



AWS Well-Architected Tool

AWS Well-Architected Tool test - AWS Well- Architected Framework Report

AWS Account ID: 354071446752

AWS Well-Architected Tool Report

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Workload properties

Workload name

test

ARN

arn:aws:wellarchitected:us-east-2:354071446752:workload/
ab18dce85db49b26d7b4027c730c79f0

Description

this is the test try

Review owner

rrp29101999@gmail.com

Industry type

-

Industry

-

Environment

Production

AWS Regions

Asia Pacific (Mumbai)

Non-AWS regions

-

Account IDs

-

Architectural design

-

Lens overview

Questions answered

52/52

Version

AWS Well-Architected Framework, 2nd Jul 2020

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

Lens notes

-

Improvement plan

Improvement item summary

High risk: 0

Medium risk: 0

Pillar	High risk	Medium risk
Security	0	0
Reliability	0	0
Operational Excellence	0	0
Performance Efficiency	0	0
Cost Optimization	0	0

High risk

Security
No improvements identified

Reliability
No improvements identified

Operational Excellence
No improvements identified

Performance Efficiency

No improvements identified

Cost Optimization

No improvements identified

Medium risk

Security

No improvements identified

Reliability

No improvements identified

Operational Excellence

No improvements identified

Performance Efficiency

No improvements identified

Cost Optimization

No improvements identified

Lens details

Operational Excellence

Questions answered

11/11

Question status

- ⊗ High risk: 0
- ⚠ Medium risk: 0
- ✓ No improvements identified: 11
- ⊖ Not Applicable: 0
- 🕒 Unanswered: 0

Pillar notes

-

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

Notes

-

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

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

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

Not selected choice(s)

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

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?

✔ No improvements identified

Selected choice(s)

- Use version control
- Test and validate changes
- 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
- Make frequent, small, reversible changes
- Fully automate integration and deployment

Not selected choice(s)

- None of these

Notes

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Improvement plan

No risk detected for this question. No action needed.

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

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?

✔ No improvements identified

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

Not selected choice(s)

- None of these

Notes

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Improvement plan

No risk detected for this question. No action needed.

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

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

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?

✔ No improvements identified

Selected choice(s)

- Use processes for event, incident, and problem management
- Have a process per alert
- Prioritize operational events based on business impact
- Define escalation paths
- Enable push notifications
- Communicate status through dashboards
- Automate responses to events

Not selected choice(s)

- None of these

Notes

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Improvement plan

No risk detected for this question. No action needed.

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

Notes

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Improvement plan






No risk detected for this question. No action needed.

Security

Questions answered

10/10

Question status

-  High risk: 0
-  Medium risk: 0
-  No improvements identified: 10
-  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

Notes

-

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

Notes

-

Improvement plan

No risk detected for this question. No action needed.

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
- Reduce permissions continuously
- 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)

- None of these

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

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
- Automate network protection
- Implement inspection and protection

Not selected choice(s)

- None of these

Notes

-

Improvement plan

No risk detected for this question. No action needed.

6. How do you protect your compute resources?

✔ No improvements identified

Selected choice(s)

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

Not selected choice(s)

- None of these

Notes

-

Improvement plan

No risk detected for this question. No action needed.

7. How do you classify your data?

✔ No improvements identified

Selected choice(s)

- Identify the data within your workload
- Define data protection controls
- Automate identification and classification
- Define data lifecycle management

Not selected choice(s)

- None of these

Notes

-

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

Notes

-

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

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?

✔ No improvements identified

Selected choice(s)

- Identify key personnel and external resources
- Develop incident management plans
- Prepare forensic capabilities
- Automate containment capability
- Pre-provision access
- Pre-deploy tools
- Run game days

Not selected choice(s)

- None of these

Notes

-

Improvement plan

No risk detected for this question. No action needed.

Reliability

Questions answered

13/13

Question status

- ⊗ High risk: 0
- ⚠ Medium risk: 0
- ✓ No improvements identified: 13
- ⊖ Not Applicable: 0
- ⌚ Unanswered: 0

Pillar notes

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1. How do you manage service quotas and constraints?

