AWS Well-Architected Tool

AWS Well-Architected Tool secure_app - AWS Well-Architected Framework - Alpha Release Report

AWS Account ID: 006840835651

AWS Well-Architected Tool Report

Table of contents

Milestone properties

Milestone name
Alpha Release

Date saved
Aug 4, 2022 12:44 AM UTC

Workload name
secure_app

ARN
arn:aws:wellarchitected:us-west-2:006840835651:workload/0d3f580b3491387d5f13bc5c1f185612

Description
Secure app review

Review owner
Jeremiah Webb, illusjw@amazon.com

Industry type
-

Industry
-

Environment
Production

AWS Regions
US West (Oregon)

Non-AWS regions
-

Account IDs

-

Architectural design

-

Lens overview

Questions answered

58/58

Version

AWS Well-Architected Framework, 31st Mar 2022

Pillar	Questions answered
Operational Excellence	11/11
Security	10/10
Reliability	13/13
Performance Efficiency	8/8
Cost Optimization	10/10
Sustainability	6/6

Lens notes

-

Improvement plan

Improvement item summary

High risk: 12

Medium risk: 12

Pillar	High risk	Medium risk
Security	2	3
Reliability	4	3
Performance Efficiency	2	1
Operational Excellence	3	2
Cost Optimization	1	2
Sustainability	0	1

High risk

Security
• SEC 5.How do you protect your network resources? • SEC 6.How do you protect your compute resources?

Reliability

- REL 8.How do you implement change?
- REL 11.How do you design your workload to withstand component failures?
- REL 5.How do you design interactions in a distributed system to mitigate or withstand failures?
- REL 1.How do you manage service quotas and constraints?

Performance Efficiency

- PERF 7.How do you monitor your resources to ensure they are performing?
- PERF 5.How do you configure your networking solution?

Operational Excellence

- OPS 8.How do you understand the health of your workload?
- OPS 10.How do you manage workload and operations events?
- OPS 11.How do you evolve operations?

Cost Optimization

- COST 9.How do you manage demand, and supply resources?

Sustainability

No improvements identified

Medium risk

Security

- SEC 3.How do you manage permissions for people and machines?
- SEC 4.How do you detect and investigate security events?
- SEC 10.How do you anticipate, respond to, and recover from incidents?

Reliability

- REL 6.How do you monitor workload resources?
- REL 10.How do you use fault isolation to protect your workload?
- REL 7.How do you design your workload to adapt to changes in demand?

Performance Efficiency

- PERF 6.How do you evolve your workload to take advantage of new releases?

Operational Excellence

- OPS 5.How do you reduce defects, ease remediation, and improve flow into production?
- OPS 6.How do you mitigate deployment risks?

Cost Optimization
• COST 2.How do you govern usage? • COST 5.How do you evaluate cost when you select services?

Sustainability
• SUS 6.How do your development and deployment processes support your sustainability goals?

Lens details

Operational Excellence

Questions answered

11/11

Question status

- High risk: 3
- Medium risk: 2
- No improvements identified: 5
- Not Applicable: 1
- Unanswered: 0

Pillar notes

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1. How do you determine what your priorities are?

No improvements identified

Selected choice(s)

- Evaluate external customer needs
- Evaluate internal customer needs
- Evaluate governance requirements
- Evaluate compliance requirements
- Evaluate threat landscape
- Evaluate tradeoffs
- Manage benefits and risks

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

2. How do you structure your organization to support your business outcomes?

No improvements identified

Selected choice(s)

- Resources have identified owners
- Processes and procedures have identified owners
- Operations activities have identified owners responsible for their performance
- Team members know what they are responsible for
- Mechanisms exist to identify responsibility and ownership
- Mechanisms exist to request additions, changes, and exceptions
- Responsibilities between teams are predefined or negotiated

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

No risk detected for this question. No action needed.

