AWS Well-Architected Tool

AWS Well-Architected Tool Cruddur - AWS Well-Architected Framework Report

AWS Account ID: 79085[redacted]

AWS Well-Architected Tool Report

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Workload properties

Workload name
Cruddur

ARN
arn:aws:wellarchitected:us-east-1:790852[redacted]:workload/8be8b1a86ed80b60afd0684a11fd9327

Description
Workload is been used for running a microblogging platform in AWS

Review owner
Demy

Industry type
Other

Industry
Social Media

Environment
Pre-production

AWS Regions
US East (N. Virginia)

Non-AWS regions
-

Account IDs
-

Architectural design
-

Application

-

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: 32

Medium risk: 15

Pillar	High risk	Medium risk
Operational Excellence	9	2
Security	3	4
Reliability	7	3
Performance Efficiency	6	0
Cost Optimization	7	2
Sustainability	0	4

High risk

Operational Excellence

- OPS 1.How do you determine what your priorities are?
- OPS 2.How do you structure your organization to support your business outcomes?
- OPS 3.How does your organizational culture support your business outcomes?
- OPS 4.How do you design your workload so that you can understand its state?
- OPS 5.How do you reduce defects, ease remediation, and improve flow into production?
- OPS 6.How do you mitigate deployment risks?
- OPS 8.How do you understand the health of your workload?
- OPS 9.How do you understand the health of your operations?
- OPS 11.How do you evolve operations?

Security

- SEC 1.How do you securely operate your workload?
- SEC 2.How do you manage identities for people and machines?
- SEC 8.How do you protect your data at rest?

Reliability

- REL 9.How do you back up data?
- REL 12.How do you test reliability?
- REL 8.How do you implement change?
- REL 11.How do you design your workload to withstand component failures?
- REL 2.How do you plan your network topology?
- REL 13.How do you plan for disaster recovery (DR)?
- REL 5.How do you design interactions in a distributed system to mitigate or withstand failures?

Performance Efficiency

- PERF 1.How do you select the best performing architecture?
- PERF 7.How do you monitor your resources to ensure they are performing?
- PERF 2.How do you select your compute solution?
- PERF 4.How do you select your database solution?
- PERF 5.How do you configure your networking solution?
- PERF 8.How do you use tradeoffs to improve performance?

Cost Optimization
• COST 1.How do you implement cloud financial management? • COST 2.How do you govern usage? • COST 3.How do you monitor usage and cost? • COST 10.How do you evaluate new services? • COST 6.How do you meet cost targets when you select resource type, size and number? • COST 8.How do you plan for data transfer charges? • COST 4.How do you decommission resources?

Sustainability
No improvements identified

Medium risk

Operational Excellence
• OPS 7.How do you know that you are ready to support a workload? • OPS 10.How do you manage workload and operations events?

Security
• SEC 3.How do you manage permissions for people and machines? • SEC 6.How do you protect your compute resources? • SEC 9.How do you protect your data in transit? • SEC 10.How do you anticipate, respond to, and recover from incidents?

Reliability

- REL 6.How do you monitor workload resources?
- REL 7.How do you design your workload to adapt to changes in demand?
- REL 1.How do you manage service quotas and constraints?

Performance Efficiency

No improvements identified

Cost Optimization

- COST 5.How do you evaluate cost when you select services?
- COST 9.How do you manage demand, and supply resources?

Sustainability

- SUS 2.How do you take advantage of user behavior patterns to support your sustainability goals?
- SUS 3.How do you take advantage of software and architecture patterns to support your sustainability goals?
- SUS 4.How do you take advantage of data access and usage patterns to support your sustainability goals?
- 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: 9
- Medium risk: 2
- No improvements identified: 0
- Not Applicable: 0
- Unanswered: 0

Pillar notes

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1. How do you determine what your priorities are?

High risk

Selected choice(s)

- Evaluate external customer needs
- Evaluate compliance requirements
- Evaluate tradeoffs
- Manage benefits and risks

Not selected choice(s)

- Evaluate internal customer needs
- Evaluate governance requirements
- Evaluate threat landscape
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Evaluate internal customer needs
- Evaluate governance requirements
- Evaluate threat landscape

Ask an expert

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

High risk

Selected choice(s)

- Team members know what they are responsible for
- Mechanisms exist to identify responsibility and ownership
- Responsibilities between teams are predefined or negotiated

Not selected choice(s)

- Resources have identified owners
- Processes and procedures have identified owners
- Operations activities have identified owners responsible for their performance
- Mechanisms exist to request additions, changes, and exceptions
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Resources have identified owners
- Processes and procedures have identified owners
- Operations activities have identified owners responsible for their performance
- Mechanisms exist to request additions, changes, and exceptions

