

AN OFFERING IN THE BLUE CYBER SERIES:

DoD Cloud Computing

Version 14 March 2022

#11 in the Blue Cyber Education Series



AFWERX
SBIR★STTR

DFARS Clause 252.239-7010 — Cloud Computing Services

Applies when a cloud solution is being used to process data on the DoD's behalf or DoD is contracting with Cloud Service Provider to host/process data in a cloud

Ensures that the cloud service provider:

- **Meets requirements of the DoD Cloud Computing Security Requirements Guide**
- **Use government-related data only to manage the operational environment that supports the Government data and for no other purpose**
- **Complies with requirements for cyber incident reporting and damage assessment**

DFARS Clause 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting, applies when a contractor intends to use an external cloud service provider to store, process, or transmit covered defense information in the performance of a contract. DFARS Clause 252.204-7012 requires the cloud service provider to meet security requirements equivalent to those established for the Federal Risk and Authorization Management Program (FedRAMP) Moderate baseline.



AFWERX
SBIR★STTR

DISA Cloud Computing SRG

Cloud Computing Security Requirements Guide

1 Introduction

2 BACKGROUND

3 INFORMATION SECURITY OBJECTIVES / IMPACT LEVELS

4 RISK ASSESSMENT OF CLOUD SERVICE OFFERINGS

5 SECURITY REQUIREMENTS

6 CYBERSPACE DEFENSE AND INCIDENT RESPONSE

Appendix A - References

Appendix B - Glossary

Appendix C - Roles and Responsibilities

Appendix D - CSP Assessment Parameter Values for PA

Appendix E - Privacy Overlay Comparative C/CE Tables and Value Tables

Appendix F - FUTURE Privacy Overlay Guidance



Department of Defense

Cloud Computing Security Requirements Guide

Version 1 Release 3 | 6 March 2017

Developed by the Defense Information Systems Agency for the Department of Defense



