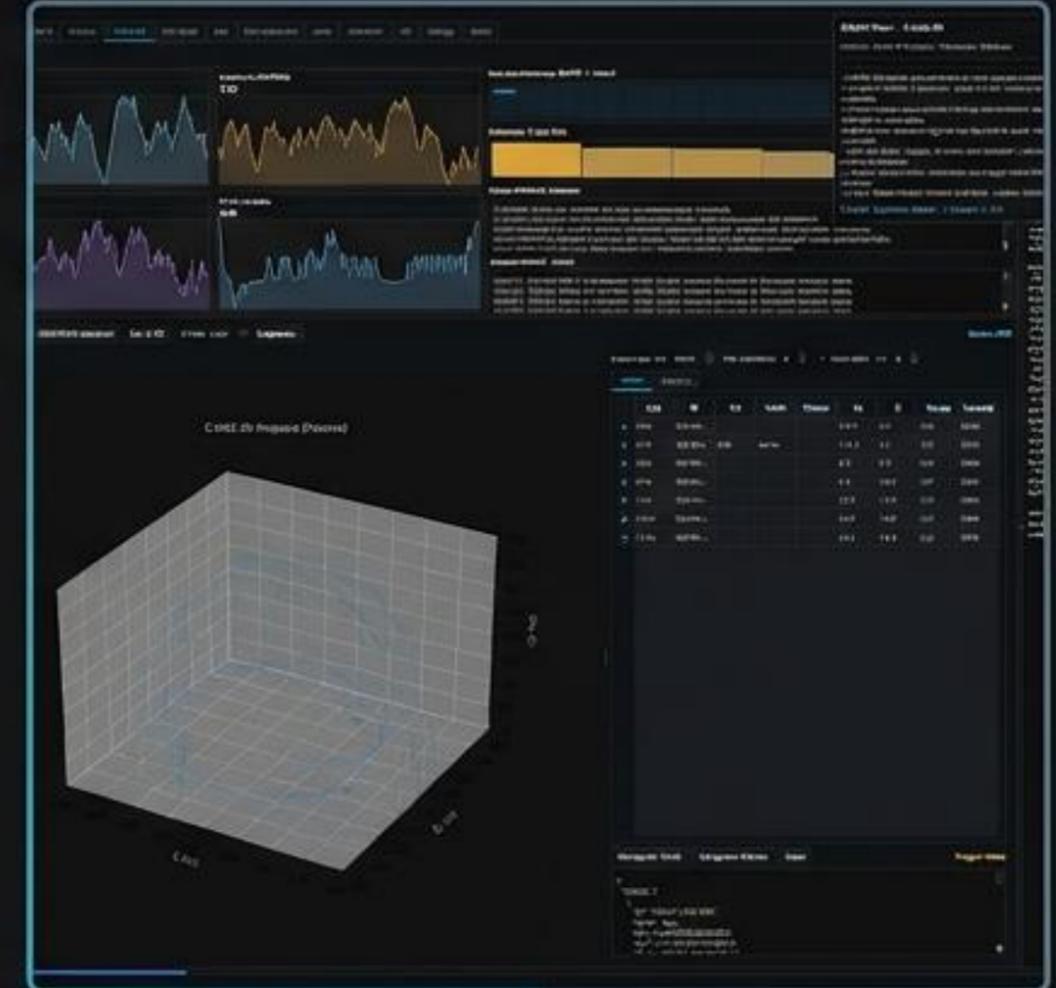
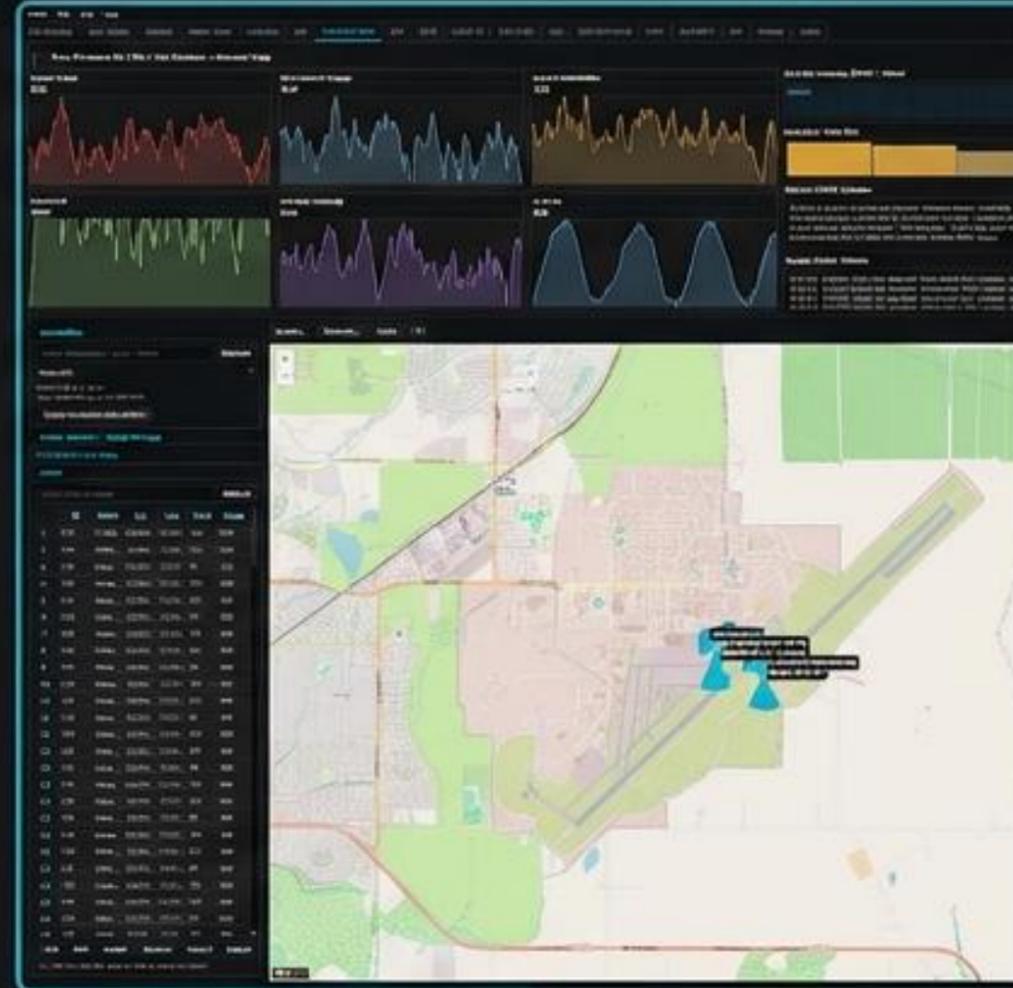


