



Module 5:

Cloud Billing and Support

Services

What's In This Module



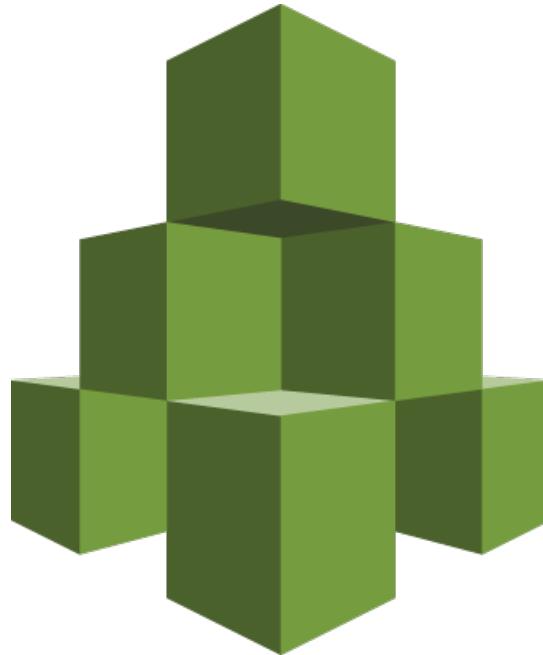
- Part 1: Introduction to AWS Organizations
- Part 2: AWS Cost Explorer
- Part 3: Overview of AWS Technical Support Plans and Costs

Review and understand AWS Organizations, billing, and technical support options to enable you to:

- ❖ Understand how set up an organizational structure that simplifies billing and account visibility to review cost data.
- ❖ Identify alternative Support options and features.

