DoD Cloud Enablement

Jim Nelson – DoD CIO, DCIO-IE
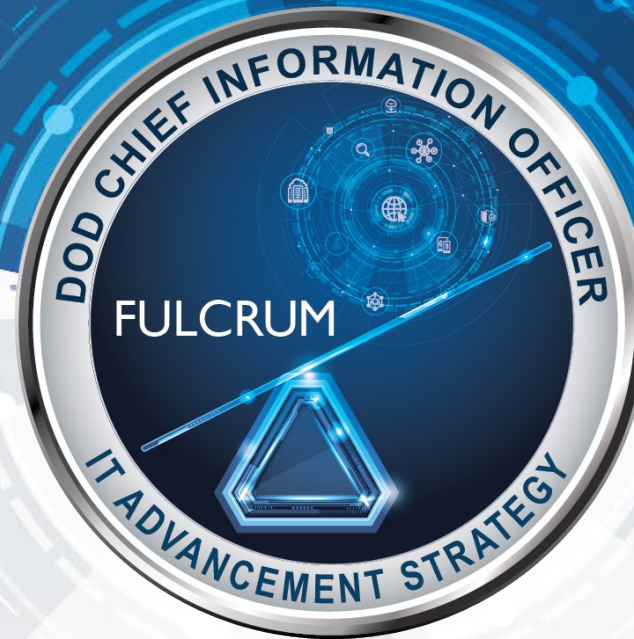
Setting the Foundation for Cloud

Set Policy/Guidance

DoD Fulcrum
- DoD Information Technology Advancement Strategy

Software Modernization Strategy
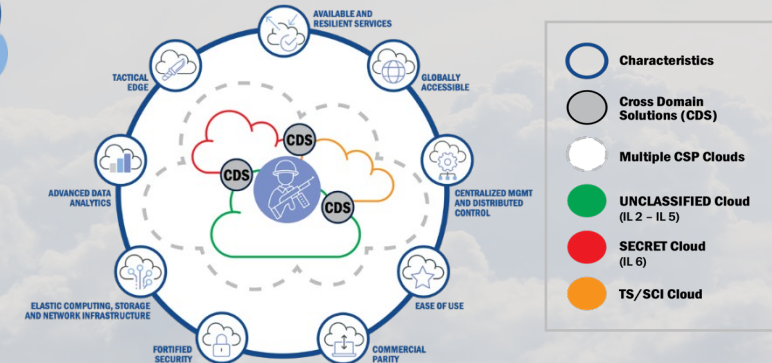- Accelerate the DoD Enterprise Cloud Environment

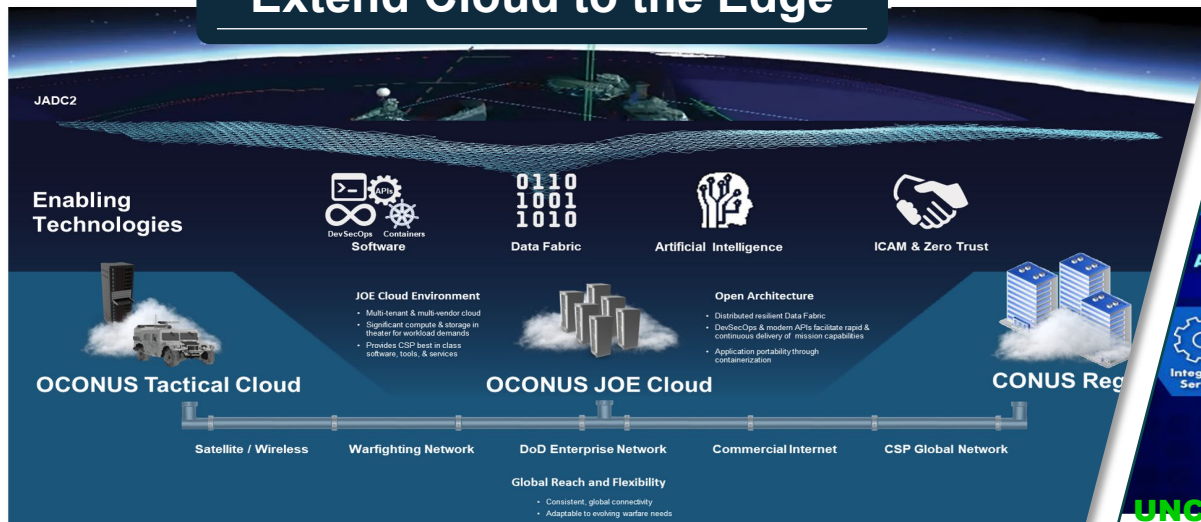**OCONUS Cloud Strategy**
- Multi-Cloud Technical Design

Buy Cloud at Scale

Make Cloud Simple.

