

Cloud Playbook



### **About the DISA Cloud Playbook**

Cloud Adopters,

As you attempt to help the department move more data into the Cloud, there will be many challenges to overcome and learning to be realized. We pulled many of the lessons learned from across the department by the early adopters of Cloud. This tool guide was assembled as a general guide and place to consider your own experiences. It is not intended to be all inclusive of cloud adoption, migration or transition. We hope you will continue to document and share these experiences, and that you will consider sharing valuable lessons with us, so we can continue to centrally manage and share them.

Here is the legal guidance that we are required to tell you about this guide:

"It does not constitute a commitment on behalf of the United States Government to provide any of the capabilities, systems or equipment presented and in no way obligates the United States Government to enter into any future agreements with regard to the same. The information presented may not be disseminated without the express consent of the United States Government. This brief may also contain references to United States Government future plans and projected system capabilities. Mention of these plans or capabilities in no way guarantees that the U.S. Government will follow these plans or that any of the associated system capabilities will be available or releasable to foreign governments."

Once again, please don't hesitate to reach out to us and share your experiences and good luck on your journey to the Cloud!

v/r,

Jason

Jason G. Martin Services Executive Defense Information Systems Agency

# **DISA Cloud Adoption Cycle**

	LEARN	CHOOSE
CLOUD CONSUMER What Mission Partners Should Know and Do	<ul> <li>Cloud Policies</li> <li>Goals (Fit, Leverage, Evolve)</li> <li>Information Impact Level</li> <li>Cloud Models</li> <li>Adoption Expertise</li> <li>Outreach</li> </ul>	<ul> <li>Business/Case Analysis (BCA)</li> <li>Requirement Definition</li> <li>Application Rationalization</li> </ul>
CLOUD PROVIDER What Cloud Providers Should Tell You	<ul><li>FedRAMP/JAB PA Status</li><li>Cloud Service Offering</li></ul>	<ul> <li>Cost Models</li> <li>Service Models</li> <li>Attributes</li> <li>Service Level Agreement</li> <li>COOP/DR Model</li> </ul>

BUY	CONFIGURE	TRANSITION	UTILIZE
<ul> <li>Contract Options</li> <li>Period of Performance</li> <li>Color of Money</li> <li>SLA</li> <li>CSSP Services</li> </ul>	Specifications     Environment     Technology     Virtual Machine Information	<ul><li>Development/Test</li><li>User Roles</li><li>Authentication/Access</li></ul>	<ul> <li>Monitor Data     Consumption</li> <li>Leverage Cloud     Functions</li> <li>Recognize     efficiencies</li> </ul>
<ul><li>Contract Vehicle</li><li>On boarding process</li><li>Consumption visibility</li></ul>	Engineer Support	<ul><li>IA Compliance</li><li>Transition Support</li></ul>	<ul> <li>Operational Transparency</li> <li>Scalability/ Flexibility</li> <li>Innovation</li> </ul>

**DOES IT MEET THE ORIGINAL NEED?** 

### Learn

	Have I read the December 5, 2014 Memorandum DoD Updated Guidance on the Acquisition and use of Commercial Cloud Computing Services?
	Have I reviewed the DAU Guide to Cloud Adoption?
	What are my cloud goals (Fit, Leverage, Evolve)?
	Do I understand the security requirements for cloud adoption? (JAB/RMF/ATO) Impact Levels (IL
_	IL2, IL4, IL5, IL6?
	Have I allocated resources to support cloud adoption?
	Do I have the current FedRAMP/JAB PA approval list?
	Do I know the cloud offerings of individual CSPs?
	Have I identified the CSSP roles and responsibilities?
	Do I understand Cloud Access Points?

