Package 'paws.cost.management'

August 3, 2020

Title Amazon Web Services Cost Management Services

Version 0.1.9

Description Interface to Amazon Web Services cost management services, including cost and usage reports, budgets, pricing, and more https://aws.amazon.com/>.

License Apache License (>= 2.0)

URL https://github.com/paws-r/paws

BugReports https://github.com/paws-r/paws/issues

Imports paws.common (>= 0.3.0)

Suggests testthat

Encoding UTF-8

LazyData true

RoxygenNote 7.1.0

Collate 'budgets service.R' 'budgets interfaces.R'

'budgets_operations.R' 'costandusagereportservice_service.R'

'costandusagereportservice_interfaces.R'

'costandusagereportservice_operations.R'

'costexplorer_service.R' 'costexplorer_interfaces.R'

'costexplorer_operations.R'

'marketplacecommerceanalytics_service.R'

'marketplacecommerceanalytics_interfaces.R'

 $'marketplace commerce analytics_operations. R'$

'marketplaceentitlementservice_service.R'

'marketplaceentitlementservice_interfaces.R'

'marketplaceentitlementservice_operations.R'

'marketplacemetering_service.R'

'marketplacemetering_interfaces.R'

'marketplacemetering_operations.R' 'pricing_service.R'

'pricing_interfaces.R' 'pricing_operations.R'

NeedsCompilation no

2 budgets

Author David Kretch [aut, cre],
 Adam Banker [aut],
 Amazon.com, Inc. [cph]

Maintainer David Kretch <david.kretch@gmail.com>

Repository CRAN

Date/Publication 2020-08-03 09:00:02 UTC

R topics documented:

| budg | s AWS Budgets | |
|-------|-------------------------------|----|
| Index | | 13 |
| | marketplaceentitlementservice | 9 |
| | marketplacecommerceanalytics | 7 |
| | budgets | 4 |

Description

The AWS Budgets API enables you to use AWS Budgets to plan your service usage, service costs, and instance reservations. The API reference provides descriptions, syntax, and usage examples for each of the actions and data types for AWS Budgets.

Budgets provide you with a way to see the following information:

- How close your plan is to your budgeted amount or to the free tier limits
- Your usage-to-date, including how much you\'ve used of your Reserved Instances (RIs)
- Your current estimated charges from AWS, and how much your predicted usage will accrue in charges by the end of the month
- · How much of your budget has been used

AWS updates your budget status several times a day. Budgets track your unblended costs, subscriptions, refunds, and RIs. You can create the following types of budgets:

- Cost budgets Plan how much you want to spend on a service.
- Usage budgets Plan how much you want to use one or more services.
- **RI utilization budgets** Define a utilization threshold, and receive alerts when your RI usage falls below that threshold. This lets you see if your RIs are unused or under-utilized.
- **RI coverage budgets** Define a coverage threshold, and receive alerts when the number of your instance hours that are covered by RIs fall below that threshold. This lets you see how much of your instance usage is covered by a reservation.

budgets 3

Service Endpoint

The AWS Budgets API provides the following endpoint:

• https://budgets.amazonaws.com

For information about costs that are associated with the AWS Budgets API, see AWS Cost Management Pricing.

Usage

```
budgets(config = list())
```

Arguments

config

Optional configuration of credentials, endpoint, and/or region.

Service syntax

```
svc <- budgets(
  config = list(
    credentials = list(
      creds = list(
        access_key_id = "string",
        secret_access_key = "string",
        session_token = "string"
    ),
    profile = "string"
    ),
    endpoint = "string",
    region = "string"
)</pre>
```

Operations

create_budget
create_notification
create_subscriber
delete_budget
delete_notification
delete_subscriber
describe_budget
describe_budget
describe_budgets
describe_notifications_for_budget
describe_subscribers_for_notification
update_budget
update_notification
update_subscriber

Creates a budget and, if included, notifications and subscribers

Creates a notification Creates a subscriber Deletes a budget Deletes a notification Deletes a subscriber Describes a budget

Describes the history for DAILY, MONTHLY, and QUARTERLY budgets

Lists the budgets that are associated with an account Lists the notifications that are associated with a budget Lists the subscribers that are associated with a notification

Updates a budget Updates a notification Updates a subscriber

Examples

```
## Not run:
svc <- budgets()
svc$create_budget(
   Foo = 123
)
## End(Not run)</pre>
```

costandusagereportservice

AWS Cost and Usage Report Service

Description

The AWS Cost and Usage Report API enables you to programmatically create, query, and delete AWS Cost and Usage report definitions.