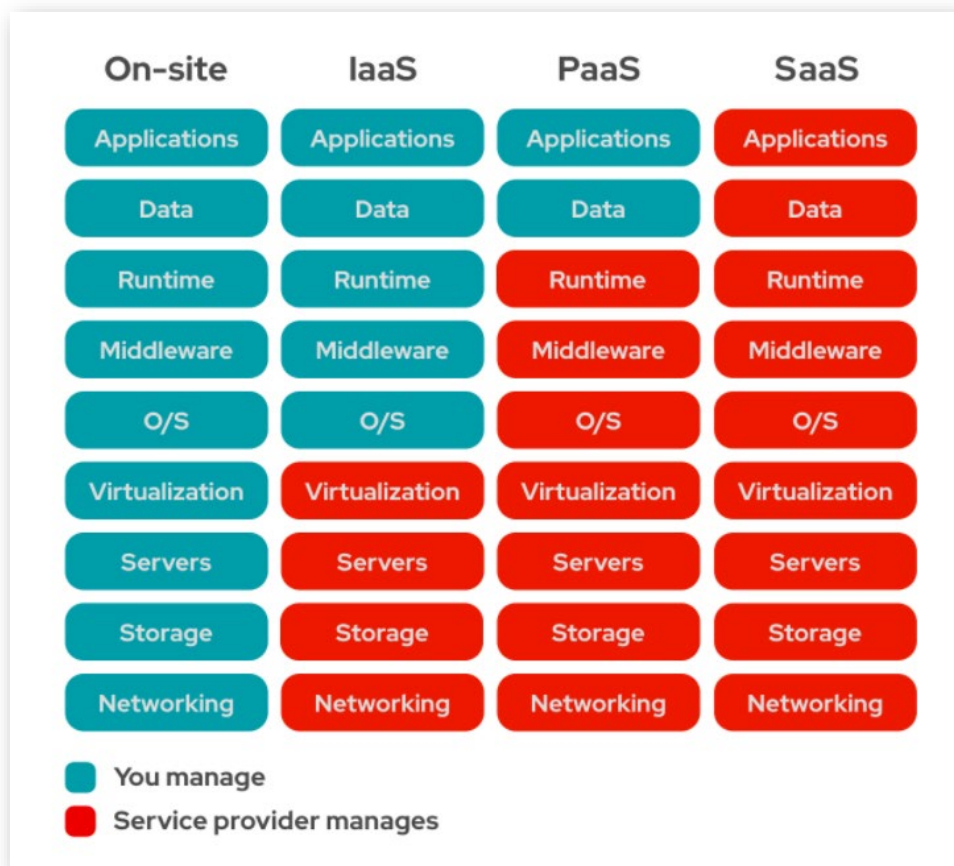
AFWERX
SBIR★STTR

Impact Level = DISA-Approved Clouds

IMPACT LEVEL	INFORMATION SENSITIVITY	SECURITY CONTROLS	LOCATION	OFF-PREMISES CONNECTIVITY	SEPARATION	PERSONNEL REQUIREMENTS
2	PUBLIC or Non-critical Mission Information	FedRAMP v2 Moderate	US / US outlying areas or DoD on-premises	Internet	Virtual / Logical PUBLIC COMMUNITY	National Agency Check and Inquiries (NACI)
4	CUI or Non-CUI Non-Critical Mission Information Non-National Security Systems	Level 2 + CUI-Specific Tailored Set	US / US outlying areas or DoD on-premises	NIPRNet via CAP	Virtual / Logical Limited "Public" Community Strong Virtual Separation Between Tenant Systems & Information	US Persons ADP-1 Single Scope Background Investigation (SSBI)
5	Higher Sensitivity CUI Mission Critical Information National Security Systems	Level 4 + NSS & CUI-Specific Tailored Set	US / US outlying areas or DoD on-premises	NIPRNet via CAP	Virtual / Logical FEDERAL GOV. COMMUNITY Dedicated Multi-Tenant Infrastructure Physically Separate from Non-Federal Systems Strong Virtual Separation Between Tenant Systems & Information	ADP-2 National Agency Check with Law and Credit (NACLC) Non-Disclosure Agreement (NDA)
6	Classified SECRET National Security Systems	Level 5 + Classified Overlay	US / US outlying areas or DoD on-premises CLEARED / CLASSIFIED FACILITIES	SIPRNET DIRECT With DoD SIPRNet Enclave Connection Approval	Virtual / Logical FEDERAL GOV. COMMUNITY Dedicated Multi-Tenant Infrastructure Physically Separate from Non-Federal and Unclassified Systems Strong Virtual Separation Between Tenant Systems & Information	US Citizens w/ Favorably Adjudicated SSBI & SECRET Clearance NDA



Cloud Computing as-a-service



SaaS

Software-as-a-service, also known as cloud application services, is the most comprehensive form of cloud computing services, delivering an entire application that is managed by a provider, via a web browser.

Software updates, bug fixes, and general software maintenance are handled by the provider and the user connects to the app via a dashboard or API. There's no installation of the software on individual machines and group access to the program is smoother and more reliable.

You're already familiar with a form of SaaS if you have an email account with a web-based service like Outlook or Gmail, for example, as you can log into your account and get your email from any computer, anywhere.

image from redhat



AFWERX
SBIR ★ STTR

[www.fedramp.gov > marketplace](https://www.fedramp.gov/marketplace)

Fed RAMP Certification for Cloud Service Providers

Sort Marketplace by:

PRODUCTS AGENCIES ASSESSORS

✕ Clear All

Search by Provider or Product

33 results

Status

- Ready
- In Process
- Authorized

Authorization Type

- Agency
- JAB











Products Authorized

Service Models

Deployment Models

Agencies

- Administration for Children & Families
- Administration for Community

Name	Service Models	Impact Level	Status	
 Avue Digital Services	SaaS	Moderate		4 Authorizations
 Blackboard Learn SaaS	SaaS	Moderate		3 Authorizations
 Box Enterprise Cloud Content Collaboration Platform	SaaS	Moderate		52 Authorizations
 Cisco Unified Communications Manager Cloud for Government (Cisco UCM Cloud for Government)	SaaS	Moderate		7 Authorizations
 Cisco WebEx	SaaS	Moderate		26 Authorizations