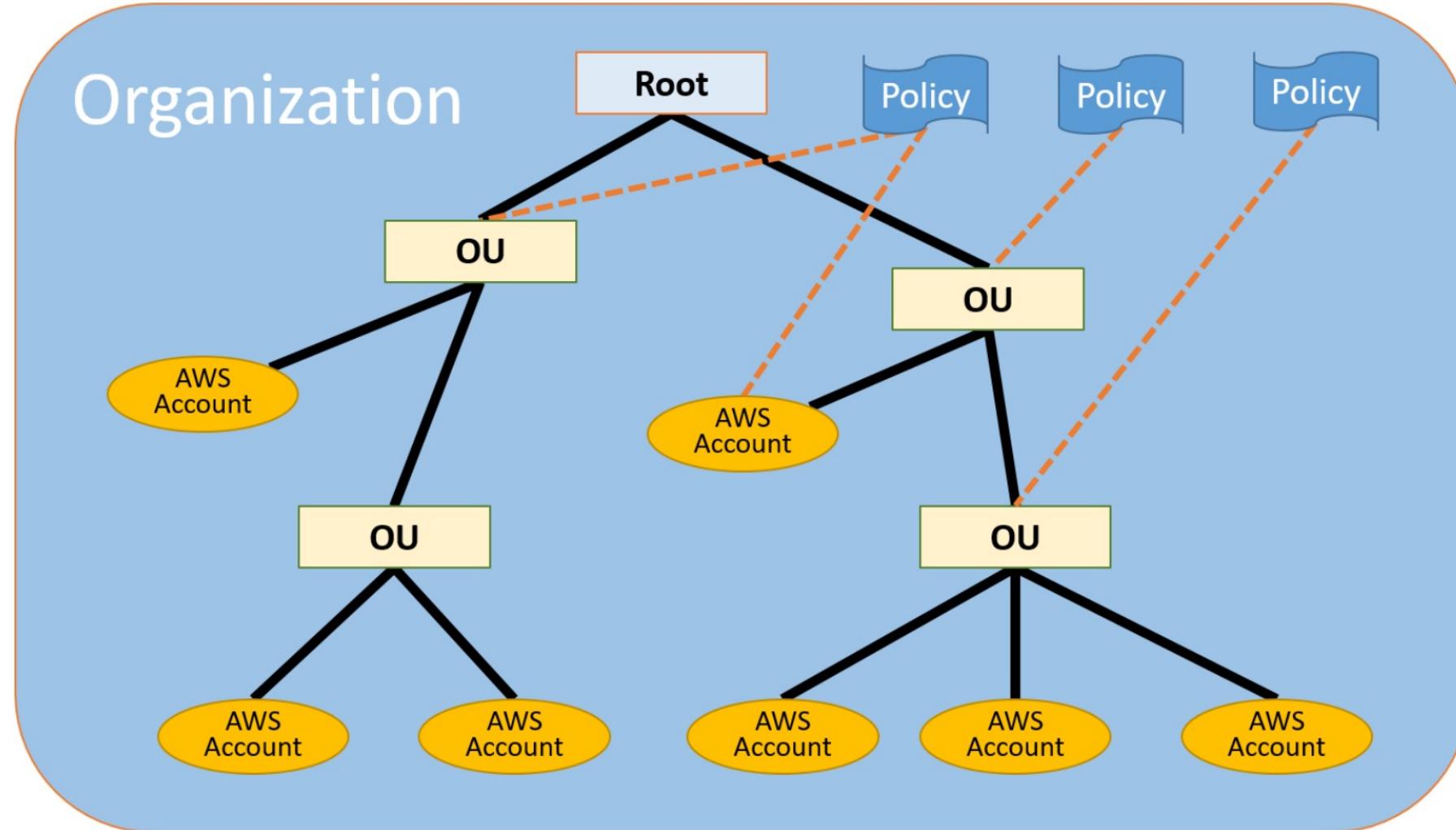
Part 1: AWS Organizations

Introduction to AWS Organizations

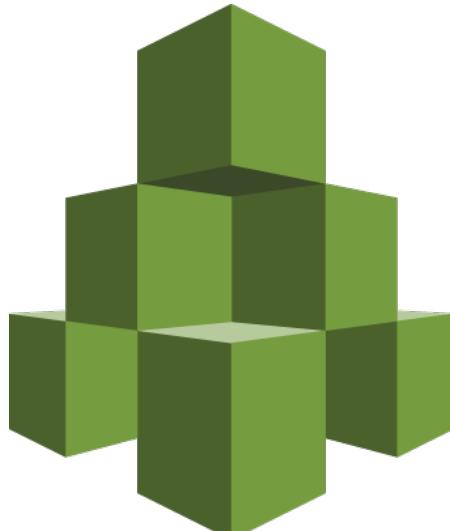


**AWS
Organizations**

AWS Organizations Terminology



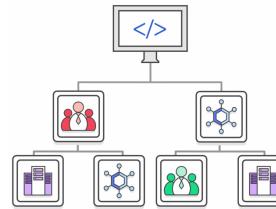
Key Features and Benefits



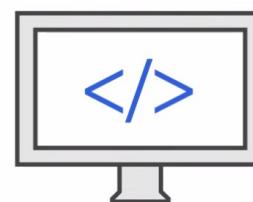
AWS
Organizations



Policy-Based Account
Management



Group Based Account
Management

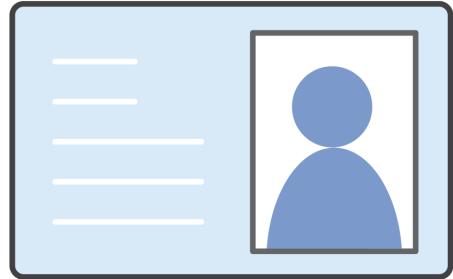


Application Program Interface
(APIs) that automate account
management



Consolidated Billing

Security with AWS Organizations



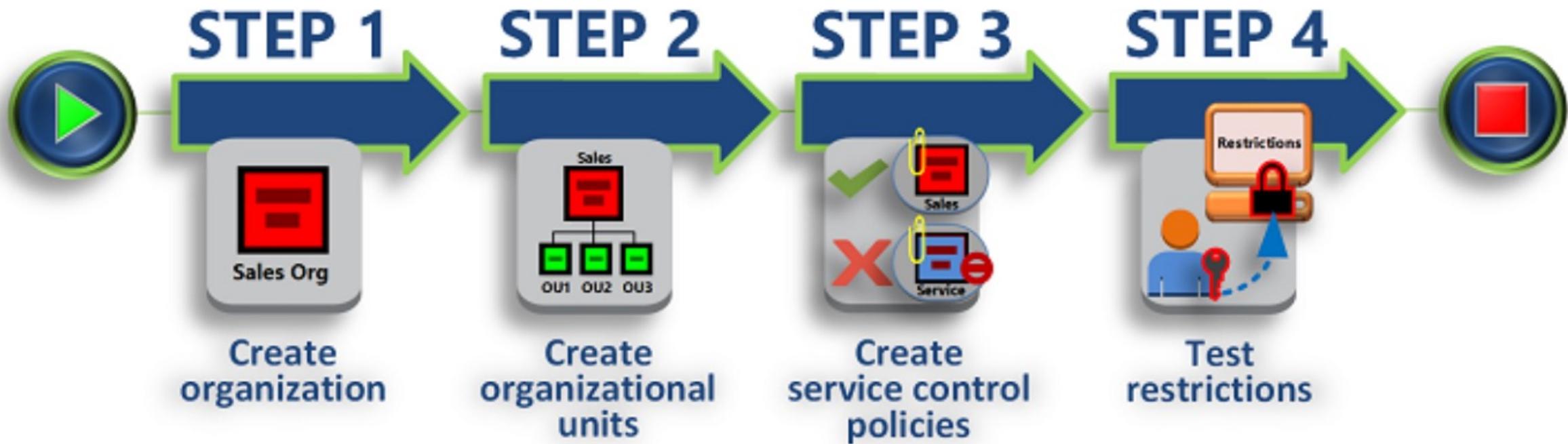
Control access with
**AWS Identity and
Access Management
(IAM).**

IAM policies enable you
to allow or deny access
to AWS services for
users, groups, and roles.



**Service Control Policies
(SCPs)** enable you to