✔ No improvements identified

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

Not selected choice(s)

- None of these

Notes

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Improvement plan

No risk detected for this question. No action needed.

2. How do you plan your network topology?

✔ No improvements identified

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
- 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

Not selected choice(s)

- None of these

Notes

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Improvement plan

No risk detected for this question. No action needed.

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
- Provide service contracts per API

Not selected choice(s)

- None of these

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
- Do constant work

Not selected choice(s)

- None of these

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?

✔ 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

Notes

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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)
- Storage and Analytics
- Conduct reviews regularly
- Monitor end-to-end tracing of requests through your system

Not selected choice(s)

- None of these

Notes

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Improvement plan

No risk detected for this question. No action needed.

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

✔ No improvements identified

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
- Load test your workload

Not selected choice(s)

- None of these

Notes

-

Improvement plan

No risk detected for this question. No action needed.

8. How do you implement change?

✔ No improvements identified

Selected choice(s)

- Use runbooks for standard activities such as deployment
- Integrate functional testing as part of your deployment
- Integrate resiliency testing as part of your deployment
- Deploy using immutable infrastructure
- Deploy changes with automation

Not selected choice(s)

- None of these

Notes

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Improvement plan

No risk detected for this question. No action needed.

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

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?

✔ No improvements identified

Selected choice(s)

- Deploy the workload to multiple locations
- Automate recovery for components constrained to a single location
- Use bulkhead architectures

Not selected choice(s)

- None of these

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?

✔ No improvements identified

Selected choice(s)

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

Not selected choice(s)

- None of these

Notes

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Improvement plan

No risk detected for this question. No action needed.

12. How do you test reliability?

✔ No improvements identified

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

Not selected choice(s)

- None of these

Notes

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Improvement plan

No risk detected for this question. No action needed.

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

Notes

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Improvement plan

No risk detected for this question. No action needed.

Performance Efficiency

Questions answered

8/8

Question status

- ⊗ High risk: 0
- ⚠ Medium risk: 0
- ✓ No improvements identified: 8
- ⊖ Not Applicable: 0
- ⌚ Unanswered: 0

Pillar notes

-

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

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

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

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

Notes

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Improvement plan

No risk detected for this question. No action needed.

5. How do you configure your networking solution?

✔ No improvements identified

Selected choice(s)

- Understand how networking impacts performance
- Evaluate available networking features
- Choose appropriately sized dedicated connectivity or VPN for hybrid workloads
- Leverage load-balancing and encryption offloading
- Choose network protocols to improve performance
- Choose your workload's location based on network requirements
- Optimize network configuration based on metrics

Not selected choice(s)

- None of these

Notes

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Improvement plan

No risk detected for this question. No action needed.

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

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

Notes

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Improvement plan

No risk detected for this question. No action needed.

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

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: 0
- ⚠ Medium risk: 0
- ✓ No improvements identified: 10
- ⊖ Not Applicable: 0
- ⌚ Unanswered: 0

Pillar notes

-

1. How do you implement cloud financial management?

✔ No improvements identified

Selected choice(s)

- Establish a cost optimization function
- Establish a partnership between finance and technology
- 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

Notes

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Improvement plan

No risk detected for this question. No action needed.

2. How do you govern usage?

✔ No improvements identified

Selected choice(s)

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

Not selected choice(s)

- None of these

Notes

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Improvement plan

No risk detected for this question. No action needed.

3. How do you monitor usage and cost?

✔ No improvements identified

Selected choice(s)

- Configure detailed information sources
- Identify cost attribution categories
- 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)

- None of these

Notes

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Improvement plan

No risk detected for this question. No action needed.

4. How do you decommission resources?

✔ No improvements identified

Selected choice(s)

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

Not selected choice(s)

- None of these

Notes

-

Improvement plan

No risk detected for this question. No action needed.

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

Notes

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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?

✔ 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

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

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
- Perform pricing model analysis at the master account level

Not selected choice(s)

- None of these

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

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?

✔ 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

Notes

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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

Notes

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Improvement plan

No risk detected for this question. No action needed.