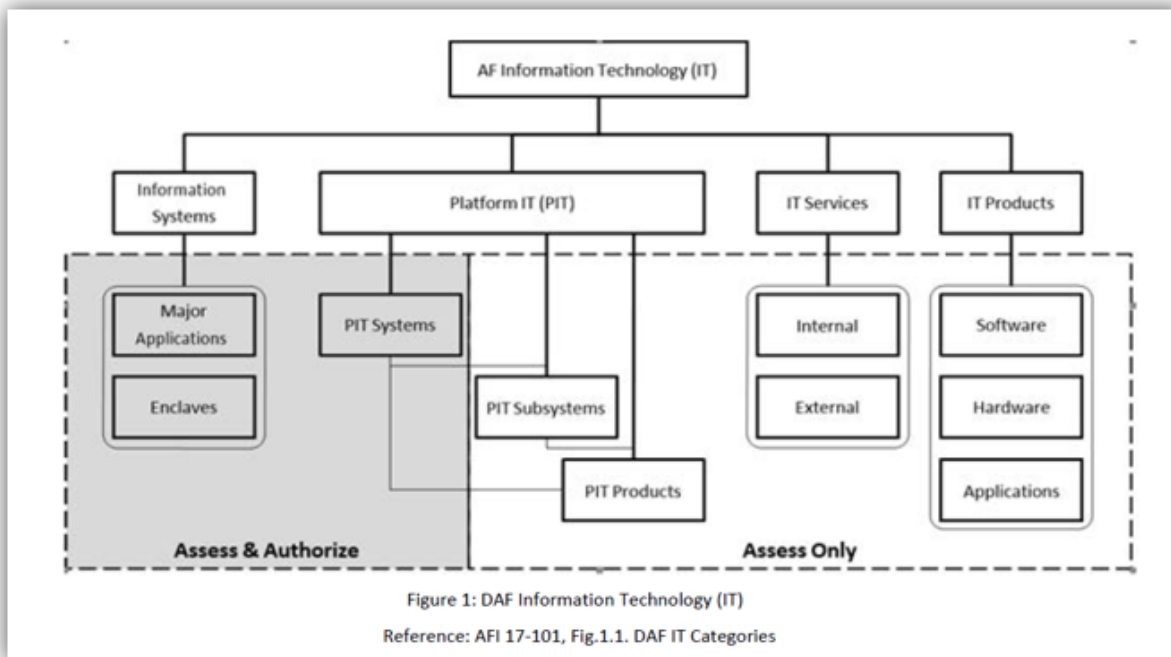




AFWERX
SBIR★STTR

ATO and Assess-Only/ATU

Do I need an ATO?



Maybe not...

If the Program is proposing an internal or external IS service, such as a web-based application or SaaS, the AO will decide


IT below the system level (Single Purpose IT Products or Devices, PIT Subsystems, PIT Products, IT Products, and IT Services) or if the IS in an internal or external IS service, the AO has discretion to simply approve for use.

Fast Track ATO Process Blue Cyber Briefing: <https://www.safcn.af.mil/CISO/Small-Business-Cybersecurity-Information/>



AFWERX
SBIR★STTR

www.cloud.mil



ENTERPRISE CLOUD


U.S. DEPARTMENT OF DEFENSE

[HOME](#) [DEOS](#) [MILCLOUD 2.0](#) [CLOUD ONE](#) [DOD 365](#) [CONTACT US](#)

What is Enterprise Cloud


Multi-cloud and multi-vendor ecosystem composed of a general-purpose and multiple fit-for-purpose clouds that are available globally and at the tactical edge

DoD Enterprise Clouds




DEOS

DEOS is a SaaS commercial cloud providing email, web conferencing, and other office productivity solutions.



