AWS Well-Architected Tool

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

AWS Account ID: 734732107779

AWS Well-Architected Tool Report

Table of contents

Milestone properties

Milestone name
cruddur

Date saved
Feb 17, 2023 11:34 PM UTC

Workload name
Cruddur

ARN
arn:aws:wellarchitected:us-east-1:734732107779:workload/a529daebd64936d69d7baa64bef6772a

Description
An ephemeral microblogging platform.

Review owner
mayvik+cloudcamp@gmail.com

Industry type
-

Industry
-

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: 18

Medium risk: 13

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

High risk

Operational Excellence

- OPS 1.How do you determine what your priorities are?
- OPS 4.How do you design your workload so that you can understand its state?
- OPS 10.How do you manage workload and operations events?

Security

- SEC 1.How do you securely operate your workload?
- SEC 2.How do you manage identities for people and machines?
- SEC 5.How do you protect your network resources?
- SEC 7.How do you classify your data?

Reliability

- 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?

Performance Efficiency

- PERF 1.How do you select the best performing architecture?
- PERF 2.How do you select your compute 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 3.How do you monitor usage and cost?
- COST 8.How do you plan for data transfer charges?

Sustainability
No improvements identified

Medium risk

Operational Excellence
• OPS 5.How do you reduce defects, ease remediation, and improve flow into production? • OPS 7.How do you know that you are ready to support a workload?

Security
• SEC 8.How do you protect your data at rest? • SEC 10.How do you anticipate, respond to, and recover from incidents?

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

Performance Efficiency
No improvements identified

Cost Optimization

- COST 2.How do you govern usage?
- COST 6.How do you meet cost targets when you select resource type, size and number?
- COST 7.How do you use pricing models to reduce cost?
- COST 4.How do you decommission resources?

Sustainability

- 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?

Lens details

Operational Excellence

Questions answered

11/11

Question status

- High risk: 3
- Medium risk: 2
- No improvements identified: 6
- Not Applicable: 0
- Unanswered: 0

Pillar notes

-

1. How do you determine what your priorities are?

High risk

Selected choice(s)

- Evaluate external customer needs
- Evaluate tradeoffs

Not selected choice(s)

- Evaluate internal customer needs
- Evaluate governance requirements
- Evaluate compliance requirements
- Evaluate threat landscape
- Manage benefits and risks
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

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

Ask an expert

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

-

Notes

-

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?

High risk

Selected choice(s)

- Implement transaction traceability

Not selected choice(s)

- Implement application telemetry
- Implement and configure workload telemetry
- Implement user activity telemetry
- Implement dependency telemetry
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

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

Ask an expert

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
- Use configuration management systems
- Perform patch management
- Share design standards
- Use multiple environments
- Make frequent, small, reversible changes
- Fully automate integration and deployment

Not selected choice(s)

- Use build and deployment management systems
- Implement practices to improve code quality
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Use build and deployment management systems
- Implement practices to improve code quality

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

6. How do you mitigate deployment risks?

No improvements identified

Selected choice(s)

- Plan for unsuccessful changes
- Test and validate changes
- Use deployment management systems
- Test using limited deployments
- Deploy using parallel environments
- Deploy frequent, small, reversible changes
- Fully automate integration and deployment
- Automate testing and rollback

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.

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

-

Notes

-

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?

No improvements identified

Selected choice(s)

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

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.

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
- Validate the achievement of outcomes and the effectiveness of KPIs and metrics

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.

10. How do you manage workload and operations events?

High risk

Selected choice(s)

- Use processes for event, incident, and problem management
- Define escalation paths
- Enable push notifications
- Communicate status through dashboards
- Automate responses to events

Not selected choice(s)

- Have a process per alert
- Prioritize operational events based on business impact
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Have a process per alert
- Prioritize operational events based on business impact

Ask an expert

11. How do you evolve operations?

No improvements identified

Selected choice(s)

- Have a process for continuous improvement
- Perform post-incident analysis
- Implement feedback loops
- Perform Knowledge Management
- Define drivers for improvement
- Validate insights
- Perform operations metrics reviews
- Document and share lessons learned
- Allocate time to make improvements

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.