## Choose

Have I completed a Business Case Analysis? What cloud services will I need? (IaaS, SaaS, PaaS) What is my ideal cloud deployment model (Public, Private, Community, Hybrid) What is my ideal compute hosting environment? (On Premise, Off Premise) Which of my applications are cloud ready, have potential, or not cloud compatible? What is my COOP/DR requirement and which applications require it? What CSPs meet my cloud requirements? COA Analysis/ Best fit? Do I have stakeholder buy in? Have I identified my migration cost? Who do I want to manage the environment (or can my staff manage the environment) Self, DISA 3rd party?
Business Rules and billing units? (I/O or Bandwidth billable? Type and rules of metered billing?)

## Buy

What is the contract vehicle lifecycle? What is the contract vehicle ceiling? What color of money can I use? Does the period of performance have fiscal year alignment? Can I take advantage of vehicles that cross FY boundary? (RDT&E, 2410A)? What is the contract SLA/Terms and Conditions? Have I identified a CSSP for my cloud solution? How do I contract? What is the onboarding process? What is the payment model? Will I have computing consumption visibility? How flexible is funds utilization?

# **Configure**

<ul> <li>□ Does the CSP provide engineering support?</li> <li>□ Have I configured my COOP/DR?</li> <li>□ Do I know my specifications (below)?</li> </ul>		
	Еха	mple
	VM Name	
	OS Hostname	
	OS Type & Version	

VM Name	
OS Hostname	
OS Type & Version	
vCPU	
RAM (GB)	
Root Volume Size (GB)	
NIC IP	
NIC Network	
Data Volume 1 Type	
Data Volume 1 Size (GB)	

## **Transition**

Does the CSP have a development and test environment to support production? Is my authentication and access solution operating in accordance with user roles? Is the Cloud Solution maintaining FedRAMP/JAB PA compliance? Have I established my security posture? What transition support do I need and where do I get it? Have I tested the COOP/DR capability? How does the CSP handle Development, Test and Production environments?

## **Utilize**

Am I able to monitor and receive data consumption alerts?  Am I able to sustain my security posture?  Am I optimizing scalability?  Is there a cost savings?  Am I leveraging all cloud tenants?  Am I recognizing program efficiencies?	
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# **Acronym Guide**

ATO – Authorization to Operate
BCA – Business Case Analyses
COA – Course of Action
COOP – Continuity of Operations
CSP – Cloud Service Provider
CSSP – Cyber Security Service Provider
DAU – Defense Acquisition University
DR – Disaster Recovery
FedRAMP – Federal Risk and Authorization Management Program
IA – Information Assurance
laaS – Infrastructure as a Service
JAB PA – Joint Authorization Board Provisional Authorization
NIC IP – Network Interface Card Internet Protocol
OS – Operating System
PaaS - Platform as a Service
RAM – Random Access Memory
RMF – Risk Management Framework
SaaS - Software as a Service
SLA – Service Level Agreement
vCPU – Virtual Central Processing Unit

### **Contact Information**

#### **DISA Mission Partner Engagement Office**

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Providing Mission Partners with a Single Point of Entry into DISA

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GENERAL MISSION PARTNER SUPPORT	disa.meade.bd.mbx.bdm4-mpeo-support@mail.mil

#### **USEFUL LINKS**

Have I read the December 5, 2014 Memorandum DoD Updated Guidance on the Acquisition and Use of Commercial Cloud Computing Services?

http://dodcio.defense.gov/Portals/0/Documents/Cloud/DoD%20CIO%20-%20Updated%20Guidance%20-%20Acquisition%20and%20Use%20of%20Commercial%20Cloud%20Serviices\_20141215.pdf

#### Have I reviewed the DAU Guide to Cloud Adoption?

https://www.dau.mil/acquipedia/Pages/ArticleDetails.aspx?aid=c40ef32b-6748-418b-b322-dd1ddbc9378c

Do I understand security requirements for cloud adoption? (JAB/RMF/ATO) Impact Levels (IL) IL2, IL4, IL5, IL6?

https://iase.disa.mil/cloud\_security/Documents/Forms/AllItems.aspx

#### Do I have the current FedRAMP/JAB PA approval list?

https://marketplace.fedramp.gov/index.html#/products?status=Compliant&sort=productName

## **Notes**


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DISA