Cloud One

Cloud One is the leading provider for state-of-the-art cloud computing platforms, technologies, approaches, and solutions.



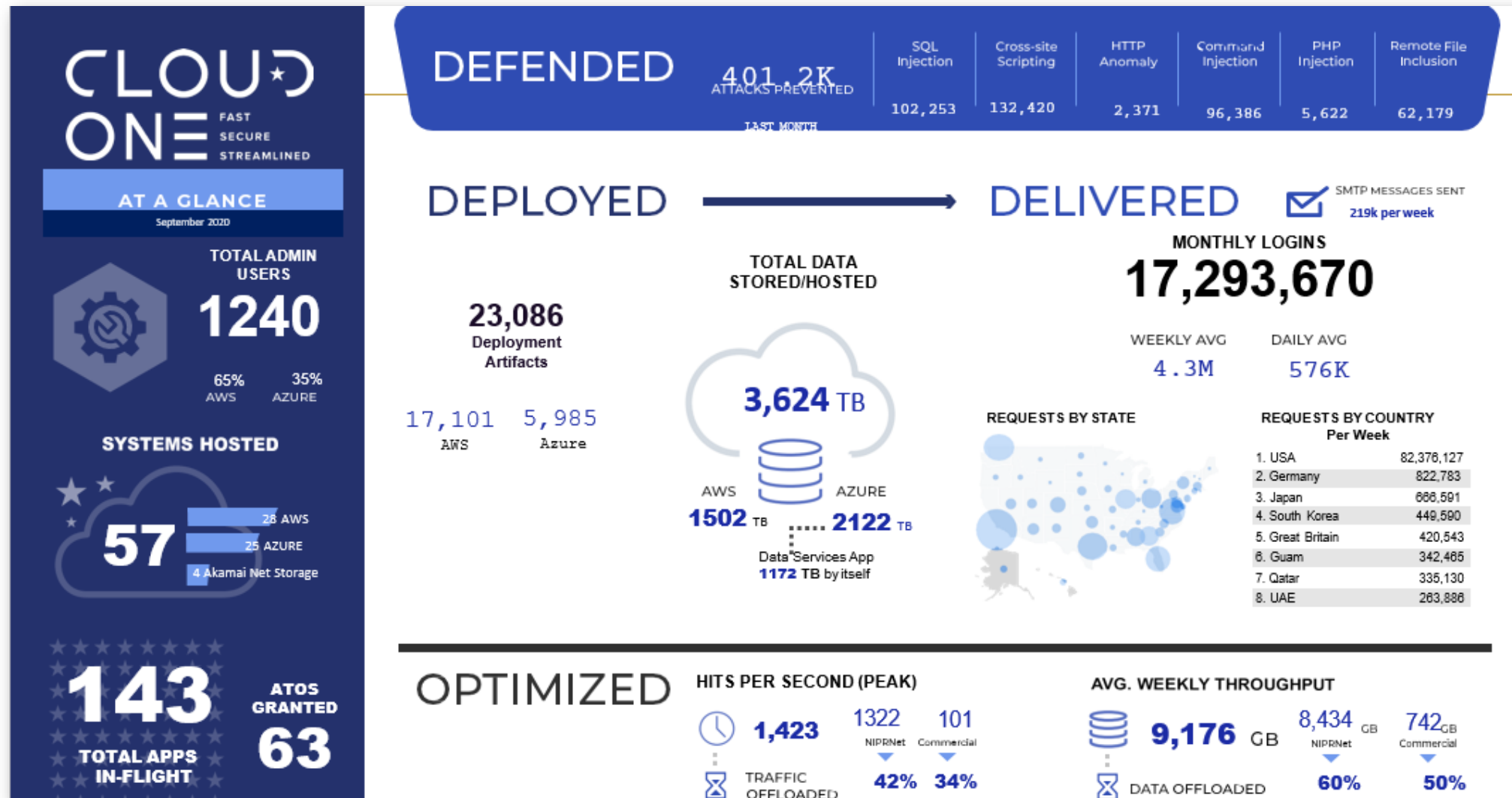
milCloud 2.0

milCloud 2.0 is a commercial cloud managed by DISA, offering IaaS and PaaS capabilities.



