



How to Be Successful in FedRAMP with Esri Managed Cloud Services

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1. What is FedRAMP?

2. What is Managed Services?



What is FedRAMP?

Federal Risk and Authorization Management Program

President's International Strategy for Cyberspace and Cloud First policy

Reduce procurement & operating costs



Increase efficiency & effectiveness of services



What is FedRAMP?

Federal Risk and Authorization Management Program

President's International Strategy for Cyberspace and Cloud First policy

- U.S. Department of Agriculture
- U.S. Department of Commerce
- U.S. Department of Defense
- U.S. Department of Education
- U.S. Department of Energy
- U.S. Department of Health and Human Services
- U.S. Department of Homeland Security
- U.S. Department of Housing and Urban Development
- U.S. Department of Justice
- U.S. Department of Labor
- U.S. Department of State
- U.S. Department of the Interior
- U.S. Department of the Treasury
- U.S. Department of Transportation
- U.S. Department of Veterans Affairs

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- U.S. Department of the Treasury
- U.S. Department of Transportation
- U.S. Department of Veterans Affairs

Approximately 4 million people



What is FedRAMP?

Federal Risk and Authorization Management Program

- National Institute of Standards and Technology (NIST), the General Services Administration (GSA)
- Department of Defense (DOD)
- Department of Homeland Security (DHS)
- United States Chief Information Officers Council (CIO Council)
- Information Security and Identity Management Committee (ISIMC)
- State and local governments
- Private sector
- Non-governmental organizations (NGOs)
- Academia

What is FedRAMP?

Federal Risk and Authorization Management Program

“Standardized security requirements for the authorization and ongoing cybersecurity of cloud services for selected information system impact levels”

- Standard security requirements
- Impact levels
 - High
 - Moderate
 - Low



Esri Cloud Deployment Options

ArcGIS Enterprise



Self-Managed

ArcGIS Enterprise



Managed Services

Partner- or Esri-Managed

ArcGIS Online



SaaS

Do-it-yourself



SaaS



Esri Cloud Deployment Options

ArcGIS Enterprise



Self-Managed

ArcGIS Enterprise



Managed Services

Partner- or Esri-Managed

ArcGIS Online



SaaS

Do-it-yourself



SaaS



What is Esri Managed Cloud Services?



What is Esri Managed Cloud Services?



Managed Services Security Frameworks

Security Controls and Procedures	Standard	Advanced	Advanced Plus (FedRAMP)
Monthly Automated Operating System Patching	X	X	X
Malware protection	X	X	X
Change management for staging and production systems	X	X	X
High availability architecture options	X	X	X
System, Application and Database Backups	X	X	X
24/7 System Monitoring and support powered by <u>ArcGIS Monitor</u>	X	X	X
Intrusion Detection System (IDS) to detect malicious activity		X	X
Web Application Firewall (WAF) to mitigate against web application attacks		X	X
Application, system, and database vulnerability scans		X	X
24/7 Security Operations Center (SOC) for security monitoring and threat detection		X	X
Disaster recovery and business continuity planning and testing		X	X
Contingency planning and risk management		X	X
Annual SOC 2 assessment		X	
Annual assessment by FedRAMP accredited Third Party Assessment Organization (3PAO)			X
Annual third-party penetration testing			X
Geographically redundant disaster recovery backups			X
FIPS 140-2 compliant encryption for data-in-transit and data-at-rest			X

Managed Services Security Frameworks

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High availability architecture options	X	X	X
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FedRAMP + Esri Managed Cloud Services

