deploy updated models and agent policies to edge nodes with controlled rollout, validation, and rollback patterns—so the edge does not become a frozen, outdated AI island.

The Applied AI Critical Technology Area: Centurion as a Reference Implementation

The Department's updated CTAs explicitly include Applied Artificial Intelligence (AAI) as a top priority. AAI is oriented toward transforming the Department into an "AI-first" organization and embedding AI into decision-making and operational efficiency. Centurion is a direct operationalization of AAI:

- Centurion embeds AI into real workflows (not standalone chat tools), with orchestration, governance, and auditability aligned to operational and enterprise use.
- Centurion pushes AAI to the tactical edge, which is where decision superiority is contested.
- Centurion enables a datacenter-to-edge continuum, matching the memo's compute directive and reducing reliance on fragile central architectures.

Centurion can also support adjacent CTA outcomes (e.g., contested logistics decision cycles, and battlefield information dominance through faster sense/decide/act loops), but its primary positioning is straightforward: AAI delivered under wartime constraints.

Warfighter-Grade AI, Delivered Forward

Centurion is Legion Intelligence's agentic AI platform, hardened, packaged, and fielded in multiple edge form factors to deliver the full power of orchestrated AI workflows wherever the mission happens. It runs locally when disconnected, maintains governance and auditability in constrained conditions, and federates across forward nodes to preserve tempo without relying on fragile reach-back. With secure integration into sensitive data and systems of record, controlled model and agent updates, and a deployment footprint designed for tactical operations centers, command posts, and low-signature missions, Centurion is ready for the environments that break cloud-dependent tools.

In short, Centurion brings Legion's proven orchestration and trust model to the edge—providing persistent, resilient AI assistance that remains available when bandwidth is limited, links are denied, and decisions cannot wait.