Applications for Decision Advantage

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U.S. Central Command (CENTCOM) sits at the crossroads of key economic, diplomatic, and military global interests.

- **Critical trade routes**

- **Energy and connectivity hub**

- **Diversity of security challenges**

Engagement across these interests requires, <u>joint, all-domain, cross-echelon, cross-classification</u> operations and coordination
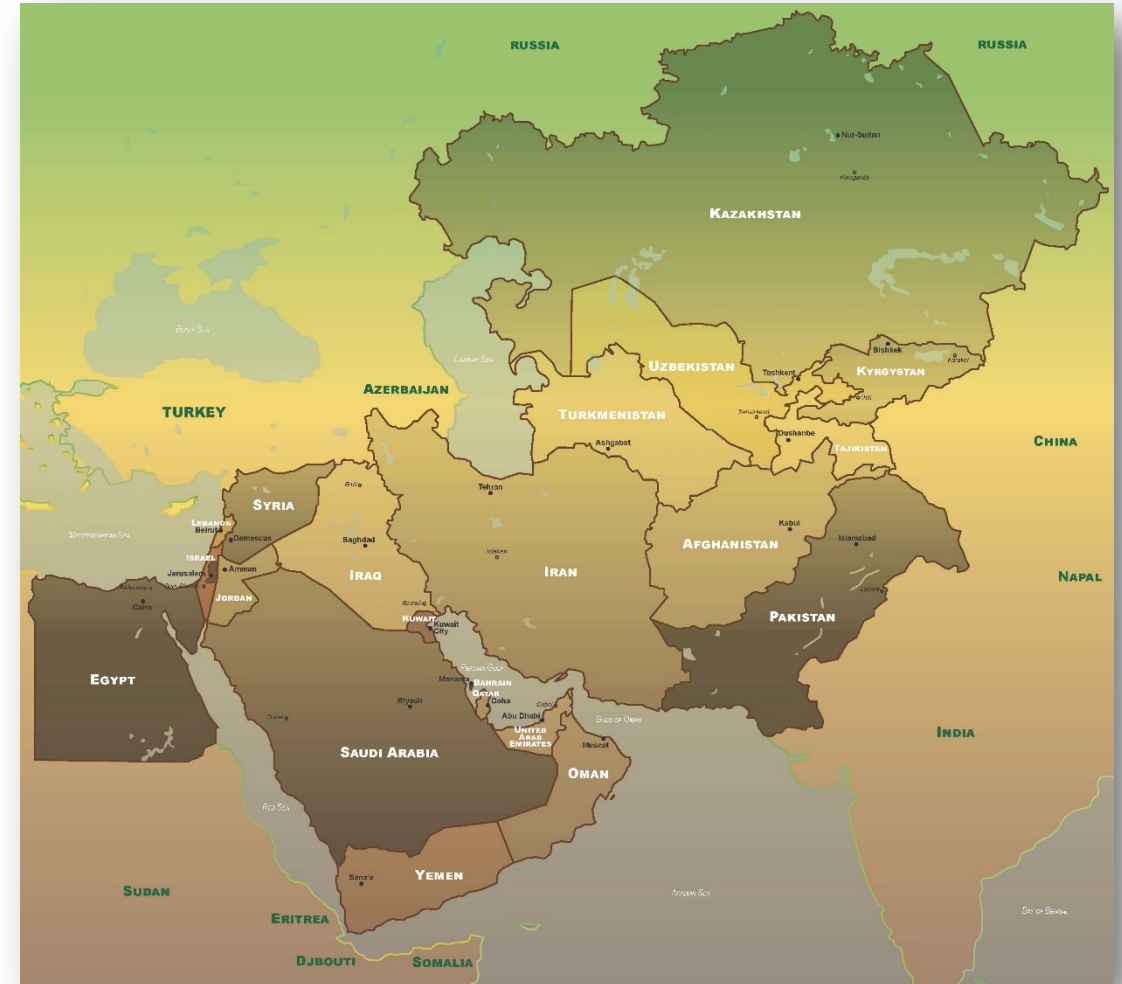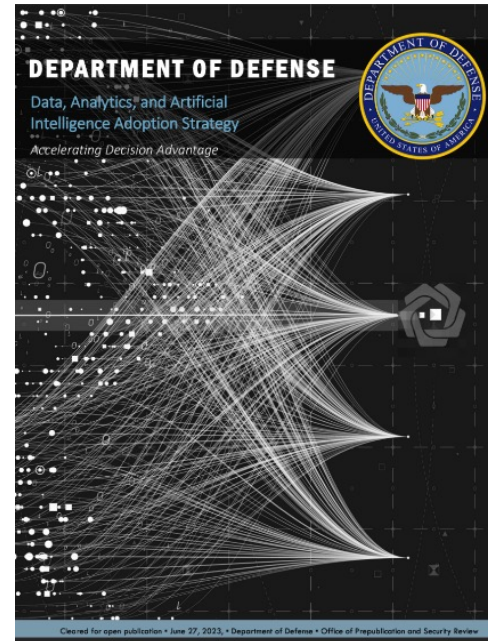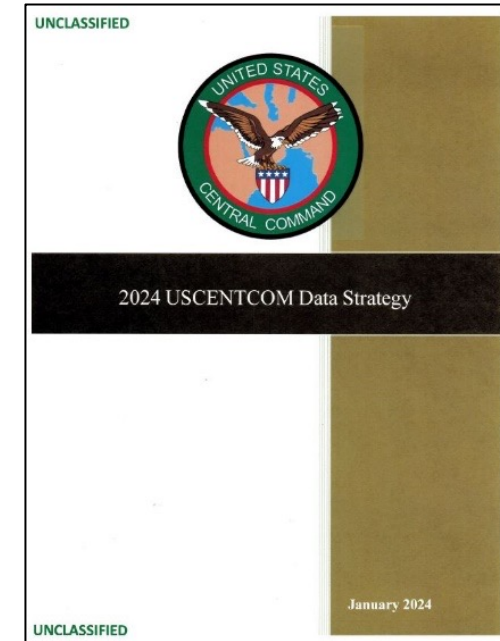
Diversity of Security Challenges