Decision Dominance in Disconnected Environments



Unified COP

Consolidates Video, LPR, Radar, Spectrum, and Geospatial data. No more toggling between 5 different screens.

High-Assurance Design

Architected for Air-gapped networks and RMF/ATO compliance.

Operator-Centric

Moves beyond raw data to "PoL Analytics" and automated anomaly detection.

The Anatomy of Awareness (Dashboard Breakdown)

The Threat Index:
Real-time fused threat score based on sensor cross-correlation.
Quantifies environment volatility.

Activity Heatmap:
Temporal tracking of anomalies by Day-of-Week and Hour to establish baseline patterns.



Narrative Topic Mix:
AI-driven analysis tracking dominance of 'Security' vs. 'Public Safety' events.

Operational Indices:
KPIs for Gate Throughput, Airfield Ops, and Force Multipliers.

Visual Intelligence & Forensics



Component A: License Plate Recognition (LPR)

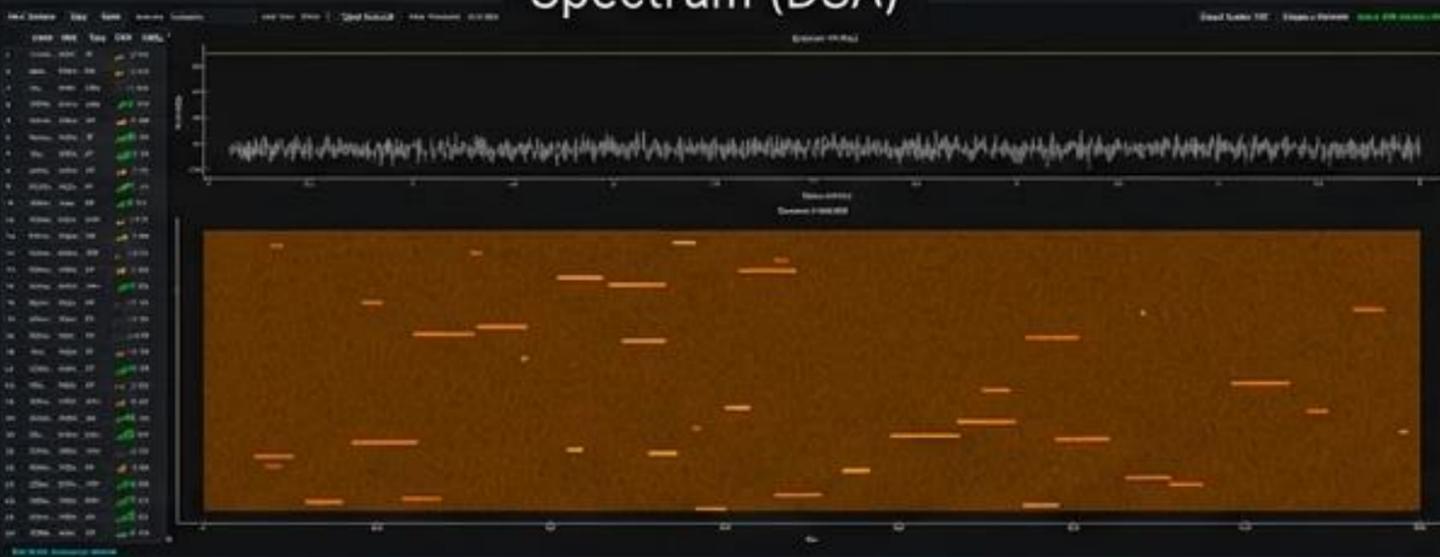
- **Watchlists:** Management of authorized vs. suspicious plates (100+ active).
- **Logic:** Confidence scoring and vehicle type classification.
- **Workflow:** "Hit" correlation creates a PoL anomaly + incident.