AWS Cost and Usage reports track the monthly AWS costs and usage associated with your AWS account. The report contains line items for each unique combination of AWS product, usage type, and operation that your AWS account uses. You can configure the AWS Cost and Usage report to show only the data that you want, using the AWS Cost and Usage API.

Service Endpoint

The AWS Cost and Usage Report API provides the following endpoint:

• cur.us-east-1.amazonaws.com

Usage

```
costandusagereportservice(config = list())
```

Arguments

config

Optional configuration of credentials, endpoint, and/or region.

Service syntax

```
svc <- costandusagereportservice(
  config = list(
    credentials = list(
    creds = list(
        access_key_id = "string",
        secret_access_key = "string",
        session_token = "string"
    ),</pre>
```

costexplorer 5

```
profile = "string"
),
endpoint = "string",
region = "string"
)
)
```

Operations

delete_report_definition
describe_report_definitions
modify_report_definition
put_report_definition

Deletes the specified report

Lists the AWS Cost and Usage reports available to this account Allows you to programatically update your report preferences Creates a new report using the description that you provide

Examples

```
## Not run:
svc <- costandusagereportservice()
# The following example deletes the AWS Cost and Usage report named
# ExampleReport.
svc$delete_report_definition(
   ReportName = "ExampleReport"
)
## End(Not run)</pre>
```

costexplorer

AWS Cost Explorer Service

Description

The Cost Explorer API enables you to programmatically query your cost and usage data. You can query for aggregated data such as total monthly costs or total daily usage. You can also query for granular data, such as the number of daily write operations for Amazon DynamoDB database tables in your production environment.

Service Endpoint

The Cost Explorer API provides the following endpoint:

• https://ce.us-east-1.amazonaws.com

For information about costs associated with the Cost Explorer API, see AWS Cost Management Pricing.

6 costexplorer

Usage

```
costexplorer(config = list())
```

Arguments

config

Optional configuration of credentials, endpoint, and/or region.

Service syntax

```
svc <- costexplorer(
  config = list(
     credentials = list(
     creds = list(
        access_key_id = "string",
        secret_access_key = "string",
        session_token = "string"
     ),
     profile = "string"
    ),
    endpoint = "string",
    region = "string"
)</pre>
```

Operations

create_cost_category_definition delete_cost_category_definition describe_cost_category_definition get_cost_and_usage get_cost_and_usage_with_resources get_cost_forecast get_dimension_values get_reservation_coverage get_reservation_purchase_recommendation get_reservation_utilization get_rightsizing_recommendation get_savings_plans_coverage get_savings_plans_purchase_recommendation get_savings_plans_utilization get_savings_plans_utilization_details get_tags get_usage_forecast list_cost_category_definitions update_cost_category_definition

Creates a new Cost Category with the requested name and rules Deletes a Cost Category

Returns the name, ARN, rules, definition, and effective dates of a Cost Categ Retrieves cost and usage metrics for your account

Retrieves cost and usage metrics with resources for your account

Retrieves a forecast for how much Amazon Web Services predicts that you w Retrieves all available filter values for a specified filter over a period of time

Retrieves the reservation coverage for your account

Gets recommendations for which reservations to purchase

Retrieves the reservation utilization for your account

Creates recommendations that help you save cost by identifying idle and und

Retrieves the Savings Plans covered for your account

Retrieves your request parameters, Savings Plan Recommendations Summar Retrieves the Savings Plans utilization for your account across date ranges w Retrieves attribute data along with aggregate utilization and savings data for

Queries for available tag keys and tag values for a specified period

Retrieves a forecast for how much Amazon Web Services predicts that you we Returns the name, ARN, NumberOfRules and effective dates of all Cost Cate Updates an existing Cost Category

Examples

```
## Not run:
svc <- costexplorer()
svc$create_cost_category_definition(
   Foo = 123
)
## End(Not run)</pre>
```

marketplacecommerceanalytics

AWS Marketplace Commerce Analytics

Description

Provides AWS Marketplace business intelligence data on-demand.