Data Strategy

- **Data-centric Operations**
  - Governance principles via **VAULTIS**
  - Centralized data stores
  - Unit Testing via **Data Dimensions**
- **Data Resiliency**
- **Smart Tools & Infrastructure**
  - Workflow Automation
  - Artificial Intelligence

2023 DoD Data, Analytics & AI Adoption Strategy

2024 CENTCOM Data Strategy

Primary Apps for JADC2 Decision Advantage

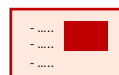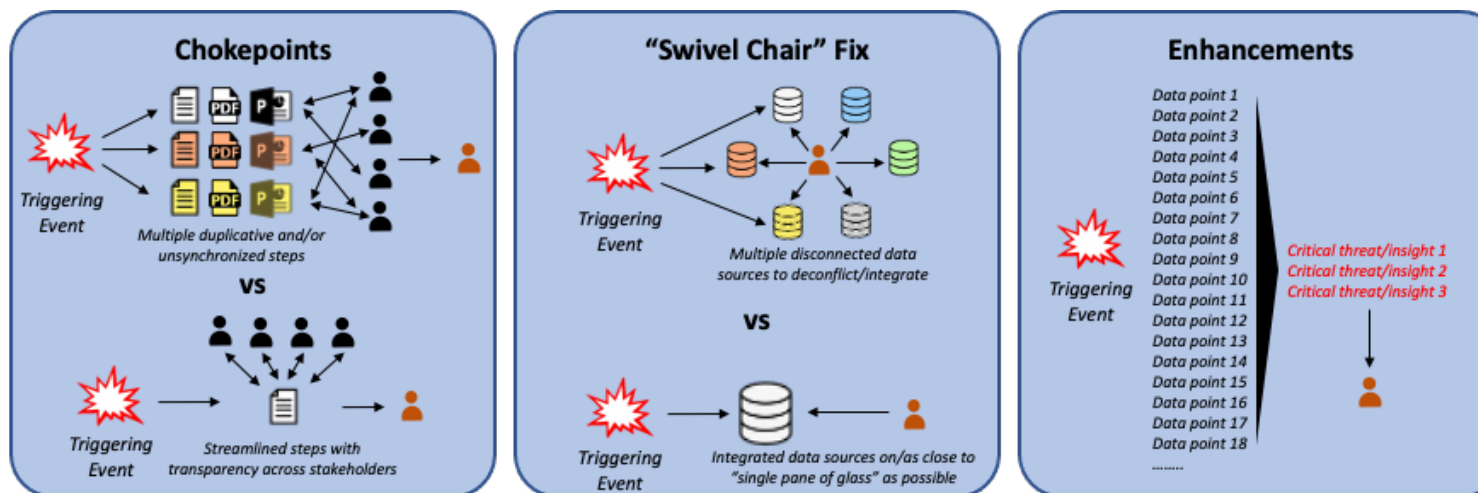|	Features in use by CENTCOM			
	Heterogeneous Bulk Ingest	*Synchronized* **Situational Awareness**	**Automated Workflows**	**Artificial Intelligence**
Maven Smart Systems	★	★	★	★
Advana	★	★	★	
VJOC		★		

JADC2: Synchronized Situational Awareness

*Effective **fusion, synthesis, and presentation of data** to a commander requires a cloud environment (multi-classification), a robust data integration & visualization tool, and heavy coordination of technologies and policies with the entities feeding in data*

Chokepoints — Multiple duplicative and/or unsynchronized steps — Triggering Event

VS

Streamlined steps with transparency across stakeholders — Triggering Event

"Swivel Chair" Fix — Multiple disconnected data sources to deconflict/integrate — Triggering Event

VS

Integrated data sources on/as close to "single pane of glass" as possible — Triggering Event

Enhancements — Data point 1 through Data point 18 — Critical threat/insight 1, Critical threat/insight 2, Critical threat/insight 3 — Triggering Event

Targeting: Previous Method	Targeting: Enhanced Method
Mediums with **manual version control** (e.g., excel)	Collaborative platform **eliminates need for version control**
Mediums with **limited, static data layers** (e.g., PPT)	Platform with **large number of live data layers**
SA requires **active outreach** (e.g., phone/email)	Enhanced SA persistently maintained by platform
Lack of process transparency (e.g., who made change/why)	Updates & changes **tracked and easily accessible**

By leveraging workflow automation tools with common/widely-accessible data layers, teams were able to reduce time for nomination, submission, and approval of a dynamic target from days to hours

CENTCOM has developed tools to automate the target-refinement process, expediting approval and reporting