Component B: Video Forensics

- **Import Video:** Offline ingest of body-worn or gate footage.
- **AI Overlays:** Object detection (Person, Vehicle, Drone) on timeline.
- **No "VMS Bloat":** Focus on analysis and evidence, not long-term storage.

Advanced Sensor Fusion (Beyond Visual)

Spectrum (DSA)



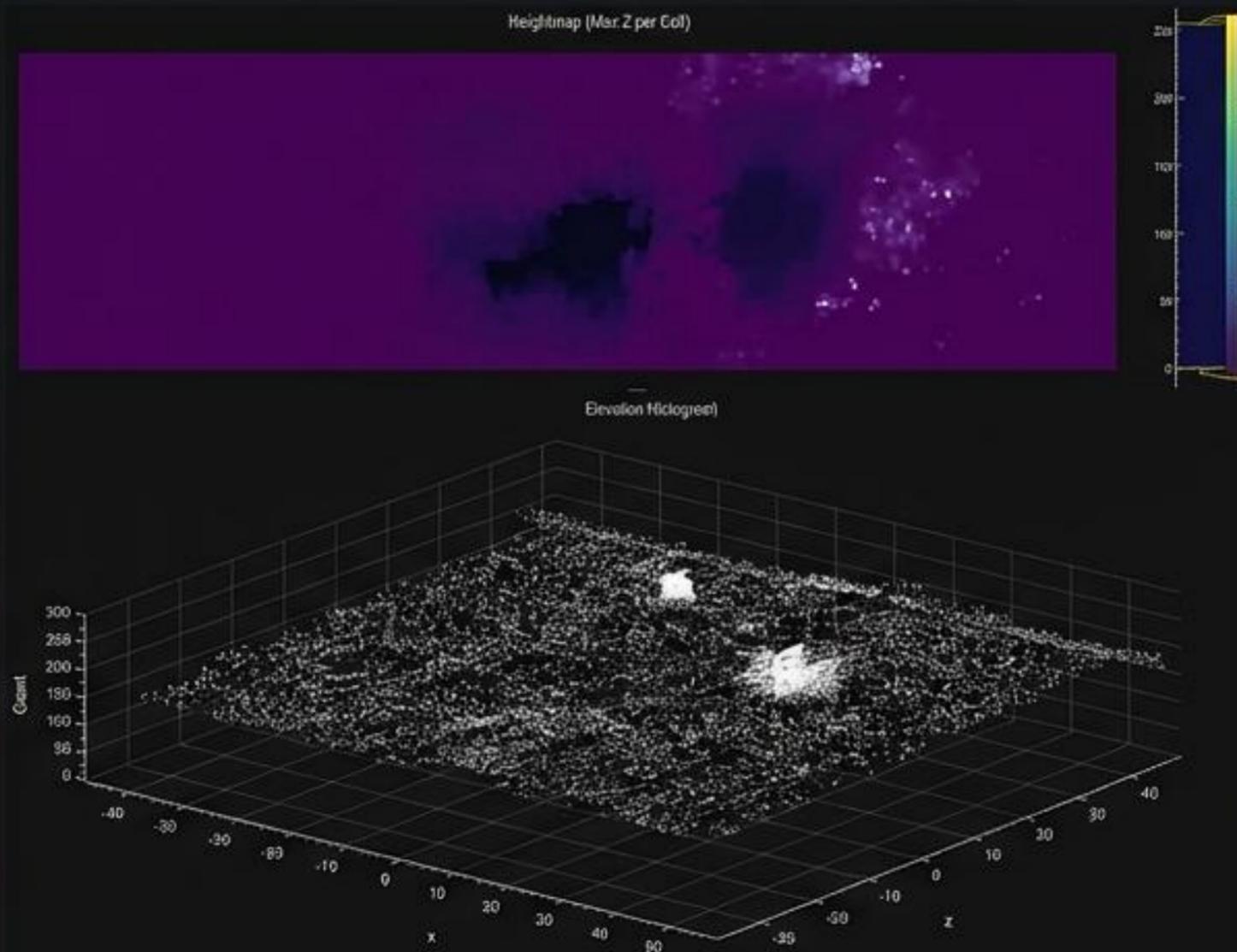
RF signal waterfall, device tracking (Bluetooth/Wi-Fi), and RSSI signal strength.

Ground Radar (GSR)



Ground surveillance corroboration and 'Slew-to-Cue' camera automation.