Security

Questions answered

10/10

Question status

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

Pillar notes

-

1. How do you securely operate your workload?

High risk

Selected choice(s)

- Separate workloads using accounts
- Secure AWS account
- 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

Not selected choice(s)

- Identify and validate control objectives
- Evaluate and implement new security services and features regularly
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Identify and validate control objectives
- Evaluate and implement new security services and features regularly

Ask an expert

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

High risk

Selected choice(s)

- Audit and rotate credentials periodically
- Leverage user groups and attributes

Not selected choice(s)

- Use strong sign-in mechanisms
- Use temporary credentials
- Store and use secrets securely
- Rely on a centralized identity provider
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Use strong sign-in mechanisms
- Use temporary credentials
- Store and use secrets securely
- Rely on a centralized identity provider

Ask an expert

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

No improvements identified

Selected choice(s)

- Define access requirements
- Grant least privilege access
- Establish emergency access process
- Define permission guardrails for your organization
- Manage access based on life cycle
- Analyze public and cross account access
- Share resources securely

Not selected choice(s)

- Reduce permissions continuously
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

No risk detected for this question. No action needed.

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
- Automate response to events
- Implement actionable security events

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.

5. How do you protect your network resources?

High risk

Selected choice(s)

- Control traffic at all layers
- Automate network protection

Not selected choice(s)

- Create network layers
- Implement inspection and protection
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Create network layers
- Implement inspection and protection

Ask an expert

6. How do you protect your compute resources?

No improvements identified

Selected choice(s)

- Perform vulnerability management
- Reduce attack surface
- Automate compute protection
- Enable people to perform actions at a distance
- Validate software integrity

Not selected choice(s)

- Implement managed services
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

No risk detected for this question. No action needed.

7. How do you classify your data?

High risk

Selected choice(s)

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

Not selected choice(s)

- Define data protection controls
- Automate identification and classification
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Define data protection controls
- Automate identification and classification

Ask an expert

8. How do you protect your data at rest?

⚠ Medium risk

Selected choice(s)

- Implement secure key management
- Enforce encryption at rest
- Automate data at rest protection
- Enforce access control

Not selected choice(s)

- Use mechanisms to keep people away from data
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Use mechanisms to keep people away from data

Ask an expert

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

-

Notes

-

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
- Prepare forensic capabilities

Not selected choice(s)

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

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- 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: 5
- Not Applicable: 1
- Unanswered: 0

Pillar notes

-

1. How do you manage service quotas and constraints?

⊖ Not Applicable: Out of Scope

Selected choice(s)

-

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
- Monitor and manage quotas
- Automate quota management
- 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

-

Improvement plan

Answer the question to view the improvement plan.

2. How do you plan your network topology?

High risk

Selected choice(s)

- Use highly available network connectivity for your workload public endpoints

Not selected choice(s)

- Provision redundant connectivity between private networks in the cloud and on-premises environments
- Ensure IP subnet allocation accounts for expansion and availability
- 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

-

Notes

-

Improvement plan

- Provision redundant connectivity between private networks in the cloud and on-premises environments
- Ensure IP subnet allocation accounts for expansion and availability
- 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

2. How do you plan your network topology?

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

-

Notes

-

Improvement plan

No risk detected for this question. No action needed.

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

⚠ Medium risk

Selected choice(s)

- Identify which kind of distributed system is required
- Implement loosely coupled dependencies

Not selected choice(s)

- Do constant work
- Make all responses idempotent
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Do constant work
- Make all responses idempotent

Ask an expert

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

No improvements identified

Selected choice(s)

- Implement graceful degradation to transform applicable hard dependencies into soft dependencies
- Throttle requests
- Control and limit retry calls
- Fail fast and limit queues
- Set client timeouts
- Make services stateless where possible
- Implement emergency levers

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.

6. How do you monitor workload resources?

No improvements identified

Selected choice(s)

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

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.

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

-

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
- Deploy changes with automation

Not selected choice(s)

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

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

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

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

-

Notes

-

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

-

Notes

-

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

Selected choice(s)

- Monitor all components of the workload to detect failures
- Fail over to healthy resources
- 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
- Use static stability to prevent bimodal behavior
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Automate healing on all layers
- Rely on the data plane and not the control plane during recovery
- Use static stability to prevent bimodal behavior

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
- Test resiliency using chaos engineering
- Conduct game days regularly

Not selected choice(s)

- Use playbooks to investigate failures
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Use playbooks to investigate failures

Ask an expert

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

No improvements identified

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

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.