allow or deny access to
AWS services for
individuals or group
accounts in an
Organizational Unit (OU).

Organizations Set Up

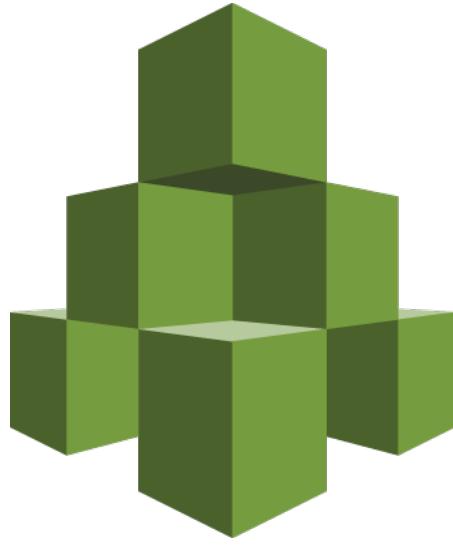


Limits of AWS Organizations



Limits		
Limits on Names	Names must be composed of Unicode characters. Names must not exceed 250 characters in length.	
Maximum and Minimum Values	Number of AWS Accounts	Varies. Note: An invitation sent to an account counts against this limit.
	Number of roots	1
	Number of	1,000
	Number of policies	1,000
	Maximum size of a service control policy document	5,120 bytes
	OU maximum nesting in a root	5 levels of OUs under a root
	Invitations sent per day	20
	Number of member accounts you can create concurrently	Only five can be in progress at one time
	Number of entities to which you can attach a policy	Unlimited