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

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

High risk

Selected choice(s)

- Communications are timely, clear, and actionable
- Experimentation is encouraged
- Team members are enabled and encouraged to maintain and grow their skill sets
- Diverse opinions are encouraged and sought within and across teams

Not selected choice(s)

- Executive Sponsorship
- Team members are empowered to take action when outcomes are at risk
- Escalation is encouraged
- Resource teams appropriately
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Executive Sponsorship
- Team members are empowered to take action when outcomes are at risk
- Escalation is encouraged
- Resource teams appropriately

3. How does your organizational culture support your business outcomes?
Ask an expert

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

High risk

Selected choice(s)

- Implement and configure workload telemetry
- Implement user activity telemetry
- Implement dependency telemetry

Not selected choice(s)

- Implement application telemetry
- Implement transaction traceability
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Implement application telemetry
- Implement transaction traceability

Ask an expert

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

High risk

Selected choice(s)

- Test and validate changes
- Use build and deployment management systems
- Perform patch management
- Use multiple environments
- Make frequent, small, reversible changes

Not selected choice(s)

- Use version control
- Use configuration management systems
- Share design standards
- Implement practices to improve code quality
- 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 version control
- Use configuration management systems
- Share design standards

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

6. How do you mitigate deployment risks?

High risk

Selected choice(s)

- Test and validate changes
- Use deployment management systems
- Test using limited deployments
- Deploy frequent, small, reversible changes
- Automate testing and rollback

Not selected choice(s)

- Plan for unsuccessful changes
- Deploy using parallel environments
- Fully automate integration and deployment
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Plan for unsuccessful changes
- Deploy using parallel environments
- Fully automate integration and deployment

Ask an expert

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

⚠ Medium risk

Selected choice(s)

- Ensure personnel capability
- Ensure consistent review of operational readiness
- Make informed decisions to deploy systems and changes

Not selected choice(s)

- Use runbooks to perform procedures
- Use playbooks to investigate issues
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Use runbooks to perform procedures
- Use playbooks to investigate issues

Ask an expert

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

High risk

Selected choice(s)

- Identify key performance indicators
- Collect and analyze workload metrics
- Learn expected patterns of activity for workload
- Alert when workload outcomes are at risk
- Alert when workload anomalies are detected

Not selected choice(s)

- Define workload metrics
- Establish workload metrics baselines
- 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

- Define workload metrics
- Establish workload metrics baselines
- Validate the achievement of outcomes and the effectiveness of KPIs and

8. How do you understand the health of your workload?
metrics Ask an expert

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

High risk

Selected choice(s)

- Identify key performance indicators
- Learn the expected patterns of activity for operations
- Alert when operations outcomes are at risk
- Validate the achievement of outcomes and the effectiveness of KPIs and metrics

Not selected choice(s)

- Define operations metrics
- Collect and analyze operations metrics
- Establish operations metrics baselines
- Alert when operations anomalies are detected
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Define operations metrics
- Collect and analyze operations metrics
- Establish operations metrics baselines

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

- Alert when operations anomalies are detected

Ask an expert

10. How do you manage workload and operations events?

⚠ Medium risk

Selected choice(s)

- Use processes for event, incident, and problem management
- Have a process per alert
- Enable push notifications
- Communicate status through dashboards
- Automate responses to events

Not selected choice(s)

- Prioritize operational events based on business impact
- Define escalation paths
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Prioritize operational events based on business impact
- Define escalation paths

Ask an expert

11. How do you evolve operations?

High risk

Selected choice(s)

- Have a process for continuous improvement
- Perform post-incident analysis
- Perform Knowledge Management
- Validate insights
- Document and share lessons learned
- Allocate time to make improvements

Not selected choice(s)

- Implement feedback loops
- Define drivers for improvement
- Perform operations metrics reviews
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Implement feedback loops
- Define drivers for improvement
- Perform operations metrics reviews

Ask an expert

Security

Questions answered

10/10

Question status

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

Pillar notes

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1. How do you securely operate your workload?