3. How does your organizational culture support your business outcomes?

No improvements identified

Selected choice(s)

- Executive Sponsorship
- Team members are empowered to take action when outcomes are at risk
- Escalation is encouraged
- Communications are timely, clear, and actionable
- Experimentation is encouraged
- Team members are enabled and encouraged to maintain and grow their skill sets
- Resource teams appropriately
- Diverse opinions are encouraged and sought within and across teams

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

4. How do you design your workload so that you can understand its state?

No improvements identified

Selected choice(s)

- Implement application telemetry
- Implement and configure workload telemetry
- Implement user activity telemetry
- Implement dependency telemetry
- Implement transaction traceability

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

5. How do you reduce defects, ease remediation, and improve flow into production?

⚠ Medium risk

Selected choice(s)

- Use version control
- Test and validate changes
- Make frequent, small, reversible changes

Not selected choice(s)

- Use configuration management systems
- Use build and deployment management systems
- Perform patch management
- Share design standards
- Implement practices to improve code quality
- Use multiple environments
- Fully automate integration and deployment
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Use configuration management systems
- Use build and deployment management systems
- Perform patch management

5. How do you reduce defects, ease remediation, and improve flow into production?
• Share design standards • Implement practices to improve code quality • Use multiple environments • Fully automate integration and deployment Ask an expert

6. How do you mitigate deployment risks?

⚠ Medium risk

Selected choice(s)

- Plan for unsuccessful changes
- Test and validate changes
- Use deployment management systems
- Deploy frequent, small, reversible changes

Not selected choice(s)

- Test using limited deployments
- Deploy using parallel environments
- Fully automate integration and deployment
- Automate testing and rollback
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Test using limited deployments
- Deploy using parallel environments
- Fully automate integration and deployment
- Automate testing and rollback

Ask an expert

7. How do you know that you are ready to support a workload?

⊖ Not Applicable: Out of Scope

Selected choice(s)

-

Not selected choice(s)

- Ensure personnel capability
- Ensure consistent review of operational readiness
- Use runbooks to perform procedures
- Use playbooks to investigate issues
- Make informed decisions to deploy systems and changes
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

Answer the question to view the improvement plan.

8. How do you understand the health of your workload?

High risk

Selected choice(s)

- Collect and analyze workload metrics
- Alert when workload outcomes are at risk
- Alert when workload anomalies are detected

Not selected choice(s)

- Identify key performance indicators
- Define workload metrics
- Establish workload metrics baselines
- Learn expected patterns of activity for workload
- Validate the achievement of outcomes and the effectiveness of KPIs and metrics
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Identify key performance indicators
- Define workload metrics
- Establish workload metrics baselines

8. How do you understand the health of your workload?

- Learn expected patterns of activity for workload
- Validate the achievement of outcomes and the effectiveness of KPIs and metrics

Ask an expert

9. How do you understand the health of your operations?

No improvements identified

Selected choice(s)

- Identify key performance indicators
- Define operations metrics
- Collect and analyze operations metrics
- Establish operations metrics baselines
- Learn the expected patterns of activity for operations
- Alert when operations outcomes are at risk
- Alert when operations anomalies are detected

Not selected choice(s)

- Validate the achievement of outcomes and the effectiveness of KPIs and metrics
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

10. How do you manage workload and operations events?

High risk

Selected choice(s)

- Use processes for event, incident, and problem management
- Communicate status through dashboards

Not selected choice(s)

- Have a process per alert
- Prioritize operational events based on business impact
- Define escalation paths
- Enable push notifications
- Automate responses to events
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Have a process per alert
- Prioritize operational events based on business impact
- Define escalation paths
- Enable push notifications
- Automate responses to events

Ask an expert

11. How do you evolve operations?

High risk

Selected choice(s)

- Perform post-incident analysis
- Perform Knowledge Management
- Validate insights
- Document and share lessons learned
- Allocate time to make improvements

Not selected choice(s)

- Have a process for continuous improvement
- Implement feedback loops
- Define drivers for improvement
- Perform operations metrics reviews
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Have a process for continuous improvement
- Implement feedback loops
- Define drivers for improvement
- Perform operations metrics reviews

11. How do you evolve operations?
Ask an expert

Security

Questions answered

10/10

Question status

- High risk: 2
- Medium risk: 3
- No improvements identified: 5
- Not Applicable: 0
- Unanswered: 0

Pillar notes

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1. How do you securely operate your workload?

No improvements identified

Selected choice(s)

- Separate workloads using accounts
- Secure AWS account
- Identify and validate control objectives
- Keep up to date with security threats
- Keep up to date with security recommendations
- Automate testing and validation of security controls in pipelines
- Identify and prioritize risks using a threat model
- Evaluate and implement new security services and features regularly

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

2. How do you manage identities for people and machines?

No improvements identified

Selected choice(s)

- Use strong sign-in mechanisms
- Use temporary credentials
- Store and use secrets securely
- Rely on a centralized identity provider
- Audit and rotate credentials periodically
- Leverage user groups and attributes

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

No risk detected for this question. No action needed.