AFWERX
SBIR★STTR

<https://cloudone.af.mil/>



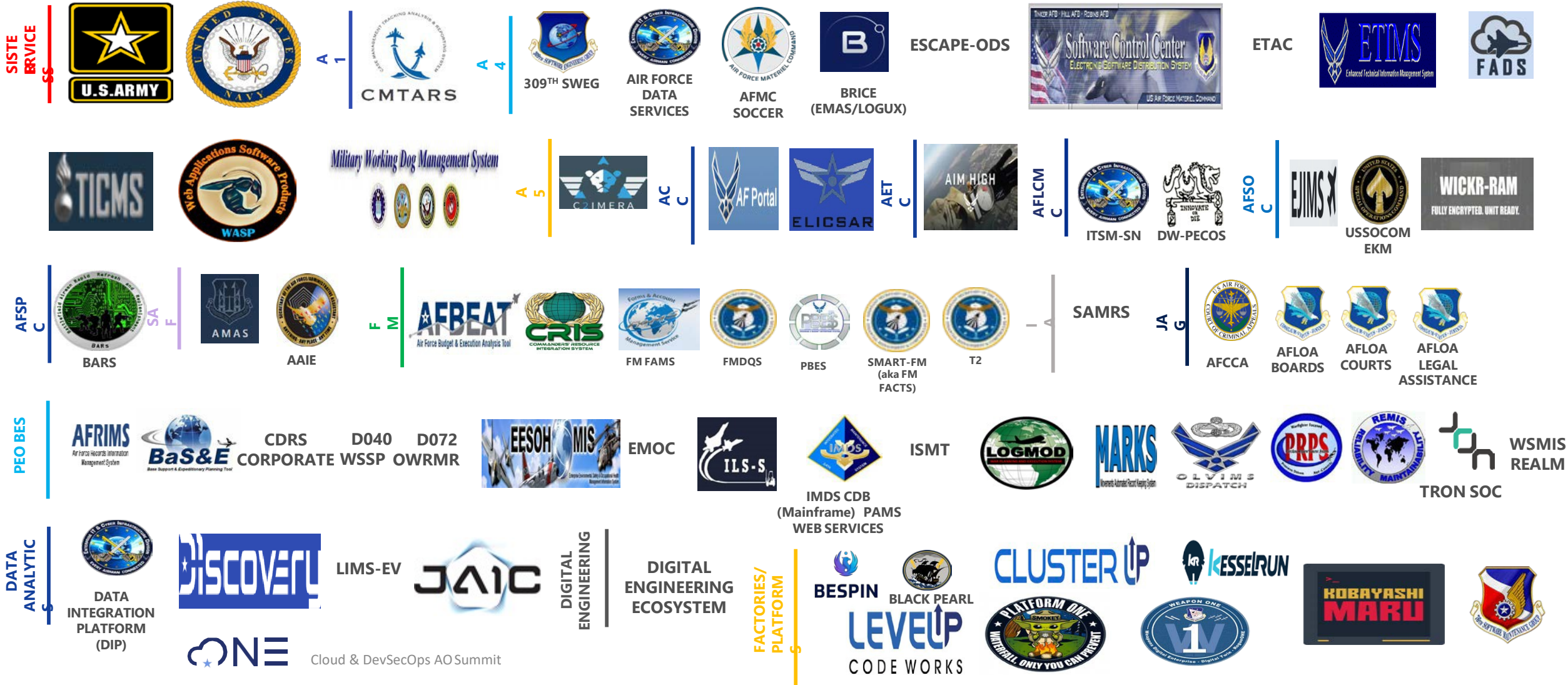


AFWERX
SBIR ★ STTR

Advantages of Cloud One

- Cloud One is a multi-hybrid cloud environment with centrally-funded hosting that utilizes both Amazon Web Services and Microsoft Azure to host the Air Force's enterprise general purpose applications at the Impact Levels (IL) 2, 4 and 5. As of May 2021, Additionally, Cloud One is able to support IL2 workloads in Google Cloud Platform (GCP) and will soon host higher levels of classification in both GCP and Oracle cloud offerings. When you are ready to begin or continue your cloud journey, the Cloud One team will discuss your capability needs and provide a way forward with an approved delivery partner.
- Cloud One provides a plethora of services that will accelerate the accreditation process, ensure continuing compliance with security controls, and facilitate rapid future deployment of capabilities. We need to take advantage of the rapid ATO-inheritance and Real-time Compliance that Cloud One offers. Additionally, Cloud One offers a wide range of native cloud services, including DISA-approved “guardrails” that allow system and application owners to focus on maintaining their applications rather than spending valuable time managing their own hosting environment and underlying infrastructure.