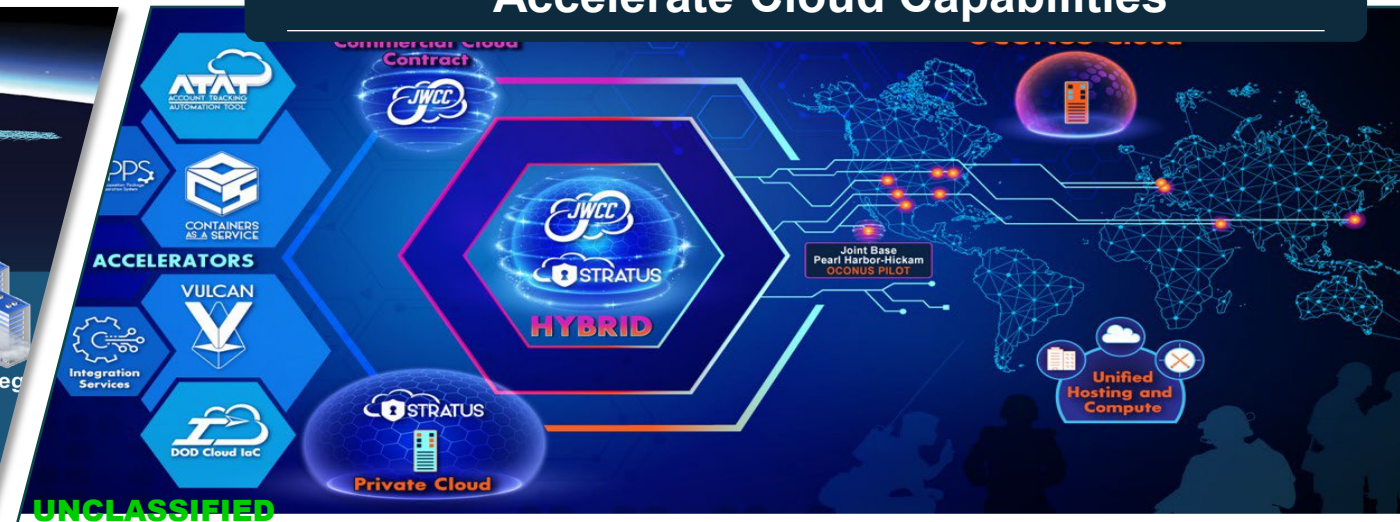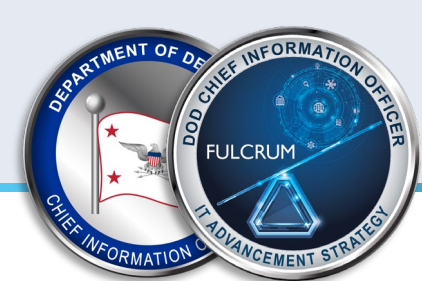|	
Characteristics	
Cross Domain Solutions (CDS)	
Multiple CSP Clouds	
UNCLASSIFIED Cloud (IL 2 – IL 5)	
SECRET Cloud (IL 6)	
TS/SCI Cloud	

Extend Cloud to the Edge

Accelerate Cloud Capabilities

DoD Fulcrum Strategy

- **LOE 1: Provide Joint Warfighting IT capabilities** to expand strategic dominance of U.S. Forces & mission partners.
- **LOE 2: Modernize information networks and compute** to rapidly meet mission and business needs.
- **LOE 3: Optimize IT governance** to gain efficiencies in capability delivery and enable cost savings.
- **LOE 4: Cultivate a premier digital workforce** ready to deploy emerging technology to the warfighter.