3. How do you manage permissions for people and machines?

⚠ Medium risk

Selected choice(s)

- Define access requirements
- Grant least privilege access
- Reduce permissions continuously
- Define permission guardrails for your organization
- Analyze public and cross account access
- Share resources securely

Not selected choice(s)

- Establish emergency access process
- Manage access based on life cycle
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Establish emergency access process
- Manage access based on life cycle

Ask an expert

4. How do you detect and investigate security events?

⚠ Medium risk

Selected choice(s)

- Configure service and application logging
- Analyze logs, findings, and metrics centrally

Not selected choice(s)

- Automate response to events
- Implement actionable security events
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Automate response to events
- Implement actionable security events

Ask an expert

5. How do you protect your network resources?

High risk

Selected choice(s)

- Control traffic at all layers
- Automate network protection
- Implement inspection and protection

Not selected choice(s)

- Create network layers
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Create network layers

Ask an expert

6. How do you protect your compute resources?

High risk

Selected choice(s)

- Reduce attack surface
- Implement managed services
- Automate compute protection

Not selected choice(s)

- Perform vulnerability management
- Enable people to perform actions at a distance
- Validate software integrity
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Perform vulnerability management
- Enable people to perform actions at a distance
- Validate software integrity

Ask an expert

7. How do you classify your data?

No improvements identified

Selected choice(s)

- Identify the data within your workload
- Define data protection controls
- Define data lifecycle management

Not selected choice(s)

- Automate identification and classification
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

8. How do you protect your data at rest?

No improvements identified

Selected choice(s)

- Implement secure key management
- Enforce encryption at rest
- Automate data at rest protection
- Enforce access control
- Use mechanisms to keep people away from data

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

No risk detected for this question. No action needed.

9. How do you protect your data in transit?

No improvements identified

Selected choice(s)

- Implement secure key and certificate management
- Enforce encryption in transit
- Automate detection of unintended data access
- Authenticate network communications

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

10. How do you anticipate, respond to, and recover from incidents?

⚠ Medium risk

Selected choice(s)

- Identify key personnel and external resources
- Develop incident management plans

Not selected choice(s)

- Prepare forensic capabilities
- Automate containment capability
- Pre-provision access
- Pre-deploy tools
- Run game days
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Prepare forensic capabilities
- Automate containment capability
- Pre-provision access
- Pre-deploy tools
- Run game days

Ask an expert

Reliability

Questions answered

13/13

Question status

- High risk: 4
- Medium risk: 3
- No improvements identified: 1
- Not Applicable: 5
- Unanswered: 0

Pillar notes

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1. How do you manage service quotas and constraints?

High risk

Selected choice(s)

- Monitor and manage quotas
- Automate quota management

Not selected choice(s)

- Aware of service quotas and constraints
- Manage service quotas across accounts and regions
- Accommodate fixed service quotas and constraints through architecture
- Ensure that a sufficient gap exists between the current quotas and the maximum usage to accommodate failover
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Aware of service quotas and constraints
- Manage service quotas across accounts and regions
- Accommodate fixed service quotas and constraints through architecture
- Ensure that a sufficient gap exists between the current quotas and the maximum usage to accommodate failover

Ask an expert

2. How do you plan your network topology?

⊖ Not Applicable

Selected choice(s)

- Use highly available network connectivity for your workload public endpoints
- Ensure IP subnet allocation accounts for expansion and availability

Not selected choice(s)

- Provision redundant connectivity between private networks in the cloud and on-premises environments
- Prefer hub-and-spoke topologies over many-to-many mesh
- Enforce non-overlapping private IP address ranges in all private address spaces where they are connected
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

Answer the question to view the improvement plan.

3. How do you design your workload service architecture?

⊖ Not Applicable: Architecture Constraints

Selected choice(s)

-

Not selected choice(s)

- Choose how to segment your workload
- Build services focused on specific business domains and functionality
- Provide service contracts per API
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

Answer the question to view the improvement plan.

4. How do you design interactions in a distributed system to prevent failures?

⊖ Not Applicable: Architecture Constraints

Selected choice(s)

-

Not selected choice(s)

- Identify which kind of distributed system is required
- Implement loosely coupled dependencies
- Do constant work
- Make all responses idempotent
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

Answer the question to view the improvement plan.

