

Securing Mission Data

February 2025

Cigent Overview



Protects mission data
with integrated Secure
Storage Solutions
providing layered
protection

- Capabilities developed for and with top Federal agencies
- Integrated hardware and software solution
- Extensive coverage including PCs, Servers, External Media, UxV, and OT/ICS
- Protection for data at rest, when device is in use, and end of life sanitization
- Extensive ecosystem of integrations with leading suppliers



Cigent Data Expertise

Decades of Operational Experience with USAF and NSA

37 Years of USG Data Recovery and Destruction Contract Work

Most advanced data recovery lab in US

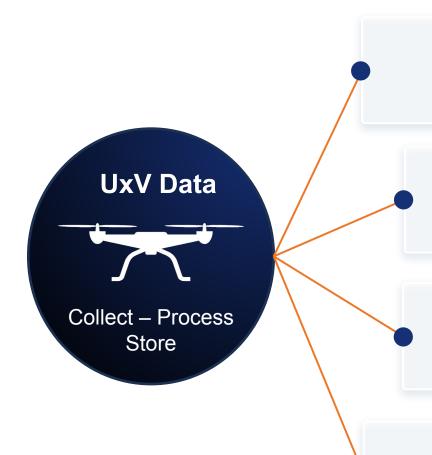
Cleared personnel with TS/SCI

US based firm - US-based software development

IQT & US DOD Phase I and Phase II SBIRs completed contracts (Phase III IDIQ in process)



Impact of UxV Data Loss



Algorithm Targeting Data

Adversary utilize target data information to modify configurations undermining UxV efficacy

Algorithm Automated Reactions

Adversary compromises swarm automated reactions and develops counter-measures

UxV Frequencies

Adversary identifies UxV frequencies and develops countermeasures to detect and defeat

Mission Data

Adversary accessing mission information including location, tactics, targets, and capability data



Challenge of UxV Data Protection

UxV Data

Collect – Process

Store

Environment

Harsh operating environments with extreme temperature ranges

Ecosystem

Protection for maintenance & update ecosystem

Sanitization

Emergency sanitization requires automated, remote, and simple

Seamless

Data protection cannot impede mission operations

Operators

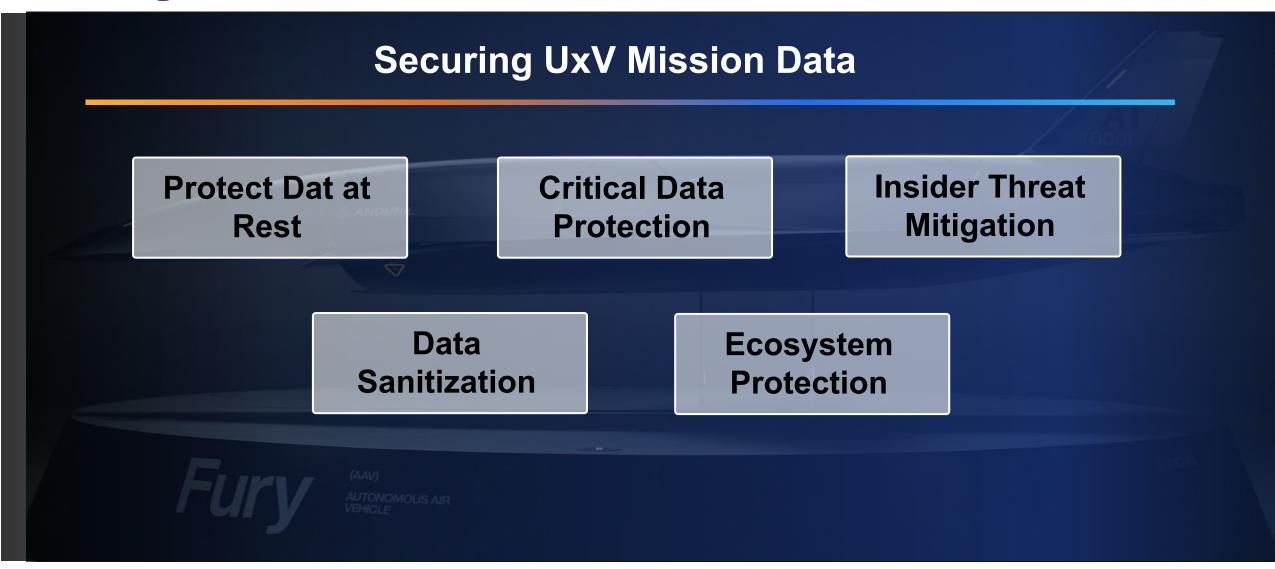
Simple operations for operators w/out data expertise

Automation

UxV operating independently require automated protection



The Cigent Mission





Cigent Secure Storage Capabilities

Full Drive Hardware Encryption

- outer layer protection

Full Drive Software Encryption

- inner layer of protection

File Encryptionthird layer

Pre-boot Authentication

Multifactor Authentication

Hidden Partitions

Granular Access Control

Read -only environments

• Crypto & Block Erase | Verified Drive Sanitization

Secure Data Access Logs

ONLY SOLUTION WITH INTEGRATED HARDWARE & SOFTWARE CAPABILITIES

10 Patents Awarded, 5 Patents Pending



Portfolio to Support UxV Requirements

M.2 2230

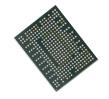


NIAP FDE_EE+AA Security Target 1.0 document complete

NIAP check-in mid February

CSfC DAR estimated Aug 25

SSD BGA



NIST FIPS CAVP for PBA Software (Cert A4388)