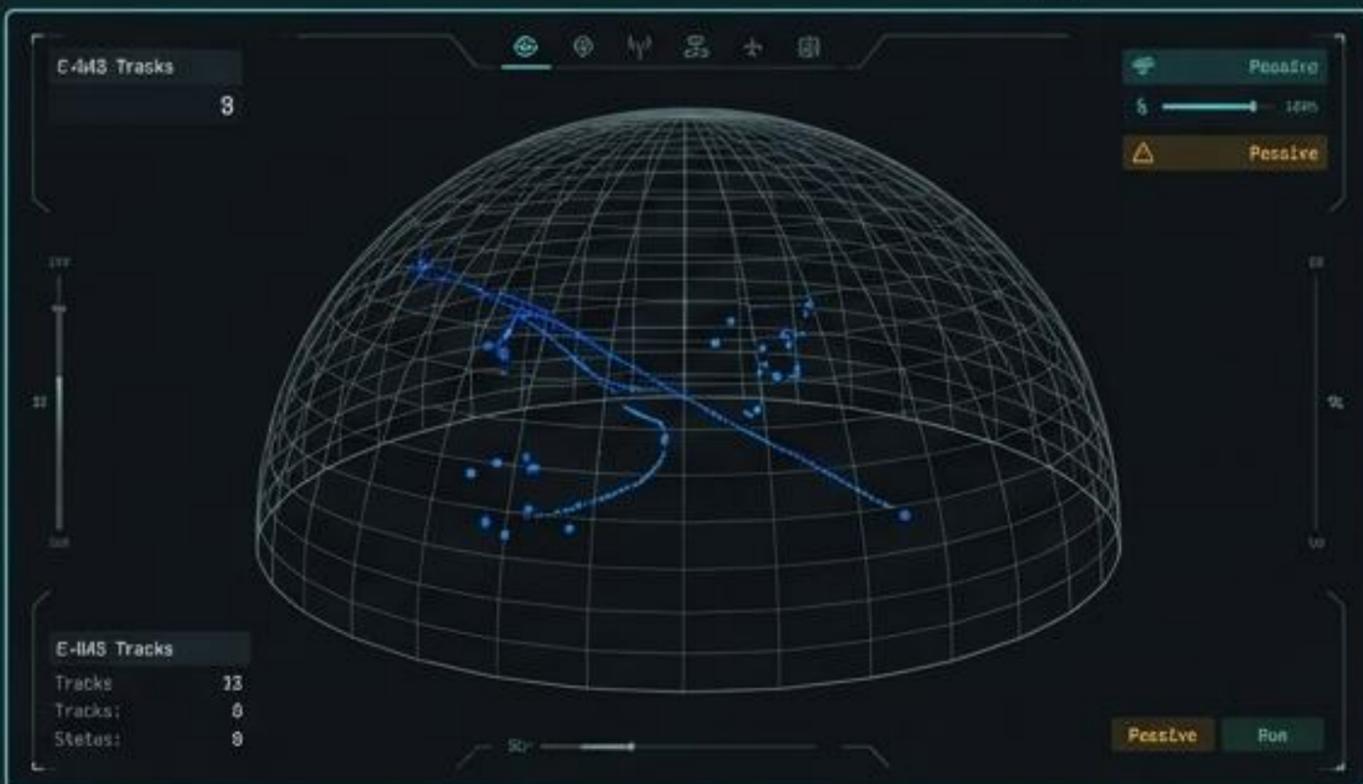
LIDAR



Point cloud ingestion for terrain/structure analysis and heightmap generation.