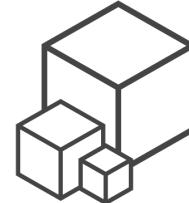
Accessing AWS Organizations



AWS
Organizations



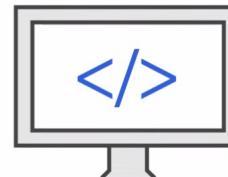
Management Console



Command Line Tools

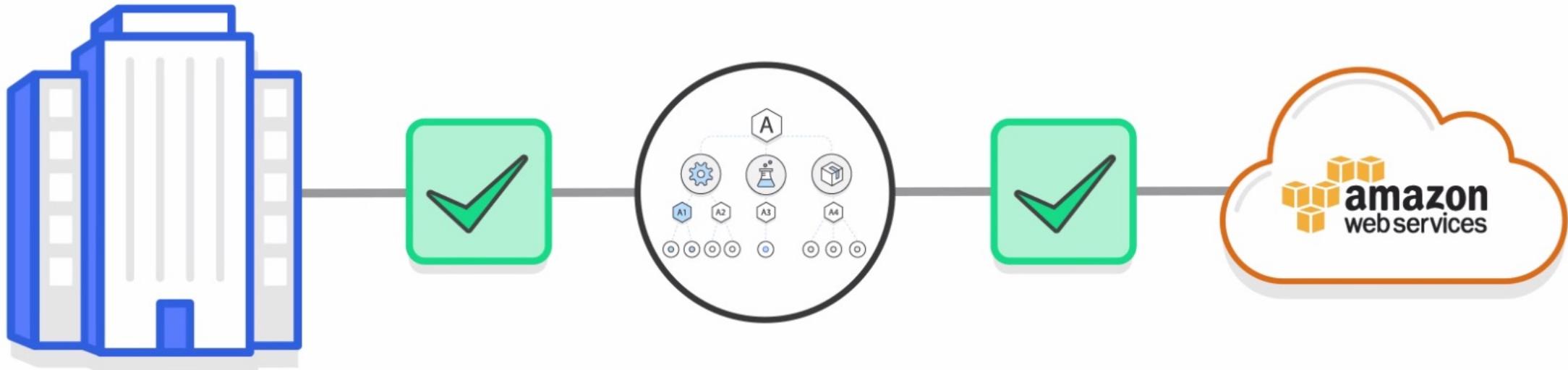


Software Development Kits
(SDKs)



HTTPS Query Application
Programming Interfaces (API)

AWS Organizations is Free!



- AWS Organizations helps you programmatically create AWS accounts and consolidate them into a centrally managed organization.
- AWS Organizations provides consolidated billing and account management capabilities that help you reach your business goals around:
 - Budget
 - Security
 - Compliance



Part 2: AWS Billing and Cost Management

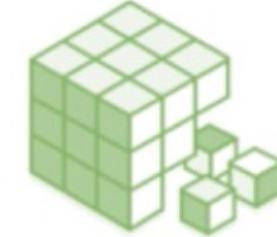
Introducing AWS Billing and Cost Management



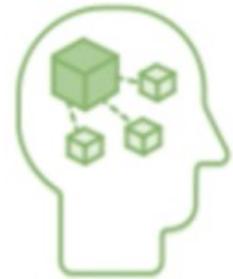
Forecast future
usage and costs



Set time interval
and granularity



Filter or group
your data



Understand underlying
cost drivers



Review AWS
usage and costs

AWS Billing Dashboard



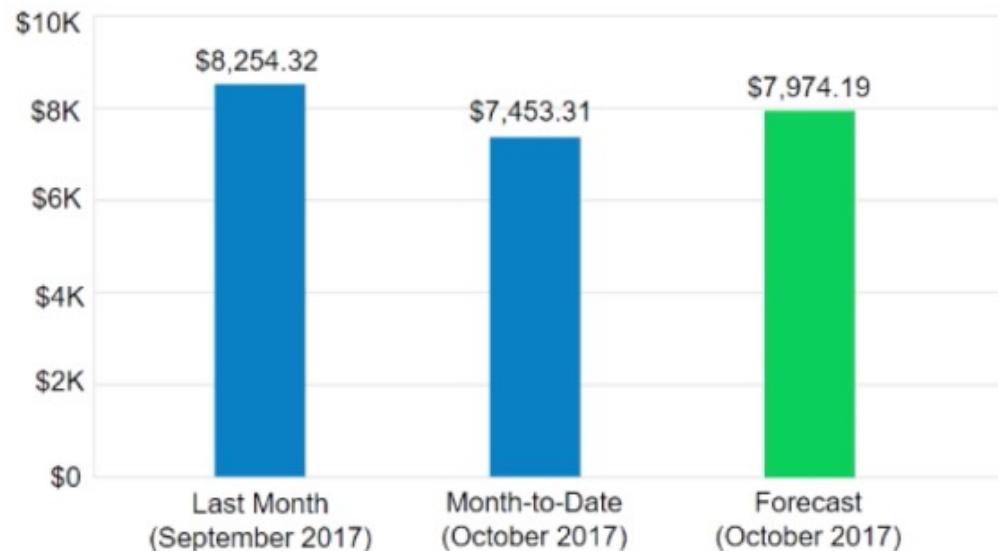
Billing & Cost Management Dashboard

Spend Summary

Welcome to the AWS Account Billing console. Your last month, month-to-date, and month-end forecasted costs appear below.

Current month-to-date balance for October 2017

\$7,453.41



Cost Explorer

Monthly-to-Date Spend by Service

Bill Details

The chart below shows the proportion of costs spent for each service you use.