CSfC DAR Capability
Package 5.0 for PBA
Authorization Acquisition

Micro SD

Picture

USB: FIPS197 certifiable w/ AES ECB and CBC

SD/uSD: FIPS197 certifiable w/ AES ECB, CBC and XT **U.2**

Picture

USB: FIPS197 certifiable w/ AES ECB and CBC

SD/uSD: FIPS197 certifiable w/ AES ECB, CBC and XT



Comprehensive UxV Ecosystem Data Protection

Cigent Secure Storage



Mission information, targets, ap code, algorithms, classified data



Critical data across devices – adversary exploit any weakness to exfiltrate, tamper, erase



Transfer algorithms and software updates



Field data analysis, new algorithm creation





UxV field management – firmware, config updates, etc.

Handhelds



UxV operations with mission data and connections



Back-up



Securing UxV Mission Data

Protect data at rest, in use and end of life

Integrated, **Layered Protection**

- Three layers of encryption, PBA, and MFA
- Keeps data secret with hardware-based, hidden partitions
- Insider threat detection, tracking, & prevention utilizing secured data logs
- Device sanitization with automated emergency data erasure and verification

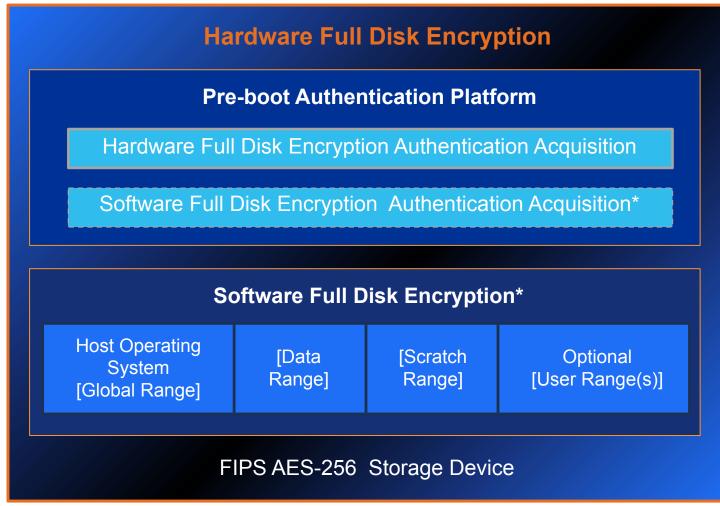
Update key themes?

Mission-Centric Organization

- Operational experienced data experts with clearance
- US-based, "made in America" software development
- Simple procurement with ecosystem of FSI and OEM device partners including Dell and HP
- Mission-specific custom software and firmware capabilities



Cigent Secure Storage Solution Architecture

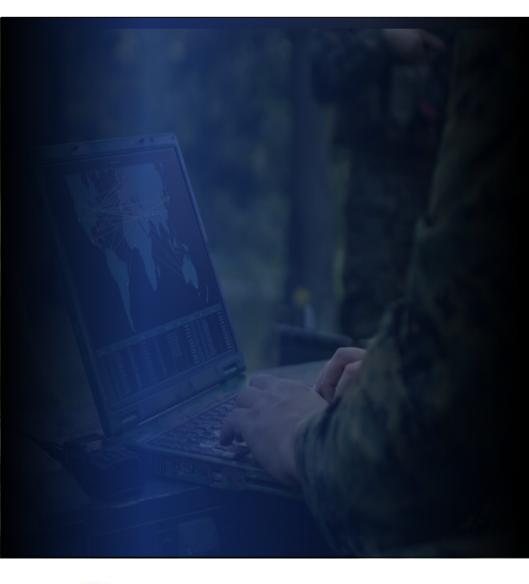


*Software Full Disk Encryption Under Development (target Q1 GA)

- All primary storage ranges locked
- Shadow partition running Linux + Cigent PBA software
- All data encrypted on drive (protects against direct physical attacks)
- Range 0 locks all drive including "sub-ranges"
- Range 1, 2... (up to 8 unique and individual)
- Admin User and End User auths
- SSD firmware improvements to meet FIPS, NIAP CC FDE_EE, CSfC are activated by Cigent software



Cigent Capabilities



Mission-centric Organization

- Vertical integration with single hardware & software solution for data protection
- Keeps data protected with three-layers of encryption with PBA and MFA
- Enterprise management for efficient administration at scale
- Ecosystem of SI and device OEM partners for efficient procurement and support
- Team of US-based data protection experts with security clearance



Cigent Customers

US Federal Government































Federal System Integrators

































Recent Cigent Projects

Looks OK. Planning to use...



DISA WINDAR with AT&T BPA



USAEUR FIPS Drives



MSTIC OTA for OT DAR Solutions



Manned & Unmanned (Replicator) Vehicle Projects



Flyaway Kits and Edge Data Centers



Overseas Travelers
Data Security