Air & Space Domain Awareness

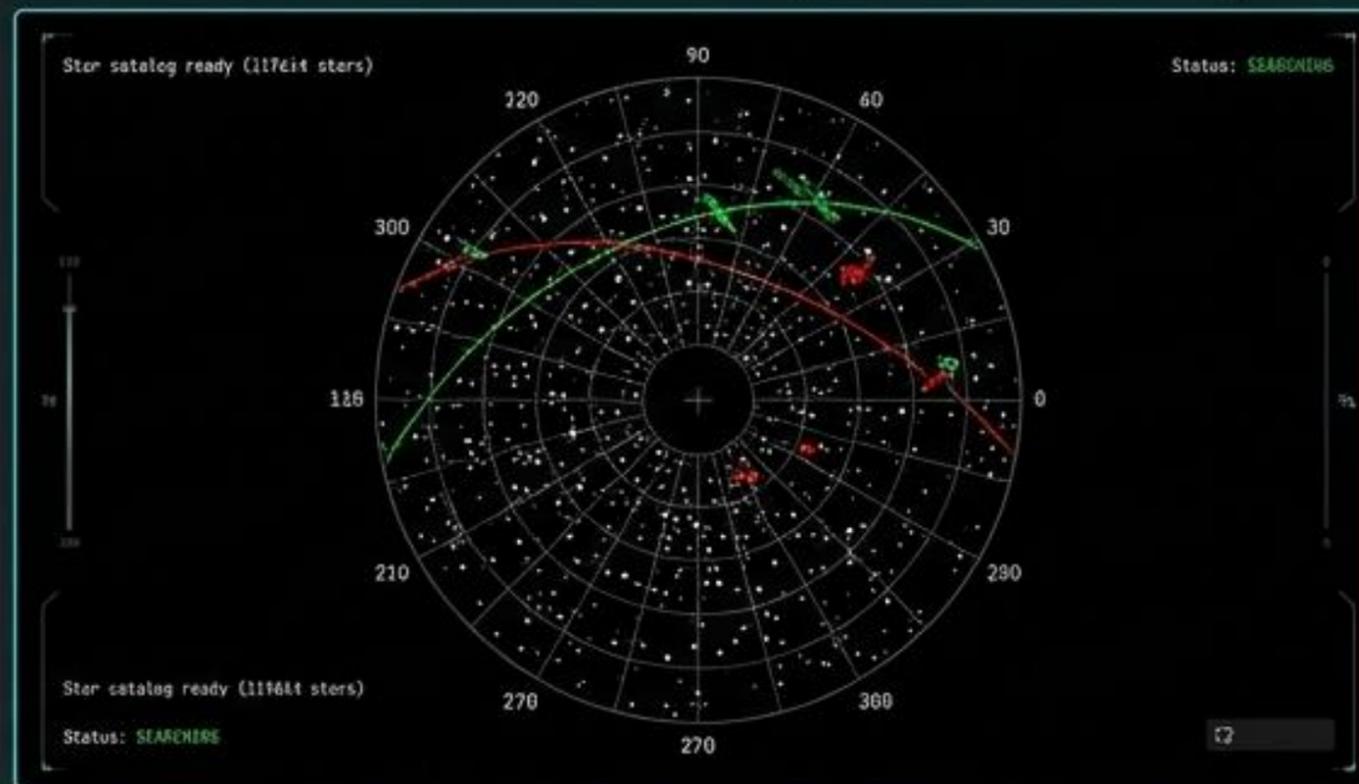
C-UAS 3D Tracking



Visualization: 3D swarm plotting and track history.

- **Passive Cueing:** Exports designations to external C2 systems.
- **Mitigation Out of Scope:** Jamming/Takeover disabled in software.

Low Earth Orbit (LEO) & Sky



Star Catalog: 119k stars for distinguishing satellites from UAP/Drones.

- **Telescope** connection for high-zoom verification.
- **ADS-B Integration** for aircraft proximity awareness.

Geospatial Context & Asset Management

Geospatial Context & Asset Management

Asset Registry

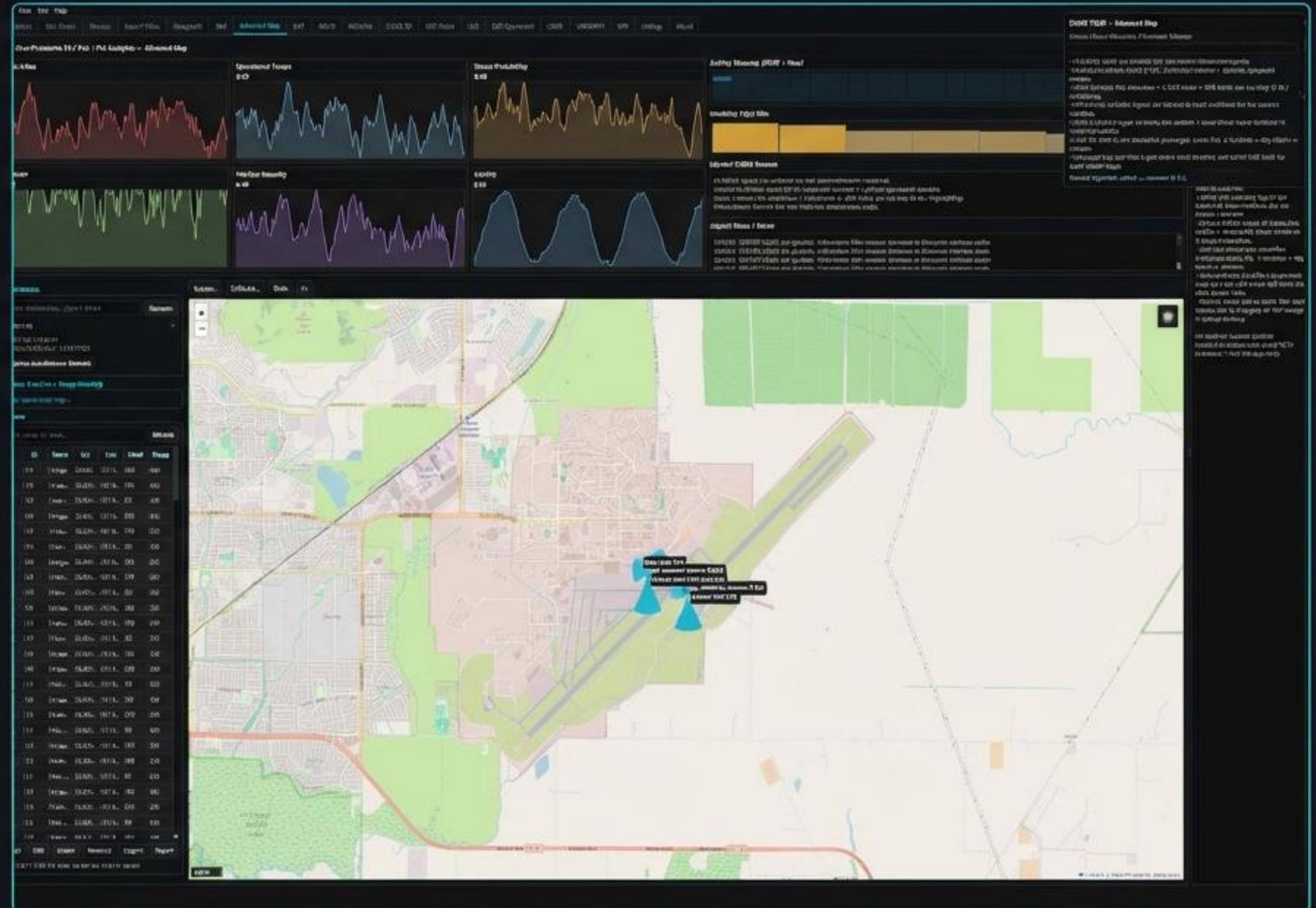
- Management of installation directories (Gates, Hangars, Generators).
- Import/Export via JSON for rapid site commissioning.