EC2	\$3,700.71
RDS	\$1,876.36
ElastiCache	\$938.18
DynamoDB	\$625.44
Other Services	\$312.57
Tax	\$0.16

- cube AWS Bills
- cube AWS Cost Explorer
- cube AWS Budgets
- cube AWS Cost and Usage Reports

Monthly Bills



BILLS | COST EXPLORER | BUDGETS | REPORTS

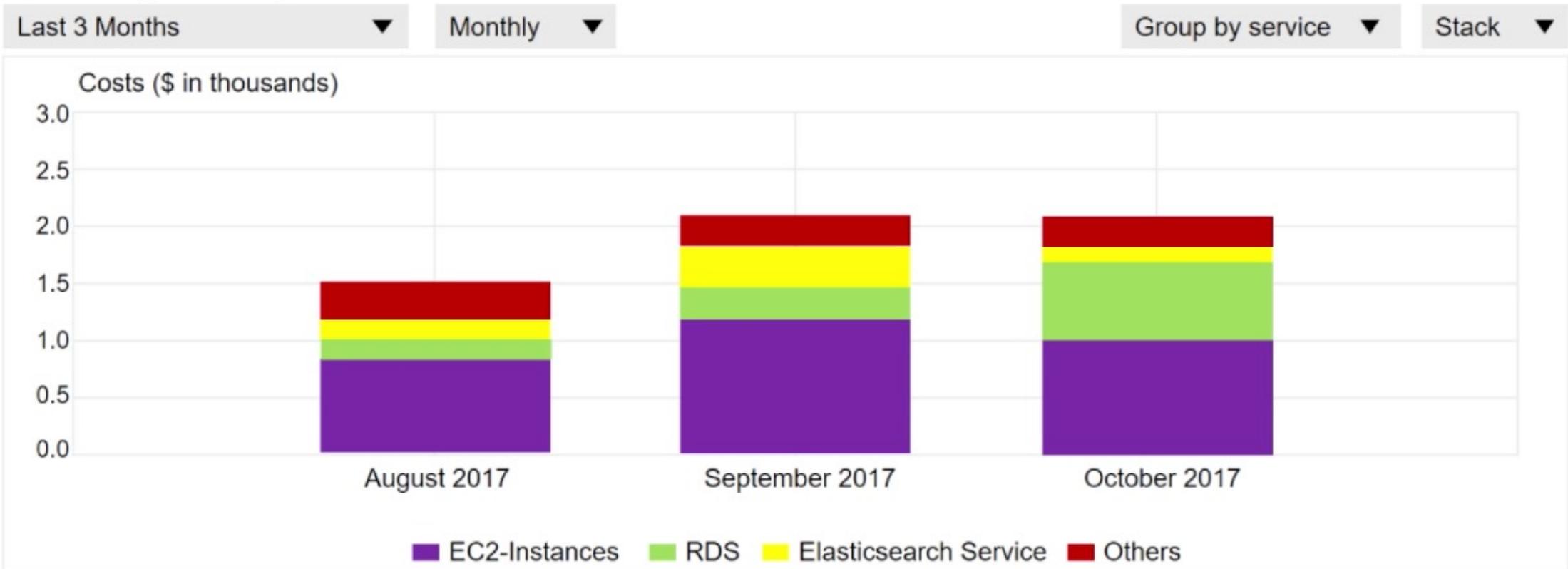
Total	\$7,453.41 USD
AWS Marketplace Charges	\$15.00
▼ Usage Charges and Recurring Fees	\$15.00
Invoice 32342548 – AWS Service Charges: Usage charge for this statement period	2017-10-10
	\$15.00
AWS Service Charges	\$7,438.41
▼ Usage Charges and Recurring Fees	\$7,414.41
Invoice 32342513 – AWS Service Charges: Usage charge for this statement period	2017-10-10
	\$7,414.41
▼ Usage Charges and Recurring Fees	\$24.00
Invoice 32342507 – AWS Service Charges: Subscription charge	2017-10-10
	\$24.00

Cost Explorer



BILLS | COST EXPLORER | BUDGETS | REPORTS

Monthly costs by service



Forecast and Track Costs



BILLS | COST EXPLORER | **BUDGETS** | REPORTS

Create budget							Copy	Edit	Delete	Download CSV						
Filter by budget name																
	Budget name	Current	Forecasted	Budgeted	Current vs. budgeted	Forecasted vs. budgeted										
	Budget name	Current	Forecasted	Budgeted	Current vs. budgeted	Forecasted vs. budgeted										
<input type="checkbox"/>	▶ Total Monthly Cost	\$760.27	\$787.44	\$1,000.00												
<input type="checkbox"/>	▼ S3 Usage Bucket	2978.00 Req	3650.16 Req	3000.00 Req												
Budget details																
Start date 10/01/17																
End date -																
Budget Period Monthly																
Variance analysis																