High risk

Selected choice(s)

- Separate workloads using accounts
- Secure AWS account
- Identify and validate control objectives
- Keep up to date with security recommendations
- Evaluate and implement new security services and features regularly

Not selected choice(s)

- Keep up to date with security threats
- Automate testing and validation of security controls in pipelines
- Identify and prioritize risks using a threat model
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Keep up to date with security threats
- Automate testing and validation of security controls in pipelines
- Identify and prioritize risks using a threat model

Ask an expert

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

High risk

Selected choice(s)

- Use strong sign-in mechanisms
- Use temporary credentials
- Leverage user groups and attributes

Not selected choice(s)

- Store and use secrets securely
- Rely on a centralized identity provider
- Audit and rotate credentials periodically
- None of these

Best Practices marked as Not Applicable

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Notes

-

Improvement plan

- Store and use secrets securely
- Rely on a centralized identity provider
- Audit and rotate credentials periodically

Ask an expert

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

Not selected choice(s)

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

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Establish emergency access process
- Manage access based on life cycle
- Share resources securely

Ask an expert

4. How do you detect and investigate security events?

No improvements identified

Selected choice(s)

- Configure service and application logging
- Analyze logs, findings, and metrics centrally
- Implement actionable security events

Not selected choice(s)

- Automate response to events
- 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 protect your network resources?

No improvements identified

Selected choice(s)

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

Not selected choice(s)

- Automate network protection
- 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.

6. How do you protect your compute resources?

⚠ Medium risk

Selected choice(s)

- Perform vulnerability management
- Reduce attack surface
- Implement managed services
- Enable people to perform actions at a distance

Not selected choice(s)

- Automate compute protection
- Validate software integrity
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Automate compute protection
- 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?

High risk

Selected choice(s)

- Enforce encryption at rest
- Automate data at rest protection
- Enforce access control

Not selected choice(s)

- Implement secure key management
- Use mechanisms to keep people away from data
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Implement secure key management
- Use mechanisms to keep people away from data

Ask an expert

9. How do you protect your data in transit?

⚠ Medium risk

Selected choice(s)

- Implement secure key and certificate management
- Enforce encryption in transit

Not selected choice(s)

- Automate detection of unintended data access
- Authenticate network communications
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Automate detection of unintended data access
- Authenticate network communications

Ask an expert

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
- Pre-provision access
- Pre-deploy tools

Not selected choice(s)

- Prepare forensic capabilities
- Automate containment capability
- Run game days
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Prepare forensic capabilities
- Automate containment capability
- Run game days

Ask an expert

Reliability

Questions answered

13/13

Question status

- High risk: 7
- Medium risk: 3
- No improvements identified: 3
- Not Applicable: 0
- Unanswered: 0

Pillar notes

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1. How do you manage service quotas and constraints?

⚠ Medium risk

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

Not selected choice(s)

- Monitor and manage quotas
- Automate quota management
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Monitor and manage quotas
- Automate quota management

Ask an expert

2. How do you plan your network topology?

High risk

Selected choice(s)

- Prefer hub-and-spoke topologies over many-to-many mesh

Not selected choice(s)

- Use highly available network connectivity for your workload public endpoints
- Provision redundant connectivity between private networks in the cloud and on-premises environments
- Ensure IP subnet allocation accounts for expansion and availability
- 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

- Use highly available network connectivity for your workload public endpoints
- Provision redundant connectivity between private networks in the cloud and on-premises environments
- Ensure IP subnet allocation accounts for expansion and availability
- Enforce non-overlapping private IP address ranges in all private address

2. How do you plan your network topology?
spaces where they are connected Ask an expert

3. How do you design your workload service architecture?

No improvements identified

Selected choice(s)

- Choose how to segment your workload
- Build services focused on specific business domains and functionality

Not selected choice(s)

- 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

No risk detected for this question. No action needed.

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

No improvements identified

Selected choice(s)

- Identify which kind of distributed system is required
- Implement loosely coupled dependencies
- Make all responses idempotent

Not selected choice(s)

- Do constant work
- 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 design interactions in a distributed system to mitigate or withstand failures?

High risk

Selected choice(s)

- Control and limit retry calls
- Make services stateless where possible
- Implement emergency levers

Not selected choice(s)

- Implement graceful degradation to transform applicable hard dependencies into soft dependencies
- Throttle requests
- Fail fast and limit queues
- Set client timeouts
- 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
- Throttle requests
- Fail fast and limit queues
- Set client timeouts

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

6. How do you monitor workload resources?

⚠ Medium risk

Selected choice(s)

- Monitor all components for the workload (Generation)
- Define and calculate metrics (Aggregation)
- Send notifications (Real-time processing and alarming)
- Analytics
- Monitor end-to-end tracing of requests through your system

Not selected choice(s)

- Automate responses (Real-time processing and alarming)
- Conduct reviews regularly
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Automate responses (Real-time processing and alarming)
- Conduct reviews regularly

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 that more resources are needed for a workload
- Load test your workload

Not selected choice(s)

- Obtain resources upon detection of impairment to a workload
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Obtain resources upon detection of impairment to a 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
- Deploy using immutable infrastructure