Geofencing Engine

- Polygon-based rules: Enter, Exit, Dwell (>30s), and Presence.
- Multi-stream overlays: Drawing a fence on the map applies it to camera views.

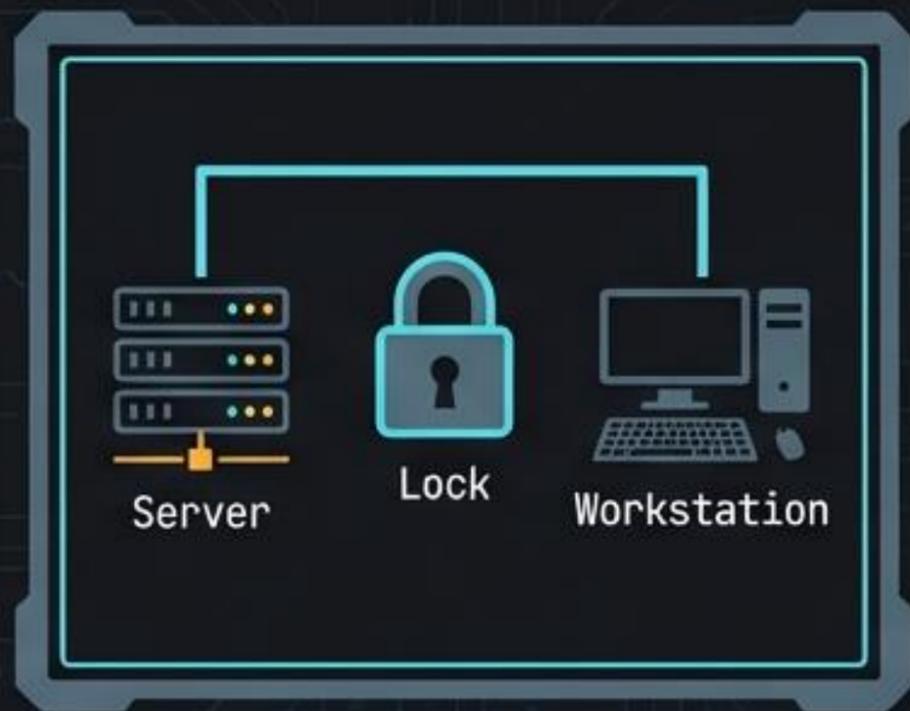
SAR Change Detection

- **Workflow:** Reference Image vs. Current Image.
- **Output:** Automated heatmaps highlighting structural changes.



