Cloud Cost Management AWS

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Cloud Computing Benefits

Cost efficiency
  - only pay for the resources you need
Scalability
        - flexible resource limits
Procurement
        - resources immediately available
Highly reliable
        - designed to facilitate redundancy, fast error recovery

Risks

Inefficient cost management
        - costs can easily increase: "set and forget"
        - needs tight budget accountability

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Organizing cloud deployment

- Carefully plan how to organize the cloud environment

    - Organization units, teams, groups
    - Resource allocation: R&D, development, testing, production
    - Budget limits

- Create budgets and assign responsibility
- Establish clear naming conventions
- Tag resources
- Monitor costs vs budgets

AWS Cost Management
Before you start

Preparation for costs management
- Establish a mandatory resource tagging policy
- Create budgets for organization units and services
- Identify personnel responsible for budget compliance

AWS Cost Categories
- Organize your costs into custom categories that map to your business structure as needed

AWS Billing Dashboard
- View current month's costs and payment history
- View high-level spending breakdown

AWS Cost Management
Monitoring

AWS Budgets
- Set custom cost and usage budgets
- Set alerts to notify when you exceed thresholds

AWS Cost Explorer
- Visualize and analyze your spending patterns over time
- Create reports, forecast future spending

AWS Cost Anomaly Detection
- Automatically detects unusual spending patterns, and sends alerts

AWS Cost Management
Monitoring (cont.)

Unused AWS regions
- When possible, disable regions you are not going to use
- Monitor and alert when resource activity is detected in an unused region

AWS Cost and Usage Report (CUR)
- Get detailed billing data, delivered to S3 for analysis

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AWS Cost Management
Learn and adapt

AWS Compute Optimizer
- Recommends optimal AWS resources based on your utilization patterns

AWS Trusted Advisor
- Cost optimization recommendations (including idle or underutilized resources)

AWS Savings Plans and Reservations
- Commitment-based pricing models that can significantly reduce costs for predictable workloads. Use them if you can!
    - Available for EC2, RDS and other database services
    - Lambda, Opensearch

Questions?