Software Modernization Strategy

DEPARTMENT OF DEFENSE

Software Modernization Strategy

DoD Cloud FinOps Strategy

U.S. Department of Defense
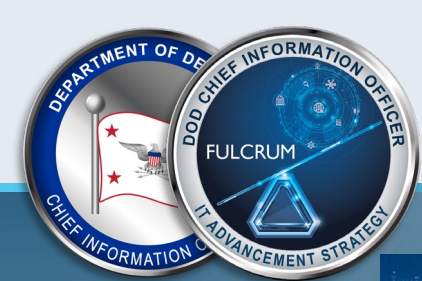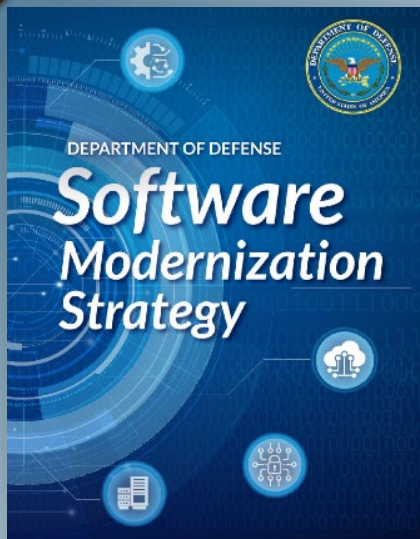
Goals

Accelerate the DoD Enterprise Cloud Environment

Establish Department-wide Software Factory Ecosystem
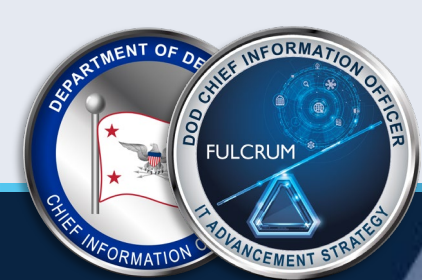
Transform Processes to Enable Resilience and Speed

Goals

Obtain Visibility of Cloud Cost and Utilization Data

Define and Display Metrics for Optimization

Integrate Insights into Decision Making

Joint Warfighting Cloud Capabilities

JWCC

Contract to purchase commercial public cloud and edge offerings from AWS, Google, Oracle, and/or Microsoft, at all classification levels

FEATURES

- Available and Resilient Services
- Globally Accessible
- Ease of Use
- Commercial Parity
- Centralized Management and Distributed Control
- Tactical Edge
- Advanced Data Analytics
- Fortified Security
- Elastic Computing, Storage and Network Infrastructure

CLASSIFICATION LEVEL AVAILABILITY

EXPECTED EDGE OFFERINGS

aws
- Snowball
- Snow Blade
- Modular Data Center

Microsoft
- Azure Stack Mini R
- Azure Stack Edge Pro-R
- Azure Stack ASH-R

Google Cloud
- GDC-H Edge (Appliance)
- GDC-H Modular Data Center

ORACLE Cloud
- Roving Edge Ultra
- Roving Edge Device
- Roving Edge Station
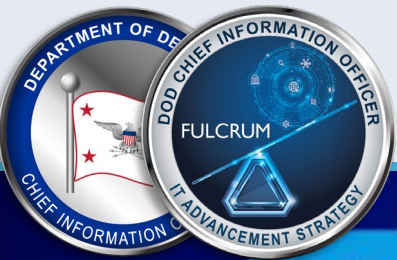
DISA Cloud Accelerators

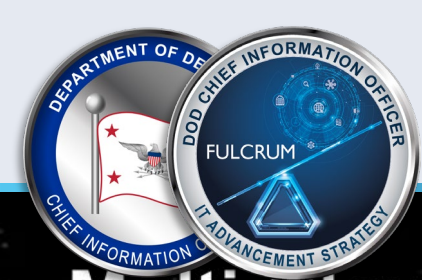Multi-Cloud / Joint Operational Edge (JOE) Cloud Enables Combined Joint All Domain Command and Control Operations

JADC2

Enabling Technologies

DevSecOps   APIs   Containers
Software

0110
1001
1010
Data Fabric

Artificial Intelligence

ICAM & Zero Trust

JOE Cloud Environment
- Multi-tenant & multi-vendor cloud
- Significant compute & storage in theater for workload demands
- Provides CSP best in class software, tools, & services

Open Architecture
- Distributed resilient Data Fabric
- DevSecOps & modern APIs facilitate rapid & continuous delivery of mission capabilities
- Application portability through containerization

OCONUS Tactical Cloud   **OCONUS JOE Cloud**   **CONUS Regions**

Satellite / Wireless   Warfighting Network   DoD Enterprise Network   Commercial Internet   CSP Global Network

Global Reach and Flexibility
- Consistent, global connectivity
- Adaptable to evolving warfare needs