

# Your Cloud Readiness Assessment Starts Here

We have guided numerous DoD and government organizations on their infrastructure modernization journeys. This battle-tested template incorporates that experience to evaluate readiness, create an air-tight plan, and confidently migrate to the cloud.

## What's inside?

- ✓ Mission objectives and requirements checklist
- ✓ Current state assessment checklist
- ✓ Organization requirements and constraints checklist
- ✓ Migration roadmap and operations plan checklist
- ✓ Implement, monitor, and optimize the checklist

**Instructions for Use:** This checklist is designed to guide government agencies through the initial phase of defining mission objectives and requirements for cloud adoption. By systematically addressing each item, agencies can ensure their cloud strategy is mission-aligned, compliant with regulations, and tailored to meet their unique needs.

## 1. Mission objectives and requirements checklist

**Objective:** To align cloud adoption with the agency's core mission, strategic goals, and regulatory obligations, ensuring that the transition to cloud computing supports and enhances its ability to fulfill its mandate effectively and efficiently.

### Mission objectives

- List your agency's core mission statement and key objectives the cloud adoption strategy must support.
- Identify key strategic goals for the next 3-5 years.

- Analyze how cloud adoption can support achieving these goals to ensure they contribute directly to the agency's mission.
- Prioritize specific initiatives within your digital transformation plan.
- Identify potential challenges and opportunities associated with cloud migration.

## 2. Current state assessment checklist

**Objective:** Evaluate the IT infrastructure, applications, and data to determine cloud readiness and identify technical gaps.

### Inventory of IT assets

- List all hardware, software, network resources, and data storage solutions currently used.
- Catalog all applications, including custom-developed software and commercial off-the-shelf (COTS) products.
- Identify where data resides, its format, sensitivity level, and any regulatory compliance requirements affecting its storage and processing.

### Technical capability assessment

- Evaluate the performance of current IT infrastructure against required standards for cloud adoption.
- Determine which applications are cloud-ready, which need re-architecting, and which should be phased out or replaced.
- Examine network capacity and connectivity to support cloud services, including bandwidth and latency considerations.

## 3. Organization requirements and constraints checklist

**Objective:** Systematically identify and document the unique organizational requirements and constraints that will influence your cloud migration strategy. This step will ensure a secure, compliant, and efficient transition that aligns with the agency's mission, operational needs, and regulatory obligations.

### Mission-critical functions

- List all mission-critical functions and services.
- Determine how each function or service will be affected by cloud migration.

### Data sensitivity levels

- Classify data according to sensitivity levels (public, sensitive, confidential, classified).
- Identify data handling and storage requirements for each sensitivity level.

## **Compliance with federal regulations**

- Document specific federal regulations applicable to your agency (FedRAMP, FISMA, HIPAA, etc.).
- Ensure compliance requirements for data protection, access control, and audit trails are understood.

## **Technical constraints**

- Assess the compatibility of legacy systems with cloud technologies.
- Identify dependencies between systems and services that may affect migration.
- Evaluate network capacity and performance requirements for cloud services.

## **Security requirements**

- Define security requirements for cloud services, including access management, identity, encryption, and threat protection.
- Plan for the integration of cloud services with existing security infrastructure.

## **Operational impact**

- Analyze the potential impact of cloud migration on daily operations and service delivery.
- Plan for any necessary operational changes or adaptations.

## **Budget and cost considerations**

- Estimate the budget required for cloud migration and ongoing cloud service costs.
- Identify potential cost savings or efficiencies gained through cloud adoption.

## **Skill gaps and training needs**

- Assess the current skill levels of IT staff regarding cloud technologies.
- Identify training programs or certifications needed to fill any skill gaps.

## **Vendor evaluation**

- Create criteria for evaluating cloud service providers (CSPs) based on your agency's requirements.
- Research and list potential CSPs that meet your criteria.

## **Risk management**

- Identify potential risks associated with cloud migration, including data loss, service disruption, and security breaches.
- Develop a risk management plan to mitigate identified risks.

## **4. Migration roadmap and operations plan checklist**

**Objective:** Outline a detailed plan for transitioning to the cloud, including timelines, priorities, operational changes and training and support plans

- Outline specific goals and objectives for cloud migration, including timelines and expected outcomes.
- Choose between rehosting, re-platforming, refactoring, rebuilding, or replacing based on application and data assessment.
- Identify and prioritize applications and data sets for migration based on their business value, cloud readiness, and complexity.
- Develop a detailed cost model factoring in migration expenses, cloud service fees, and potential cost savings.
- Identify and mitigate potential risks associated with migration, including data security, downtime, and vendor lock-in.

## 5. Implement, monitor and optimize checklist

**Objective:** To execute the migration plan, ensuring that applications, data, and services are seamlessly transitioned to the cloud environment and to continuously monitor cloud operations for performance, security, and cost-efficiency, making adjustments as necessary to optimize cloud usage.

### Migration execution

- Finalize and review the cloud migration plan with all stakeholders.
- Schedule the migration to minimize impact on agency operations.
- Ensure all necessary data backups are created before migration.
- Conduct a final security and compliance check before migration.
- Migrate data, apps, and services according to the planned sequence.

### Post-migration testing

- Verify the integrity and accessibility of migrated data.
- Test the performance and functionality of applications in the cloud environment.
- Conduct security vulnerability assessments post-migration.
- Gather feedback from users on the migrated services and address any issues.

### Monitoring and performance optimization

- Implement cloud monitoring tools to track performance, usage, and costs.
- Set up alerts for abnormal usage patterns or potential security breaches.
- Regularly review cloud resource utilization to identify underused or overused resources.

### Security and compliance management

- Continuously monitor for new security threats and vulnerabilities.
- Ensure all cloud services comply with federal regulations and standards.

- Regularly update security policies and procedures to address evolving threats.

### **Cost management and optimization**

- Monitor and analyze cloud spending to identify opportunities for cost savings.
- Implement tagging and cost allocation to track expenses by department, project, or application.
- Optimize cloud resources and services to match demand without overprovisioning.

### **Continuous improvement and scaling**

- Collect and analyze operational metrics to identify areas for improvement.
- Plan and execute scaling strategies to support increasing workloads or to reduce resources when demand decreases.
- Encourage ongoing training and development for staff to enhance cloud skills and knowledge.

### **Documentation and knowledge sharing**

- Update internal documentation to reflect the new cloud environment and operational practices.
- Share best practices and lessons learned with other departments or agencies considering similar migrations.
- Maintain a comprehensive runbook for cloud operations, including response plans for potential issues.

## Ready to transform your agency's IT infrastructure?

[Let's discuss how IPKeys](#) can help operationalize your cloud-focused modernization initiatives. Our managed services cover assessment, migration, security, automation, governance, and beyond. Our benefits include:

- Prepare a Strategic Performance Plan (SPP) document to identify cost-effectiveness and to provide enterprise solutions to eliminate system and application duplication and redundancy.
- Conduct a physical inventory and data center analysis of all continental United States (CONUS) and all outside continental United States (OCONUS) data centers.
- Design and build-out of data center and cloud enclaves that conform to cost-saving efforts while maintaining effectiveness, innovation, efficiencies, and security.
- Optimization of the cloud environment with a well-defined governance strategy, cloud analytics and reporting, and properly configured elasticity and scalability.
- Rationalization and analysis of software applications to help consolidate and improve business operations.