5. How do you design interactions in a distributed system to mitigate or withstand failures?

High risk

Selected choice(s)

- Throttle requests
- Control and limit retry calls
- Fail fast and limit queues
- Set client timeouts
- Make services stateless where possible

Not selected choice(s)

- Implement graceful degradation to transform applicable hard dependencies into soft dependencies
- Implement emergency levers
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Implement graceful degradation to transform applicable hard dependencies into soft dependencies
- Implement emergency levers

Ask an expert

6. How do you monitor workload resources?

⚠ Medium risk

*This question has best practices marked as not applicable by the reviewer

Selected choice(s)

- Monitor all components for the workload (Generation)
- Define and calculate metrics (Aggregation)

Not selected choice(s)

- Analytics
- Monitor end-to-end tracing of requests through your system
- None of these

Best Practices marked as Not Applicable

- Automate responses (Real-time processing and alarming)

  Out of Scope
- Send notifications (Real-time processing and alarming)

  Out of Scope
- Conduct reviews regularly

  Out of Scope

Notes

-

Improvement plan

- Analytics
- Monitor end-to-end tracing of requests through your system

Ask an expert

7. How do you design your workload to adapt to changes in demand?

⚠ Medium risk

Selected choice(s)

- Use automation when obtaining or scaling resources
- Obtain resources upon detection of impairment to a workload
- Obtain resources upon detection that more resources are needed for a workload

Not selected choice(s)

- Load test your workload
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Load test your workload

Ask an expert

8. How do you implement change?

High risk

Selected choice(s)

- Integrate functional testing as part of your deployment
- Integrate resiliency testing as part of your deployment

Not selected choice(s)

- Use runbooks for standard activities such as deployment
- Deploy using immutable infrastructure
- Deploy changes with automation
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Use runbooks for standard activities such as deployment
- Deploy using immutable infrastructure
- Deploy changes with automation

Ask an expert

9. How do you back up data?

No improvements identified

Selected choice(s)

- Identify and back up all data that needs to be backed up, or reproduce the data from sources
- Secure and encrypt backups
- Perform data backup automatically
- Perform periodic recovery of the data to verify backup integrity and processes

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

10. How do you use fault isolation to protect your workload?

⚠ Medium risk

Selected choice(s)

- Deploy the workload to multiple locations
- Select the appropriate locations for your multi-location deployment
- Automate recovery for components constrained to a single location

Not selected choice(s)

- Use bulkhead architectures to limit scope of impact
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Use bulkhead architectures to limit scope of impact

Ask an expert

11. How do you design your workload to withstand component failures?

High risk

*This question has best practices marked as not applicable by the reviewer

Selected choice(s)

- Monitor all components of the workload to detect failures

Not selected choice(s)

- Fail over to healthy resources
- Automate healing on all layers
- Use static stability to prevent bimodal behavior
- Send notifications when events impact availability
- None of these

Best Practices marked as Not Applicable

- Rely on the data plane and not the control plane during recovery

  Out of Scope

Notes

-

Improvement plan

- Fail over to healthy resources
- Automate healing on all layers
- Use static stability to prevent bimodal behavior
- Send notifications when events impact availability

Ask an expert

12. How do you test reliability?

⊖ Not Applicable: Out of Scope

Selected choice(s)

-

Not selected choice(s)

- Use playbooks to investigate failures
- Perform post-incident analysis
- Test functional requirements
- Test scaling and performance requirements
- Test resiliency using chaos engineering
- Conduct game days regularly
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

Answer the question to view the improvement plan.

13. How do you plan for disaster recovery (DR)?

⊖ Not Applicable: Out of Scope

Selected choice(s)

-

Not selected choice(s)

- Define recovery objectives for downtime and data loss
- Use defined recovery strategies to meet the recovery objectives
- Test disaster recovery implementation to validate the implementation
- Manage configuration drift at the DR site or Region
- Automate recovery
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

Answer the question to view the improvement plan.

Performance Efficiency

Questions answered

8/8

Question status

- High risk: 2
- Medium risk: 1
- No improvements identified: 5
- Not Applicable: 0
- Unanswered: 0

Pillar notes

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1. How do you select the best performing architecture?