INITIAL STATE: Cluttered, difficult-to-decipher picture
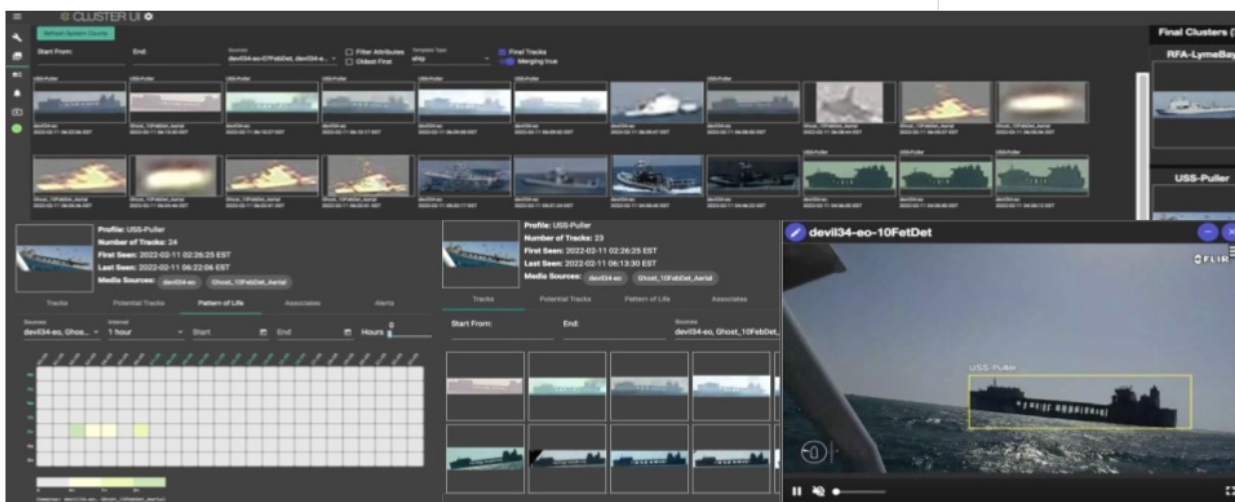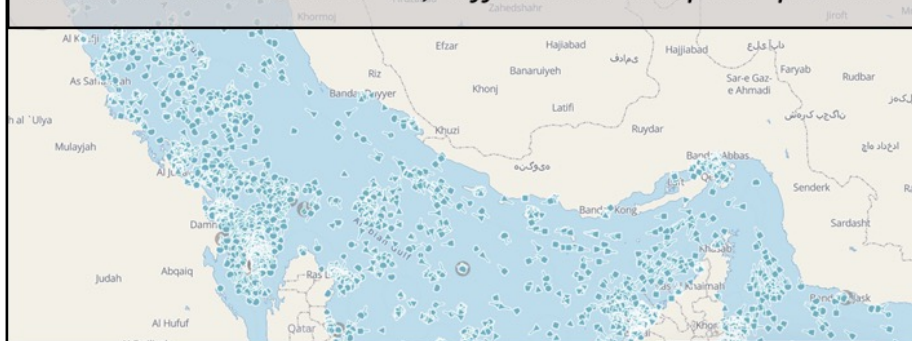
Seabed to Space
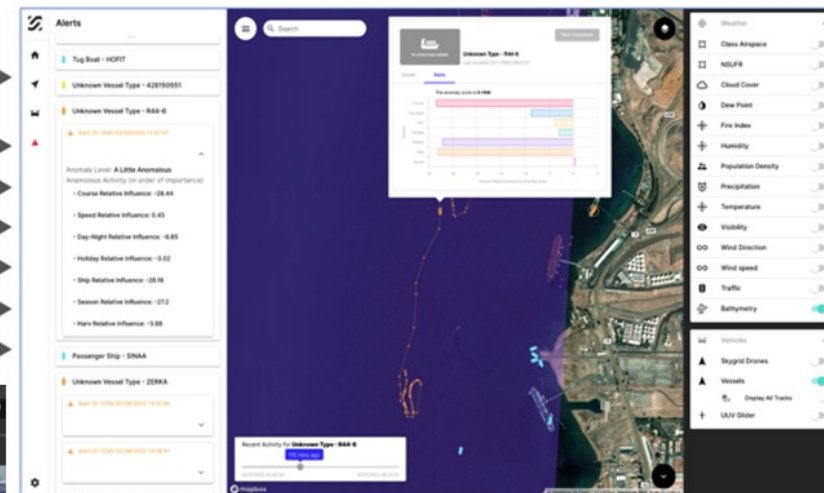- Jordanian Navy & AF manned system imagery
- MarineInstruments UAS
- Various DARPA Buoys
- Various Saildrone USV
- Teledyne/L3Harris UUV
- Blue Hotel Navy Cloud
- Local ad-hoc networks