Cost and Usage Reporting



BILLS | COST EXPLORER | BUDGETS | **REPORTS**

Product Code	Usage Type	Operation	Availability Zone	Usage Amount	Currency Code	Line Item Description
Amazon S3	Requests – Tier 1	ListAllMyBuckets		2	USD	\$0.00 per request – PUT, COPY, POST, LIST under the global free tier
Amazon EC2	USW2-Boxusage:t2.micro	Runinstnaces:0002	us-west-2a	1	USD	\$0.00 per Windows t2.micro instance-hour under monthly free tier
Amazon S3	Requests – Tier 1	ListAllMyBuckets		2	USD	\$0.00 per request – PUT, COPY, POST, LIST under the global free tier
Amazon EC2	USW2-Boxusage:t2.micro	Runinstnaces:0002	us-west-2a	1	USD	\$0.00 per Windows t2.micro instance-hour under monthly free tier
Amazon S3	Requests – Tier 1	ListAllMyBuckets		2	USD	\$0.00 per request – PUT, COPY, POST, LIST under the global free tier
Amazon S3	Requests – Tier 1	ListAllMyBuckets		2	USD	\$0.00 per request – PUT, COPY, POST, LIST under the global free tier

- 💡 Tools to help you access, understand, allocate, control and optimize your AWS costs and usage:



AWS Bills



AWS Cost Explorer



AWS Budgets



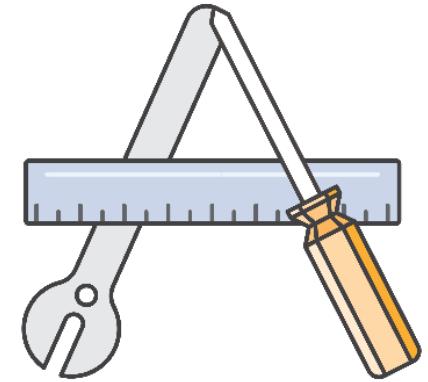
AWS Cost and Usage Reports



Part 3: AWS Support Services

AWS Support

- Provide unique combination of tools/expertise:
 - AWS Support
 - AWS Support Plans
- Support is provided for:
 - Experimenting with AWS
 - Production use of AWS
 - Business critical use of AWS



AWS Support



💡 Proactive guidance:

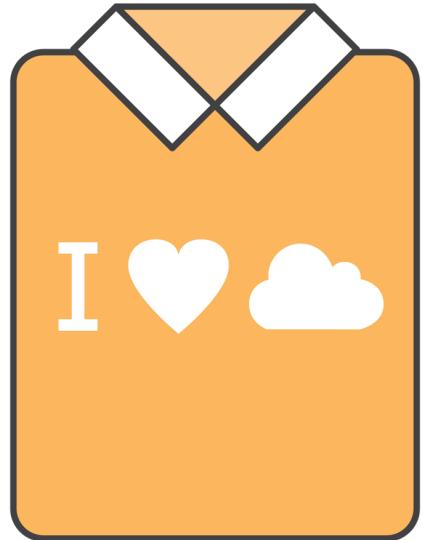
- ✓ Technical Account Manager (TAM)

💡 Best practices:

- ✓ Trusted Advisor

💡 Account assistance:

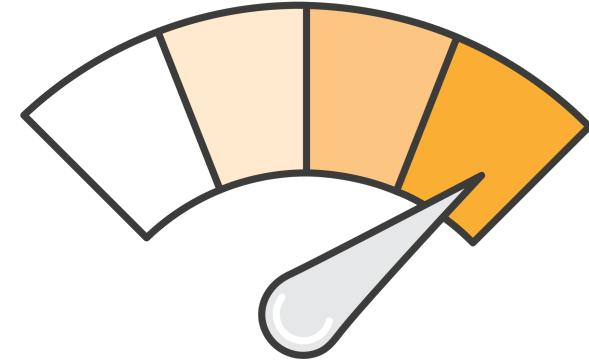
- ✓ AWS Support Concierge



Support Plans

AWS Support offers four support plans:

- **Basic Support:** Resource Center access, Service Health Dashboard, Product FAQs, Discussion Forums, and Support for Health Checks
- **Developer Support:** Support for early development on AWS
- **Business Support:** Customers running production workloads
- **Enterprise Support:** Customers running business and mission-critical workloads



Support Plan Prices



	BASIC	DEVELOPER	BUSINESS	ENTERPRISE
Cost	FREE	Greater of \$29 / month or 3% of monthly AWS usage	Greater of \$100 / month or 10% of monthly AWS usage for the first \$0–\$10K 7% of monthly AWS usage from \$10K–\$80K 5% of monthly AWS usage from \$80K–\$250K 3% of monthly AWS usage over \$250K	Greater of \$15,000 or 10% of monthly AWS usage for the first \$0–\$150K 7% of monthly AWS usage from \$150K–\$500K 5% of monthly AWS usage from \$500K–\$1M 3% of monthly AWS usage over \$1M
Tech Support	Business hour access via email		24x7, email, chat & phone	24x7, email, chat & phone
Technical Account Manager (TAM)	NO	NO	NO	YES
Who can open cases?	No one	1 Person / Unlimited Cases	Unlimited Contacts / Unlimited Cases	Unlimited Contacts / Unlimited Cases

Case Severity & Response Times



	Critical	Urgent	High	Normal	Low
Basic	No Case Support				
Developer Plan (Business hours)				12 hours or less	24 hours or less
Business Plan (24 x 7)		1 hour or less	4 hours or less	12 hours or less	24 hours or less
Enterprise Plan (24 x 7)	15 minutes or less	1 hour or less	4 hours or less	12 hours or less	24 hours or less

AWS Trusted Advisor



Online resource to:

- ✓ Reduce cost
- ✓ Increase performance
- ✓ Improve security

Core checks and recommendations available to all customers.

Full Trusted Advisor benefits available with Business or Enterprise support plans.

Located in the Management Tools section of the console.

The screenshot shows the Trusted Advisor Dashboard with four main sections: Cost Optimization, Performance, Security, and Fault Tolerance. Each section has a summary icon and a count of findings (e.g., 0 findings for Cost Optimization). Below each section is a 'Recommended Actions' section with various items like 'Security Groups - Specific Ports Unrestricted' and 'IAM Use', each with a status indicator (yellow warning or green success) and a brief description.

AWS White Papers and Documentation



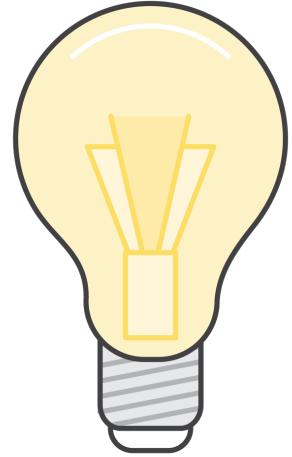
💡 AWS White Papers are:

- ✓ Available at
<https://aws.amazon.com/whitepapers>
- ✓ Collection of technical documents that outline AWS topics including:
 - Architecture best practices
 - Security best practices
 - Cloud Computing Economics
 - Serverless Architecture

AWS Whitepapers & Guides

Expand your knowledge of the cloud with AWS technical content authored by AWS and the AWS community, including technical whitepapers, technical guides, reference material, and reference architecture diagrams.

- AWS Support Plans include:
 - Basic Support plan
 - Developer Support plan
 - Business Support plan
 - Enterprise Support plan
- All support plans include
 - 24/7 access to customer service
 - AWS documentation, whitepapers, support forums
 - Access to six core trusted advisor checks
 - Access to personal health dashboard
- For resources beyond included services, select either the Developer, Business, or Enterprise support plans.



- 💡 Discussed Organizations to understand options for account set up
- 💡 Reviewed AWS Billing and Cost Management to understand how to have visibility to AWS costs
- 💡 Identify alternative Support options and features

Up Next...

- 💡 Complete:  **Knowledge Assessment**



Thanks for participating!

© 2018 Amazon Web Services, Inc. or its affiliates. All rights reserved. This work may not be reproduced or redistributed, in whole or in part, without prior written permission from Amazon Web Services, Inc. Commercial copying, lending, or selling is prohibited. Corrections or feedback on the course, please email us at: aws-course-feedback@amazon.com. For all other questions, contact us at: <https://aws.amazon.com/contact-us/aws-training/>. All trademarks are the property of their owners.