Success Factors



FedRAMP + Esri Managed Cloud Services

Success Factors

1. Expectations
 - Access
 - Roles & Responsibilities



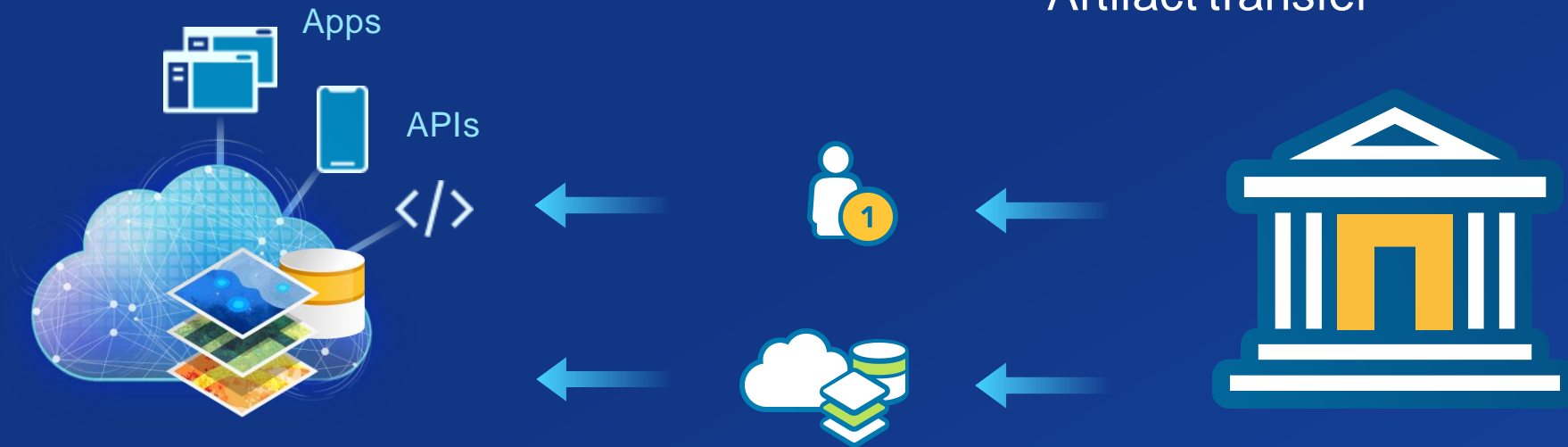
Managed Services Onboarding



1. Managed Services builds staging environment & deploys solution

Managed Services Onboarding

1. Managed Services builds staging environment & deploys solution
2. Agency and Cloud environment configuration
 - SAML
 - Artifact transfer



- Map documents
- Zipped fgdb
- Certificates
- Licenses
- Custom code

Managed Services Onboarding

Managed Services

- Data owner
- ArcGIS Server
 - Publisher
 - Administrator

Agency

- Portal User
 - All user types*

*customer responsibility

Controlling variables is a critical element of protecting system availability & stability.

- Access control
- Change control

FedRAMP + Esri Managed Cloud Services

Success Factors

1. Expectations
 - Access
 - Responsibilities
2. Preparation
 - Lift & Shift
 - Cloud Migration



FedRAMP + Esri Managed Cloud Services

Preparation

- Lift & Shift

Business Unit A



Business Unit B



FedRAMP + Esri Managed Cloud Services

Preparation

- Lift & Shift

Business Unit A



Business Unit B



Business Unit C



FedRAMP + Esri Managed Cloud Services

Preparation

- Cloud Migration

Business Unit A



Business Unit B



Business Unit C



FedRAMP + Esri Managed Cloud Services

Preparation

- **Cloud Migration**
 1. **Expectations**
 - **Access**
 - **Responsibilities**
 2. **Preparation**
 - **Lift & Shift**
 - **Cloud Migration**
 - **Business Requirements**
 - **Security Requirements**



FedRAMP + Esri Managed Cloud Services

Preparation

- **Cloud Migration**
- **Business Requirements**
 - User workflows
 - Data requirements: cleansing, ETL, editing vs. reading, public vs. private
 - Phased approach
- **Security Requirements**
 - ATO process
 - ISSO brings Understanding & oversight
 - Timelines/schedule
 - Data classification
 - Governance/policies



FedRAMP + Esri Managed Cloud Services

Next Steps

1. Engage your ISSO

- Timelines
- Expectations
- Policies
- Discovery

2. Consider Esri's partnership Migration

- Discovery Workshop
- Advantage Program

Esri Managed Cloud Services

- Hosting
- 24/7 Monitoring
- Change Management
- Integrated Support
- Service Level Agreement
- IT Best Practices

FedRAMP + Esri Managed Cloud Services

Next Steps

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