No improvements identified

Selected choice(s)

- Understand the available services and resources
- Define a process for architectural choices
- Factor cost requirements into decisions
- Use policies or reference architectures
- Use guidance from your cloud provider or an appropriate partner
- Benchmark existing workloads
- Load test your workload

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

2. How do you select your compute solution?

No improvements identified

Selected choice(s)

- Evaluate the available compute options
- Understand the available compute configuration options
- Collect compute-related metrics
- Determine the required configuration by right-sizing
- Use the available elasticity of resources
- Re-evaluate compute needs based on metrics

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

3. How do you select your storage solution?

No improvements identified

Selected choice(s)

- Understand storage characteristics and requirements
- Evaluate available configuration options
- Make decisions based on access patterns and metrics

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

No risk detected for this question. No action needed.

4. How do you select your database solution?

No improvements identified

Selected choice(s)

- Understand data characteristics
- Evaluate the available options
- Collect and record database performance metrics
- Choose data storage based on access patterns
- Optimize data storage based on access patterns and metrics

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

5. How do you configure your networking solution?

High risk

Selected choice(s)

- Understand how networking impacts performance
- Evaluate available networking features
- Leverage load-balancing and encryption offloading
- Choose network protocols to improve performance
- Choose your workload's location based on network requirements

Not selected choice(s)

- Choose appropriately sized dedicated connectivity or VPN for hybrid workloads
- Optimize network configuration based on metrics
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Choose appropriately sized dedicated connectivity or VPN for hybrid workloads
- Optimize network configuration based on metrics

Ask an expert

6. How do you evolve your workload to take advantage of new releases?

⚠ Medium risk

Selected choice(s)

- Stay up-to-date on new resources and services

Not selected choice(s)

- Define a process to improve workload performance
- Evolve workload performance over time
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Define a process to improve workload performance
- Evolve workload performance over time

Ask an expert

7. How do you monitor your resources to ensure they are performing?

High risk

Selected choice(s)

- Record performance-related metrics
- Analyze metrics when events or incidents occur
- Review metrics at regular intervals

Not selected choice(s)

- Establish Key Performance Indicators (KPIs) to measure workload performance
- Use monitoring to generate alarm-based notifications
- Monitor and alarm proactively
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Establish Key Performance Indicators (KPIs) to measure workload performance
- Use monitoring to generate alarm-based notifications
- Monitor and alarm proactively

Ask an expert

8. How do you use tradeoffs to improve performance?

No improvements identified

Selected choice(s)

- Understand the areas where performance is most critical
- Learn about design patterns and services
- Identify how tradeoffs impact customers and efficiency
- Measure the impact of performance improvements
- Use various performance-related strategies

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

Cost Optimization

Questions answered

10/10

Question status

- High risk: 1
- Medium risk: 2
- No improvements identified: 5
- Not Applicable: 2
- Unanswered: 0

Pillar notes

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1. How do you implement cloud financial management?

No improvements identified

*This question has best practices marked as not applicable by the reviewer

Selected choice(s)

- Establish a cost optimization function
- Establish cloud budgets and forecasts
- Implement cost awareness in your organizational processes
- Report and notify on cost optimization
- Monitor cost proactively
- Keep up to date with new service releases

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

- Establish a partnership between finance and technology

  Out of Scope

Notes

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Improvement plan

No risk detected for this question. No action needed.

2. How do you govern usage?

⚠ Medium risk

Selected choice(s)

- Develop policies based on your organization requirements
- Implement goals and targets
- Implement an account structure
- Implement groups and roles
- Track project lifecycle

Not selected choice(s)

- Implement cost controls
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Implement cost controls

Ask an expert

3. How do you monitor usage and cost?

No improvements identified

*This question has best practices marked as not applicable by the reviewer

Selected choice(s)

- Identify cost attribution categories
- Establish organization metrics
- Configure billing and cost management tools
- Allocate costs based on workload metrics

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

- Configure detailed information sources

  Out of Scope

- Add organization information to cost and usage

  Out of Scope

Notes

-

Improvement plan

No risk detected for this question. No action needed.

4. How do you decommission resources?

⊖ Not Applicable

Selected choice(s)

-

Not selected choice(s)

- Track resources over their life time
- Implement a decommissioning process
- Decommission resources
- Decommission resources automatically
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

Answer the question to view the improvement plan.