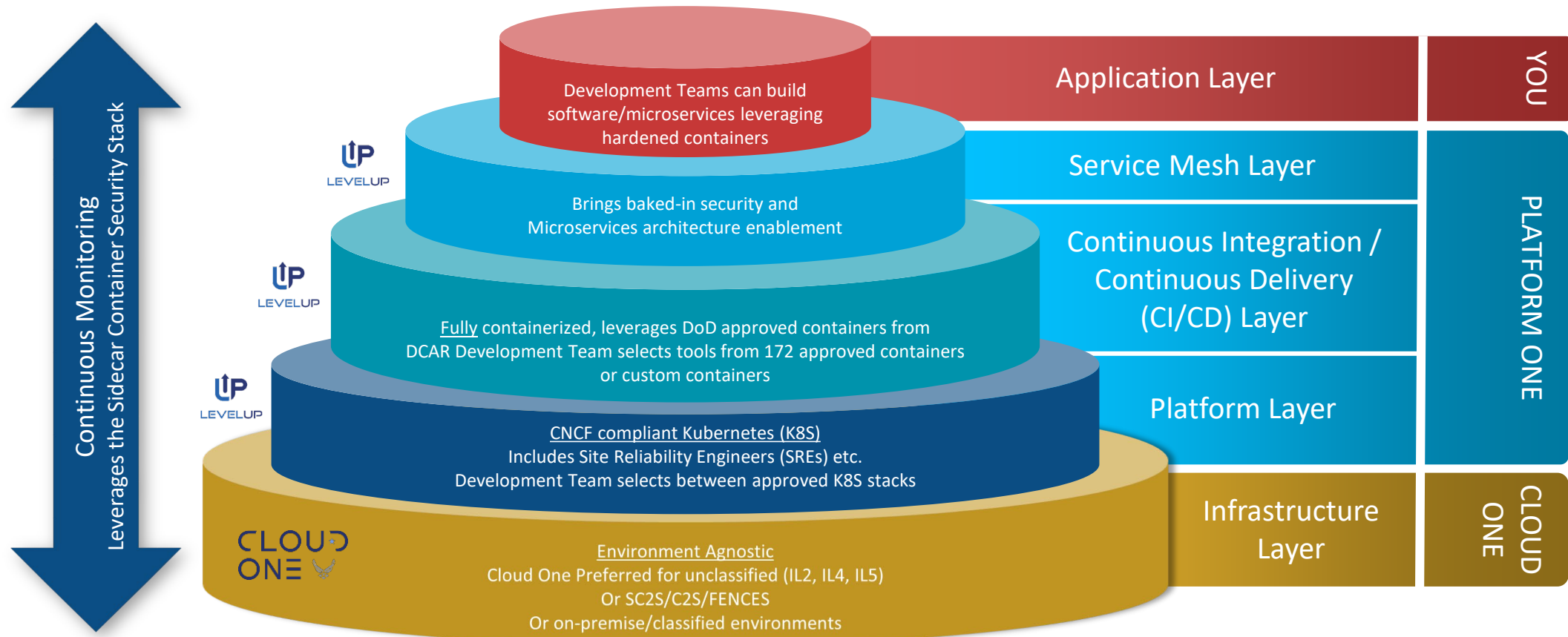
Cloud One Hosted – Mission Partners





AFWERX
SBIR★STTR

DevSecOps/Platform One/Cloud One Relationship





AFWERX
SBIR★STTR

<https://www.disa.mil/-/media/Files/DISA/Fact-Sheets/Fact-Sheet-milCloud-2-0.ashx>



milCloud® 2.0 Capabilities





AFWERX
SBIR★STTR

milCloud® 2.0 Benefits

Secure



Dozens of inherited critical security controls not available in commercial clouds, including:

- DoD Information Network Security Boundary Controls
- DISA Data Center Physical Facility Security Controls DECCS
- GDIT's FedRAMP High Accreditation & Controls
- DISA's IL-5 Provisional Authority Accreditation & Controls (IL-6 coming soon)
- Virtual Trusted Platform Manager (vTPM) provided through VMWare, providing encrypted virtual machines and storage

Easy to Use



Customers can buy cloud services in as few as 48 hours, compared to typical months-long acquisition processes

- Self-service model for service ordering, service provisioning, and account management and funding
- Customers can use MIPR funds or a credit card to buy any services on contract (all FFP)
- Funds are fungible: infrastructure hosting, engineering & migration services, and consulting & professional services
- Funds can cross fiscal years depending on color of money

Affordable



Compute, storage, and network cloud services priced at commercial parity – with enhanced security

- “Pay-as-you-go” model – customers only pay for what they use
- No a la carte bandwidth or transaction fees charged to access applications or data
- FFP Services enable predictable spend patterns and transparent cost understanding