Not selected choice(s)

- Use runbooks for standard activities such as deployment
- 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 changes with automation

Ask an expert

9. How do you back up data?

High risk

Selected choice(s)

- Identify and back up all data that needs to be backed up, or reproduce the data from sources
- Perform data backup automatically

Not selected choice(s)

- Secure and encrypt backups
- Perform periodic recovery of the data to verify backup integrity and processes
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Secure and encrypt backups
- Perform periodic recovery of the data to verify backup integrity and processes

Ask an expert

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

No improvements identified

Selected choice(s)

- Deploy the workload to multiple locations
- Select the appropriate locations for your multi-location deployment
- Use bulkhead architectures to limit scope of impact

Not selected choice(s)

- Automate recovery for components constrained to a single location
- 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.

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

High risk

Selected choice(s)

- Monitor all components of the workload to detect failures
- Fail over to healthy resources
- Use static stability to prevent bimodal behavior
- Send notifications when events impact availability

Not selected choice(s)

- Automate healing on all layers
- Rely on the data plane and not the control plane during recovery
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Automate healing on all layers
- Rely on the data plane and not the control plane during recovery

Ask an expert

12. How do you test reliability?

High risk

Selected choice(s)

- Perform post-incident analysis
- Test functional requirements
- Test scaling and performance requirements

Not selected choice(s)

- Use playbooks to investigate failures
- 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

- Use playbooks to investigate failures
- Test resiliency using chaos engineering
- Conduct game days regularly

Ask an expert

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

High risk

Selected choice(s)

- Define recovery objectives for downtime and data loss
- Test disaster recovery implementation to validate the implementation

Not selected choice(s)

- Use defined recovery strategies to meet the recovery objectives
- 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

- Use defined recovery strategies to meet the recovery objectives
- Manage configuration drift at the DR site or Region
- Automate recovery

Ask an expert

Performance Efficiency

Questions answered

8/8

Question status

- High risk: 6
- Medium risk: 0
- No improvements identified: 2
- Not Applicable: 0
- Unanswered: 0

Pillar notes

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1. How do you select the best performing architecture?

High risk

Selected choice(s)

- Understand the available services and resources
- Factor cost requirements into decisions
- Benchmark existing workloads
- Load test your workload

Not selected choice(s)

- Define a process for architectural choices
- Use policies or reference architectures
- Use guidance from your cloud provider or an appropriate partner
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Define a process for architectural choices
- Use policies or reference architectures
- Use guidance from your cloud provider or an appropriate partner

Ask an expert

2. How do you select your compute solution?

High risk

Selected choice(s)

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

Not selected choice(s)

- Collect compute-related metrics
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Collect compute-related metrics

Ask an expert

3. How do you select your storage solution?

No improvements identified

Selected choice(s)

- Understand storage characteristics and requirements
- Make decisions based on access patterns and metrics

Not selected choice(s)

- Evaluate available configuration options
- 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 select your database solution?

High risk

Selected choice(s)

- Understand data characteristics
- 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)

- Evaluate the available options
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Evaluate the available options

Ask an expert

5. How do you configure your networking solution?

High risk

Selected choice(s)

- Evaluate available networking features
- Choose appropriately sized dedicated connectivity or VPN for hybrid workloads
- Leverage load-balancing and encryption offloading
- Choose your workload's location based on network requirements

Not selected choice(s)

- Understand how networking impacts performance
- Choose network protocols to improve performance
- Optimize network configuration based on metrics
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Understand how networking impacts performance
- Choose network protocols to improve performance
- Optimize network configuration based on metrics

Ask an expert

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

No improvements identified

Selected choice(s)

- Stay up-to-date on new resources and services
- Evolve workload performance over time

Not selected choice(s)

- Define a process to improve workload performance
- 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 monitor your resources to ensure they are performing?

High risk

Selected choice(s)

- Record performance-related metrics
- Analyze metrics when events or incidents occur
- Use monitoring to generate alarm-based notifications
- Monitor and alarm proactively

Not selected choice(s)

- Establish Key Performance Indicators (KPIs) to measure workload performance
- Review metrics at regular intervals
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Establish Key Performance Indicators (KPIs) to measure workload performance
- Review metrics at regular intervals

Ask an expert

8. How do you use tradeoffs to improve performance?

High risk

Selected choice(s)

- Understand the areas where performance is most critical
- Identify how tradeoffs impact customers and efficiency

Not selected choice(s)

- Learn about design patterns and services
- Measure the impact of performance improvements
- Use various performance-related strategies
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Learn about design patterns and services
- Measure the impact of performance improvements
- Use various performance-related strategies

Ask an expert

Cost Optimization

Questions answered

10/10

Question status

- High risk: 7
- Medium risk: 2
- No improvements identified: 1
- Not Applicable: 0
- Unanswered: 0

Pillar notes

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1. How do you implement cloud financial management?