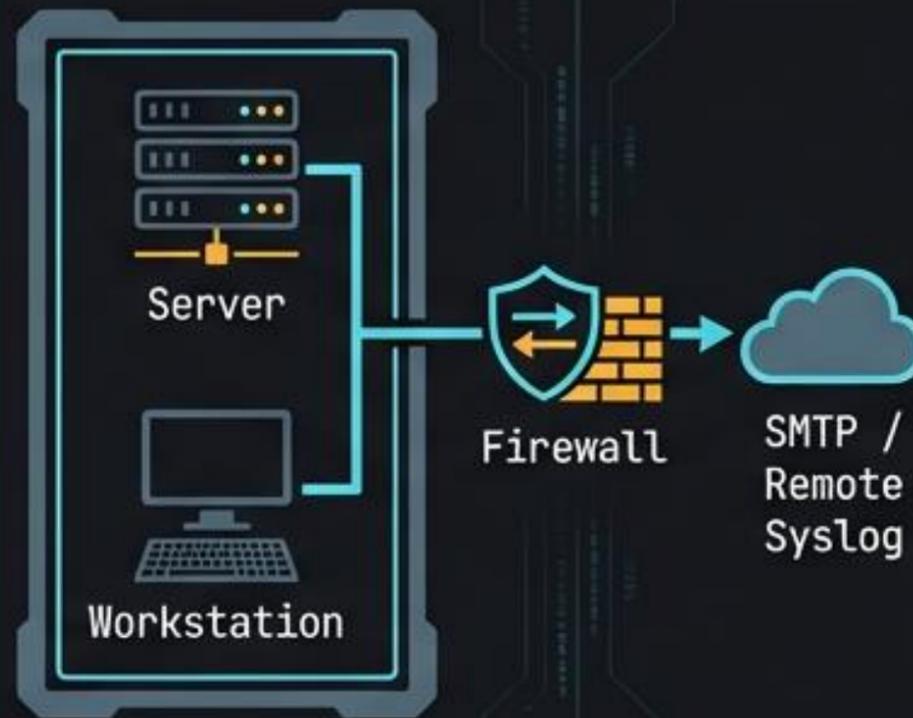
Deployment Architectures

Air-Gapped Enclave (Primary)



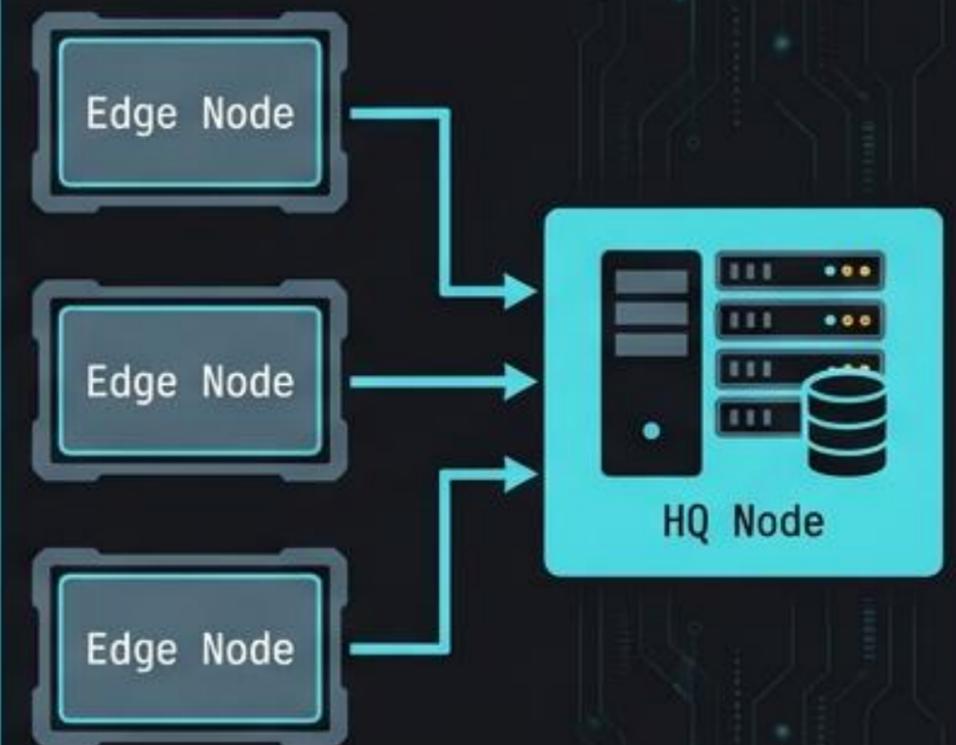
DoD Enclaves, NERC CIP.
No internet. Allowlists only.
Signed offline updates.

Connected Enclave



EOCs, Enterprise SOC.
Controlled egress for alerts
and SIEM integration.

Hybrid (Edge + Center)



Statewide DoTs, Utilities.
Edge sensors feed summarized
events to central command.

RMF Readiness & Security Controls



Audit & Accountability

Tamper-evident logging (file integrity) and optional remote syslog forwarding (TLS enabled).



System Integrity

Signed offline updates require `manifest.sig` validation against trusted public keys.