Usage

```
marketplacecommerceanalytics(config = list())
```

Arguments

config

Optional configuration of credentials, endpoint, and/or region.

Service syntax

```
svc <- marketplacecommerceanalytics(
  config = list(
    credentials = list(
    creds = list(
        access_key_id = "string",
        secret_access_key = "string",
        session_token = "string"
    ),
    profile = "string"
    ),
    endpoint = "string",
    region = "string"
)</pre>
```

Operations

generate_data_set start_support_data_export

Given a data set type and data set publication date, asynchronously publishes the requested data so Given a data set type and a from date, asynchronously publishes the requested customer support of

Examples

```
## Not run:
svc <- marketplacecommerceanalytics()
svc$generate_data_set(
   Foo = 123
)
## End(Not run)</pre>
```

marketplaceentitlementservice

AWS Marketplace Entitlement Service

Description

This reference provides descriptions of the AWS Marketplace Entitlement Service API.

AWS Marketplace Entitlement Service is used to determine the entitlement of a customer to a given product. An entitlement represents capacity in a product owned by the customer. For example, a customer might own some number of users or seats in an SaaS application or some amount of data capacity in a multi-tenant database.

Getting Entitlement Records

• GetEntitlements- Gets the entitlements for a Marketplace product.

Usage

```
marketplaceentitlementservice(config = list())
```

Arguments

config

Optional configuration of credentials, endpoint, and/or region.

Service syntax

```
svc <- marketplaceentitlementservice(
  config = list(
    credentials = list(
    creds = list(
        access_key_id = "string",
        secret_access_key = "string",
        session_token = "string"
    ),
    profile = "string"
),</pre>
```

marketplacemetering 9

```
endpoint = "string",
  region = "string"
)
)
```

Operations

get_entitlements GetEntitlements retrieves entitlement values for a given product

Examples

```
## Not run:
svc <- marketplaceentitlementservice()
svc$get_entitlements(
   Foo = 123
)
## End(Not run)</pre>
```

marketplacemetering

AWSMarketplace Metering

Description

AWS Marketplace Metering Service

This reference provides descriptions of the low-level AWS Marketplace Metering Service API.

AWS Marketplace sellers can use this API to submit usage data for custom usage dimensions.

For information on the permissions you need to use this API, see AWS Marketing metering and entitlement API permissions in the AWS Marketplace Seller Guide.

Submitting Metering Records

- *MeterUsage* Submits the metering record for a Marketplace product. MeterUsage is called from an EC2 instance or a container running on EKS or ECS.
- *BatchMeterUsage* Submits the metering record for a set of customers. BatchMeterUsage is called from a software-as-a-service (SaaS) application.

Accepting New Customers

• *ResolveCustomer*- Called by a SaaS application during the registration process. When a buyer visits your website during the registration process, the buyer submits a Registration Token through the browser. The Registration Token is resolved through this API to obtain a CustomerIdentifier and Product Code.

Entitlement and Metering for Paid Container Products

10 marketplacemetering

Paid container software products sold through AWS Marketplace must integrate with the AWS
Marketplace Metering Service and call the RegisterUsage operation for software entitlement
and metering. Free and BYOL products for Amazon ECS or Amazon EKS aren't required to
call RegisterUsage, but you can do so if you want to receive usage data in your seller reports.
For more information on using the RegisterUsage operation, see Container-Based Products.

BatchMeterUsage API calls are captured by AWS CloudTrail. You can use Cloudtrail to verify that the SaaS metering records that you sent are accurate by searching for records with the eventName of BatchMeterUsage. You can also use CloudTrail to audit records over time. For more information, see the AWS CloudTrail User Guide.

Usage

```
marketplacemetering(config = list())
```

Arguments

config

Optional configuration of credentials, endpoint, and/or region.