- One-stop shop for hosting, engineering, consulting, and professional services

milCloud® 2.0 is held by CSRA, LLC, a General Dynamics Information Technology (GDIT) managed affiliate. milCloud® and the milCloud® logo are registered trademarks owned by the Defense Information Systems Agency (DISA).



AFWERX SBIR★STTR

Software Ecosystem
Multiple Innovation Hubs, One Platform





AFWERX
SBIR★STTR

Cloud Threat Landscape

www.dc3.mil

>>>DIB Cybersecurity
>>>DCISE Analytics





AFWERX
SBIR ★ STTR

References

- DISA CC SRG: <https://dl.cyber.mil/cloud/SRG/index.html>
- FedRAMP Marketplace (DOD Cloud Service Offerings) <https://www.fedramp.gov/>
- DAF ATO Process: https://static.e-publishing.af.mil/production/1/saf_cn/publication/afi17-101/afi17-101.pdf
- Cloud One: <https://cloudone.af.mil/>
- Platform One: <https://p1.dso.mil/>
- Mil Cloud <https://www.disa.mil/-/media/Files/DISA/Fact-Sheets/Fact-Sheet-milCloud-2-0.ashx>
-



AFWERX
SBIR★STTR

Any Questions?

- This briefing is not a substitute for reading the FAR and DFARS in your contract.
- This presentation and other presentations in the DAF CISO Blue Cyber Educational Series and be found on the DAF CISO webpage: <https://www.safcn.af.mil/CISO/Small-Business-Cybersecurity-Information/>
- Please provide questions, feedback or if you just want to talk about your cyber security /data protection questions at <https://www.safcn.af.mil/Contact-Us/>
 - Daily Office Hours for answering/researching **your** questions about DAF Small Business cybersecurity and data protection!
 - **Every Tuesday**, 1pm Eastern, dial in for the DAF CISO Small Business Cybersecurity Ask-Me-Anything. _