

AWS Cloud Practitioner Exam (4/4)

▼ Topics

4.1 Compare and contrast the various pricing models for AWS (for example, On-Demand Instances, Reserved Instances, and Spot Instance pricing)

- Identify the scenarios/best fit for On-Demand Instance pricing
- Identify the scenarios/best fit for Reserved-Instance pricing
 - Describe Reserved-Instances flexibility
 - Describe Reserved-Instances behaviour in AWS Organisations
- Identify scenarios/best fit for Spot Instance pricing

4.2 Recognize the various account structures in relation to AWS billing and pricing

- Recognize that consolidated billing is a feature of AWS Organisations
- Identify how multiple accounts aid in allocating costs across departments

4.3 Identify resources available for billing support

- Identify ways to get billing support and information
 - Cost Explorer, AWS Cost and Usage Report, Amazon QuickSight, third-party partners, and AWS Marketplace tools
 - Open a billing support case
 - The role of the Concierge for AWS Enterprise Support Plan customers
- Identify where to find pricing information on AWS services
 - AWS Simple Monthly Calculator
 - AWS Services product pages
 - AWS Pricing API
- Recognize that alarms/alerts exist
- Identify how tags are used in cost allocation

Compare and Contrast Pricing Models

Purchasing Options:

- **On-demand:** pay by time (hour/sec) with no long-term commitment
- **Reserved Instance:** heavily discounted 1-3 year reserved machine
 - 3 Pricing Options:
 - All up-front (AUI)
 - Partial up-front (PURI)
 - No upfront payments (NURI)
 - Key: the larger the upfront payments, the greater the discount
- **Spot Instance:** bid on spare ec2 computing (automatic commissioning/decommissioning)

various account structures in relation to AWS billing and pricing

Account Structures (AWS billing and pricing)

Account Structures:

- Business Unit (BU) Account Structure
 - align their AWS operational and billing controls with individual BUs
 - offers individual units operational autonomy
- Environment Lifecycle Account Structure
 - align their AWS operational and billing controls with their application development lifecycles
 - offers development-lifecycle operational autonomy
- Project-Based Account Structure
 - align their AWS operational and billing controls by product, application workload or program
 - simplifies the ability to trigger cost alerts based on project, application workload, or program consumption of AWS resources
- Hybrid AWS Account Structures
 - hybrid combinations that group accounts by multiple dimensions

Consolidated Billing

- allows you to see a combined view of AWS charges incurred by all of your accounts
- you can also get a cost report for each member account that is associated with your master account
- is offered at no additional charge

Resources for Billing Support

Cost Explorer

- UI to help you visualize, understand, and manage your AWS costs and usage over a daily or monthly granularity
- lets you dive deeper using granular filtering and grouping dimensions such as Usage Type and Tags

AWS Cost and Usage Report	<ul style="list-style-type: none"> contains the most comprehensive set of cost and usage data available publish your AWS billing reports to an Amazon Simple Storage Service (Amazon S3) bucket that you own receive reports that break down your costs by the hour, day, or month, by product or product resource, or by tags that you define yourself
Quicksight	<ul style="list-style-type: none"> is a scalable, serverless, embeddable, machine learning-powered business intelligence (BI) service built for the cloud lets you easily create and publish interactive BI dashboards that include Machine Learning-powered insights offer pay-per-session pricing, where you only pay when your users access their dashboards or reports, making it cost-effective for large scale deployments
Third-party partners and AWS Marketplace tools	<ul style="list-style-type: none"> Other resources

Opening a Billing Support Case

- used to create a support case to request customer support for Account and Billing Support

Concierge for AWS Enterprise Support Plan customers

- Best support plan in the line of
 - Basic
 - Developer
 - Business
 - Enterprise
 - get 24x7 technical support from high-quality engineers, tools and technology to automatically manage health of your environment, consultative architectural guidance delivered in the context of your applications and use-cases
 - designated Technical Account Manager (TAM) to coordinate access to proactive / preventative programs and AWS subject matter experts

Pricing Information on AWS Services

AWS Simple Monthly Calculator	<ul style="list-style-type: none"> is an easy-to-use online tool that enables you to estimate the monthly cost of AWS services for your use case based on your expected usage
AWS Services product pages	<ul style="list-style-type: none"> billing information is found on all product-specific user guides
AWS Pricing API	<ul style="list-style-type: none"> enable you to query for the prices of AWS services using either JSON (with the Price List Service API) or HTML (with the AWS Price List API)

Alerts

You can also subscribe to Amazon Simple Notification Service (Amazon SNS) notifications to get alerts when prices for the services change

The use of Tags

You can use tags to organize your resources, and cost allocation tags to **track your AWS costs** on a detailed level. After you activate cost allocation tags, AWS uses the cost allocation tags to organize your resource costs on your cost allocation report, to make it easier for you to categorize and track your AWS costs