Performance Efficiency

Questions answered

8/8

Question status

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

Pillar notes

-

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
- Use guidance from your cloud provider or an appropriate partner
- Benchmark existing workloads

Not selected choice(s)

- Define a process for architectural choices
- Use policies or reference architectures
- Load test your workload
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Define a process for architectural choices
- Use policies or reference architectures
- Load test your workload

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

-

Notes

-

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
- 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

-

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

-

Notes

-

Improvement plan

No risk detected for this question. No action needed.

5. How do you configure your networking solution?

High risk

Selected choice(s)

- Evaluate available networking features
- Leverage load-balancing and encryption offloading
- Choose your workload's location based on network requirements
- Optimize network configuration based on metrics

Not selected choice(s)

- Understand how networking impacts performance
- Choose appropriately sized dedicated connectivity or VPN for hybrid workloads
- Choose network protocols to improve performance
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Understand how networking impacts performance
- Choose appropriately sized dedicated connectivity or VPN for hybrid workloads
- Choose network protocols to improve performance

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

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.

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

No improvements identified

Selected choice(s)

- Record performance-related metrics
- Analyze metrics when events or incidents occur
- Establish Key Performance Indicators (KPIs) to measure workload performance
- Use monitoring to generate alarm-based notifications
- Review metrics at regular intervals
- Monitor and alarm proactively

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.

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
- Measure the impact of performance improvements
- Use various performance-related strategies

Not selected choice(s)

- Learn about design patterns and services
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Learn about design patterns and services

Ask an expert

Cost Optimization

Questions answered

10/10

Question status

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

Pillar notes

-

1. How do you implement cloud financial management?

High risk

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)

- Establish a partnership between finance and technology
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Establish a partnership between finance and technology

Ask an expert

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 cost controls

Not selected choice(s)

- Implement groups and roles
- Track project lifecycle
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Implement groups and roles
- Track project lifecycle

Ask an expert

3. How do you monitor usage and cost?

High risk

Selected choice(s)

- Establish organization metrics
- 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
- Identify cost attribution categories
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Configure detailed information sources
- Identify cost attribution categories

Ask an expert

4. How do you decommission resources?

⚠ Medium risk

Selected choice(s)

- Track resources over their life time
- Implement a decommissioning process
- Decommission resources

Not selected choice(s)

- Decommission resources automatically
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Decommission resources automatically

Ask an expert

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

No improvements identified

Selected choice(s)

- Identify organization requirements for cost
- Analyze all components of this workload
- Perform a thorough analysis of each component
- Select software with cost effective licensing
- 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)

- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

No risk detected for this question. No action needed.

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

⚠ Medium risk

Selected choice(s)

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

Not selected choice(s)

- Select resource type, size, and number automatically based on metrics
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

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

Ask an expert

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

⚠ Medium risk

Selected choice(s)

- Perform pricing model analysis
- Implement regions based on cost
- Select third party agreements with cost efficient terms
- Implement pricing models for all components of this workload

Not selected choice(s)

- Perform pricing model analysis at the master account level
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Perform pricing model analysis at the master account level

Ask an expert

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

-

Notes

-

Improvement plan

- Perform data transfer modeling

Ask an expert

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

No improvements identified

Selected choice(s)

- Perform an analysis on the workload demand
- Implement a buffer or throttle to manage demand
- Supply resources dynamically

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.

10. How do you evaluate new services?

No improvements identified

Selected choice(s)

- Develop a workload review process
- Review and analyze this workload regularly

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.

Sustainability

Questions answered

6/6

Question status

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

Pillar notes

-

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

-

Notes

-

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?

No improvements identified

Selected choice(s)

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

-

Notes

-

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?

⚠ 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
- Use software patterns and architectures that best support data access and storage patterns

Not selected choice(s)

- Optimize software and architecture for asynchronous and scheduled jobs
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Optimize software and architecture for asynchronous and scheduled jobs

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 technologies that support data access and storage patterns
- Use lifecycle policies to delete unnecessary data
- Minimize over-provisioning in block storage
- Remove unneeded or redundant data
- Use shared file systems or object storage to access common data
- Minimize data movement across networks
- Back up data only when difficult to recreate

Not selected choice(s)

- Implement a data classification policy
- None of these

Best Practices marked as Not Applicable

-

Notes

-

Improvement plan

- Implement a data classification policy

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

-

Notes

-

Improvement plan

No risk detected for this question. No action needed.

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

No improvements identified

Selected choice(s)

- Adopt methods that can rapidly introduce sustainability improvements
- Keep your workload up to date
- Increase utilization of build environments
- Use managed device farms for testing

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.