Service syntax

```
svc <- marketplacemetering(
  config = list(
    credentials = list(
      creds = list(
      access_key_id = "string",
      secret_access_key = "string",
      session_token = "string"
    ),
    profile = "string"
    ),
    endpoint = "string",
    region = "string"
)</pre>
```

Operations

batch_meter_usage meter_usage register_usage resolve_customer BatchMeterUsage is called from a SaaS application listed on the AWS Marketplace to post metering records

Paid container software products sold through AWS Marketplace must integrate with the AWS Marketpl ResolveCustomer is called by a SaaS application during the registration process

Examples

```
## Not run:
svc <- marketplacemetering()</pre>
```

pricing 11

```
svc$batch_meter_usage(
  Foo = 123
)
## End(Not run)
```

pricing

AWS Price List Service

Description

AWS Price List Service API (AWS Price List Service) is a centralized and convenient way to programmatically query Amazon Web Services for services, products, and pricing information. The AWS Price List Service uses standardized product attributes such as Location, Storage Class, and Operating System, and provides prices at the SKU level. You can use the AWS Price List Service to build cost control and scenario planning tools, reconcile billing data, forecast future spend for budgeting purposes, and provide cost benefit analysis that compare your internal workloads with AWS.

Use GetServices without a service code to retrieve the service codes for all AWS services, then GetServices with a service code to retrieve the attribute names for that service. After you have the service code and attribute names, you can use GetAttributeValues to see what values are available for an attribute. With the service code and an attribute name and value, you can use GetProducts to find specific products that you\'re interested in, such as an AmazonEC2 instance, with a Provisioned IOPS volumeType.

Service Endpoint

AWS Price List Service API provides the following two endpoints:

- https://api.pricing.us-east-1.amazonaws.com
- https://api.pricing.ap-south-1.amazonaws.com

Usage

```
pricing(config = list())
```

Arguments

config

Optional configuration of credentials, endpoint, and/or region.

Service syntax

```
svc <- pricing(
  config = list(
    credentials = list(
    creds = list(
        access_key_id = "string",
        secret_access_key = "string",</pre>
```

12 pricing

```
session_token = "string"
),
   profile = "string"
),
   endpoint = "string",
   region = "string"
)
)
```

Operations

describe_services get_attribute_values get_products Returns the metadata for one service or a list of the metadata for all services Returns a list of attribute values Returns a list of all products that match the filter criteria

Examples

```
## Not run:
svc <- pricing()
svc$describe_services(
  FormatVersion = "aws_v1",
  MaxResults = 1L,
  ServiceCode = "AmazonEC2"
)
## End(Not run)</pre>
```

Index

```
batch_meter_usage, 10
                                               get_savings_plans_purchase_recommendation,
budgets, 2
                                               get_savings_plans_utilization, 6
                                               get_savings_plans_utilization_details,
costandusagereportservice, 4
                                                       6
costexplorer, 5
create_budget, 3
                                               get_tags, 6
                                               get_usage_forecast, 6
create_cost_category_definition, 6
create_notification, 3
                                               list_cost_category_definitions, 6
create_subscriber, 3
                                               marketplacecommerceanalytics, 7
delete_budget, 3
                                               marketplaceentitlementservice, 8
delete_cost_category_definition, 6
                                               marketplacemetering, 9
delete_notification, 3
                                               meter_usage, 10
delete_report_definition, 5
                                               modify_report_definition, 5
delete_subscriber, 3
describe_budget, 3
                                               pricing, 11
describe_budget_performance_history, 3
                                               put_report_definition, 5
describe_budgets, 3
                                               register_usage, 10
describe_cost_category_definition, 6
                                               resolve_customer, 10
describe_notifications_for_budget, 3
describe_report_definitions, 5
                                               start_support_data_export, 7
describe_services, 12
describe_subscribers_for_notification,
                                               update_budget, 3
                                               update_cost_category_definition, 6
                                               update_notification, 3
generate_data_set, 7
                                               update_subscriber, 3
get_attribute_values, 12
get_cost_and_usage, 6
get_cost_and_usage_with_resources, 6
get_cost_forecast, 6
get_dimension_values, 6
get_entitlements, 9
get_products, 12
get_reservation_coverage, 6
get_reservation_purchase_recommendation,
get_reservation_utilization, 6
get_rightsizing_recommendation, 6
get_savings_plans_coverage, 6
```