High risk

Selected choice(s)

- Establish a cost optimization function
- Establish cloud budgets and forecasts
- Monitor cost proactively
- Keep up to date with new service releases

Not selected choice(s)

- Establish a partnership between finance and technology
- Implement cost awareness in your organizational processes
- Report and notify on cost optimization
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Establish a partnership between finance and technology
- Implement cost awareness in your organizational processes
- Report and notify on cost optimization

Ask an expert

2. How do you govern usage?

High risk

Selected choice(s)

- Implement an account structure
- Implement groups and roles

Not selected choice(s)

- Develop policies based on your organization requirements
- Implement goals and targets
- Implement cost controls
- Track project lifecycle
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Develop policies based on your organization requirements
- Implement goals and targets
- Implement cost controls
- Track project lifecycle

Ask an expert

3. How do you monitor usage and cost?

High risk

Selected choice(s)

- Identify cost attribution categories
- Configure billing and cost management tools
- Add organization information to cost and usage
- Allocate costs based on workload metrics

Not selected choice(s)

- Configure detailed information sources
- Establish organization metrics
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Configure detailed information sources
- Establish organization metrics

Ask an expert

4. How do you decommission resources?

High risk

Selected choice(s)

- Implement a decommissioning process
- Decommission resources

Not selected choice(s)

- Track resources over their life time
- Decommission resources automatically
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Track resources over their life time
- Decommission resources automatically

Ask an expert

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
- Perform cost analysis for different usage over time

Not selected choice(s)

- Select software with cost effective licensing
- Select components of this workload to optimize cost in line with organization priorities
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Select software with cost effective licensing
- Select components of this workload to optimize cost in line with organization priorities

Ask an expert

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

High risk

Selected choice(s)

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

Not selected choice(s)

- Perform cost modeling
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Perform cost modeling

Ask an expert

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

No improvements identified

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)

- Implement regions based on cost
- Select third party agreements with cost efficient terms
- 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 plan for data transfer charges?

High risk

Selected choice(s)

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

Not selected choice(s)

- Perform data transfer modeling
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Perform data transfer modeling

Ask an expert

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

⚠ Medium risk

Selected choice(s)

- Perform an analysis on the workload demand

Not selected choice(s)

- Implement a buffer or throttle to manage demand
- Supply resources dynamically
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

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

Ask an expert

10. How do you evaluate new services?

High risk

Selected choice(s)

- Review and analyze this workload regularly

Not selected choice(s)

- Develop a workload review process
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Develop a workload review process

Ask an expert

Sustainability

Questions answered

6/6

Question status

- High risk: 0
- Medium risk: 4
- No improvements identified: 2
- Not Applicable: 0
- Unanswered: 0

Pillar notes

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

No improvements identified

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).

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 take advantage of user behavior patterns to support your sustainability goals?

⚠ Medium risk

Selected choice(s)

- 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)

- Scale infrastructure with user load
- Align SLAs with sustainability goals
- None of these

Best Practices marked as Not Applicable

-

Notes

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Improvement plan

- Scale infrastructure with user load
- Align SLAs with sustainability goals

Ask an expert

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

⚠ Medium risk

Selected choice(s)

- 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

Not selected choice(s)

- Optimize software and architecture for asynchronous and scheduled jobs
- Use software patterns and architectures that best support data access and storage patterns
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Optimize software and architecture for asynchronous and scheduled jobs
- Use software patterns and architectures that best support data access and storage patterns

Ask an expert

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

⚠ Medium risk

Selected choice(s)

- Use lifecycle policies to delete unnecessary data
- Minimize over-provisioning in block storage
- Use shared file systems or object storage to access common data
- Minimize data movement across networks

Not selected choice(s)

- Implement a data classification policy
- Use technologies that support data access and storage patterns
- Remove unneeded or redundant data
- Back up data only when difficult to recreate
- None of these

Best Practices marked as Not Applicable

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Notes

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Improvement plan

- Implement a data classification policy
- Use technologies that support data access and storage patterns
- Remove unneeded or redundant data
- Back up data only when difficult to recreate

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

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

No improvements identified

Selected choice(s)

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

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.

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

⚠ Medium risk

Selected choice(s)

- Adopt methods that can rapidly introduce sustainability improvements
- Keep your workload up to date
- Increase utilization of build environments

Not selected choice(s)

- 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

- Use managed device farms for testing

Ask an expert