5. How do you evaluate cost when you select services?

⚠ Medium risk

Selected choice(s)

- Identify organization requirements for cost
- Analyze all components of this workload
- Perform a thorough analysis of each component
- Select components of this workload to optimize cost in line with organization priorities
- Perform cost analysis for different usage over time

Not selected choice(s)

- Select software with cost effective licensing
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Select software with cost effective licensing

Ask an expert

6. How do you meet cost targets when you select resource type, size and number?

No improvements identified

Selected choice(s)

- Perform cost modeling
- Select resource type, size, and number based on data
- Select resource type, size, and number automatically based on metrics

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

7. How do you use pricing models to reduce cost?

No improvements identified

*This question has best practices marked as not applicable by the reviewer

Selected choice(s)

- Perform pricing model analysis
- Implement pricing models for all components of this workload
- Perform pricing model analysis at the master account level

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

- Implement regions based on cost

  Out of Scope

- Select third party agreements with cost efficient terms

  Out of Scope

Notes

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Improvement plan

No risk detected for this question. No action needed.

8. How do you plan for data transfer charges?

No improvements identified

Selected choice(s)

- Perform data transfer modeling
- Select components to optimize data transfer cost
- Implement services to reduce data transfer costs

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

9. How do you manage demand, and supply resources?

High risk

Selected choice(s)

- Implement a buffer or throttle to manage demand
- Supply resources dynamically

Not selected choice(s)

- Perform an analysis on the workload demand
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Perform an analysis on the workload demand

Ask an expert

10. How do you evaluate new services?

⊖ Not Applicable: Out of Scope

Selected choice(s)

-

Not selected choice(s)

- Develop a workload review process
- Review and analyze this workload regularly
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

Answer the question to view the improvement plan.

Sustainability

Questions answered

6/6

Question status

- High risk: 0
- Medium risk: 1
- No improvements identified: 4
- Not Applicable: 1
- Unanswered: 0

Pillar notes

-

1. How do you select Regions to support your sustainability goals?

⊖ Not Applicable: Out of Scope

Selected choice(s)

-

Not selected choice(s)

- Choose Regions near Amazon renewable energy projects and Regions where the grid has a published carbon intensity that is lower than other locations (or Regions).
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

Answer the question to view the improvement plan.

2. How do you take advantage of user behavior patterns to support your sustainability goals?

No improvements identified

*This question has best practices marked as not applicable by the reviewer

Selected choice(s)

- Scale infrastructure with user load
- Stop the creation and maintenance of unused assets
- Optimize geographic placement of workloads for user locations
- Optimize team member resources for activities performed

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

- Align SLAs with sustainability goals

  Out of Scope

Notes

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Improvement plan

No risk detected for this question. No action needed.

3. How do you take advantage of software and architecture patterns to support your sustainability goals?

No improvements identified

Selected choice(s)

- Optimize software and architecture for asynchronous and scheduled jobs
- Remove or refactor workload components with low or no use
- Optimize areas of code that consume the most time or resources
- Optimize impact on customer devices and equipment
- Use software patterns and architectures that best support data access and storage patterns

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

No risk detected for this question. No action needed.

4. How do you take advantage of data access and usage patterns to support your sustainability goals?

No improvements identified

*This question has best practices marked as not applicable by the reviewer

Selected choice(s)

- Implement a data classification policy
- Use technologies that support data access and storage patterns
- Use lifecycle policies to delete unnecessary data
- Remove unneeded or redundant data
- Use shared file systems or object storage to access common data
- Minimize data movement across networks

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

- Minimize over-provisioning in block storage

  Architecture Constraints

- Back up data only when difficult to recreate

  Out of Scope

Notes

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Improvement plan

No risk detected for this question. No action needed.

5. How do your hardware management and usage practices support your sustainability goals?

No improvements identified

*This question has best practices marked as not applicable by the reviewer

Selected choice(s)

- Use the minimum amount of hardware to meet your needs
- Use instance types with the least impact
- Use managed services

Not selected choice(s)

- None of these

Best Practices marked as Not Applicable

- Optimize your use of GPUs

  Architecture Constraints

Notes

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Improvement plan

No risk detected for this question. No action needed.

6. How do your development and deployment processes support your sustainability goals?

⚠ Medium risk

Selected choice(s)

- Keep your workload up to date

Not selected choice(s)

- Adopt methods that can rapidly introduce sustainability improvements
- Increase utilization of build environments
- Use managed device farms for testing
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Adopt methods that can rapidly introduce sustainability improvements
- Increase utilization of build environments
- Use managed device farms for testing

Ask an expert