Capabilities & Outcomes
- Advance beyond commercial/synthetic data to train AI/ML tools
- Hardware agnostic Open-Architecture (OA) preferred
- Seabed to Space edge-deployed Ocean of Things
- AI-based Pattern of Life (POL) anomaly detection and classification
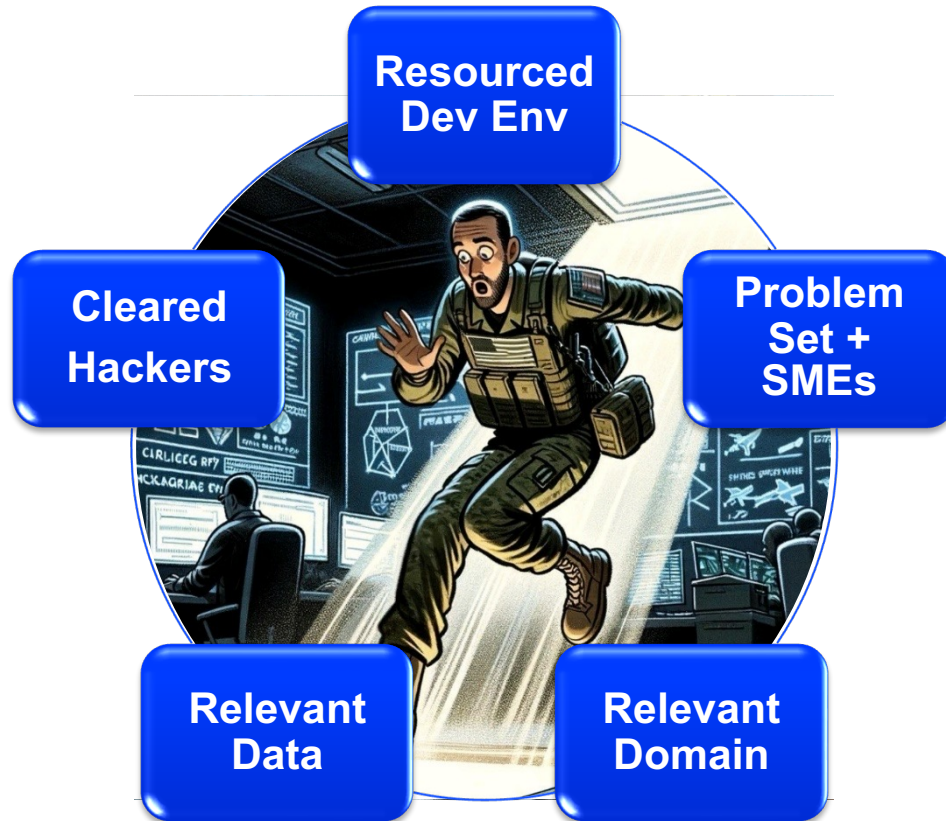- HQ workload advantages
- Enhanced multi-domain awareness

- Computer Vision via Maven
- Anomaly Detection for Streaming Tracks
- Recommendation Engines
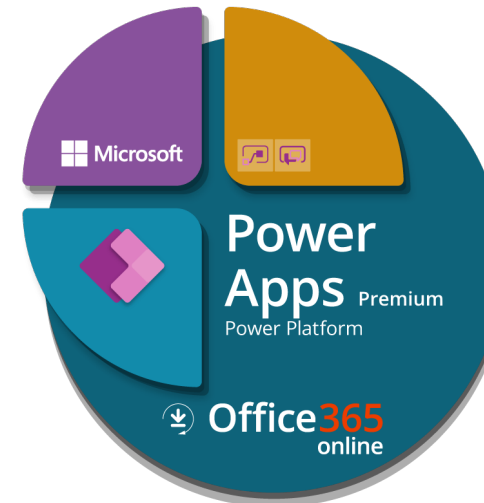
Metrics matter! Speed wins!

Dev Prototyping: SANDTRAP

No Code / Low Code

Resourced Dev Env

Cleared Hackers

Problem Set + SMEs

Relevant Data

Relevant Domain

Microsoft

Power Apps Premium
Power Platform

Office365 online

Operational Validation

Decision Advantage via Partnerships

Questions?