Access Control

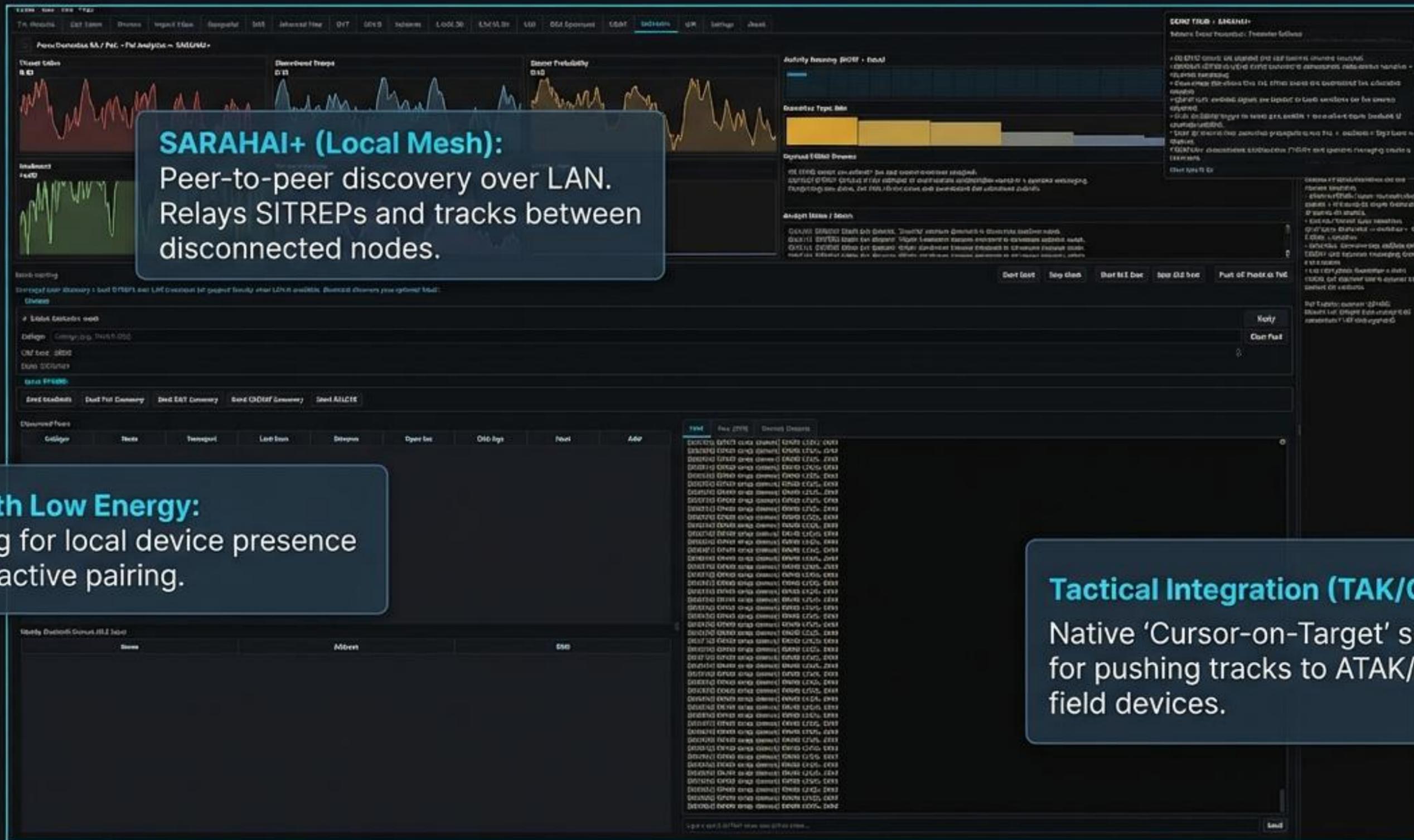
RBAC gating for privileged actions. "Safe Mode" auto-recovery for stability.



Cryptography

Configuration options to enforce FIPS 140-3 posture and offline CRL bundles.

The "Mesh" & Interoperability



SARAHAI+ (Local Mesh):
Peer-to-peer discovery over LAN.
Relays SITREPs and tracks between
disconnected nodes.

Bluetooth Low Energy:
Scanning for local device presence
without active pairing.

Tactical Integration (TAK/CoT):
Native 'Cursor-on-Target' support
for pushing tracks to ATAK/WinTAK
field devices.

Use Case: Civil Infrastructure & Utilities

Mission: Traffic Ops (EOC) or Substation Security.

Key Features:

-  **Traffic KPIs:** Monitoring flow, occupancy, and incident risk.
-  **Roadway Overlays:** Visualizing Level of Service (LOS) and congestion.
-  **Remote Security:** Intrusion detection at unstaffed substations via hybrid edge nodes.



Market Analysis & Differentiation

	SARAHAI (SAIv240)	Anduril Lattice	Genetec / Milestone	Axon Fusus
Air-Gap Native	Yes (Core)	Partially/Cloud	No (Enterprise)	No (Cloud)
Evidence-Centric	Chain of Custody	Basic	Limited	Basic
Multi-Sensor Breadth	Video+RF+Radar+LIDAR	Limited/RF	Video Focused	Video Focused
Deployment Model	Disconnected/Edge	Cloud-Connected	Cloud/On-Prem	Cloud-Connected

Market Sizing

Total Addressable Market (TAM): ~\$7.47B (Global DoD + US Critical Infrastructure)

Serviceable Obtainable Market (SAM): ~\$459M (High-value installations)

Commissioning & Next Steps

Immediate Actions (Commissioning)

- ✓ Enable `air_gap_mode` & configure Network Allowlists.
- ✓ Configure Camera Sources (RTSP/ONVIF) & LPR Watchlists.
- ✓ Verify Update Signing Policy (Import Trusted Keys).

Roadmap (ATO Support)

- Phase 0-1: Baseline hardening & Identity Integration (CAC/PIV). >>>
- Phase 2: Supply Chain Security (SBOM & Signed Offline Updates). >>>

Decision dominance in disconnected environments.