Reporting API's

Microsoft Enterprise Azure customers can access usage and billing information through REST APIs. The role owner (Enterprise Administrator, Department Administrator, Account Owner) needs to enable access to the API by generating a key from the Enterprise Azure portal. Anyone provided with the enrollment number and key can access the data through the API.

Available API's

- **Balance and Summary:** The <u>Balance and Summary API</u> offers a monthly summary of information on balances, new purchases, Azure Marketplace service charges, adjustments, and overage charges.
- **Usage Detail:** The <u>Usage Detail API</u> offers a daily breakdown of consumed quantities and estimated charges by an enrollment. The result also includes information on instances, meters, and departments. The API can be queried by billing period or by a specified start and end date.
- Marketplace Store Charge: The Marketplace Store Charge API returns the usage-based marketplace charges breakdown by day for the specified billing period or start and end dates.
- Price Sheet: The <u>Price Sheet API</u> provides the applicable rate for each meter for the given enrollment and billing period.
- **Billing Periods:** The <u>Billing Periods API</u> returns a list of billing periods that have consumption data for the specified enrollment in reverse chronological order. Each period contains a property pointing to the API route for the four sets of data, BalanceSummary, UsageDetails, Marketplace Charges, and PriceSheet.

Enabling data access to the API

Role owners can perform the following functions in the Enterprise Portal under Reports -> Download Usage -> API Access Key:

- Generate primary and secondary access keys
- Disable access keys
- View start and end dates of access keys

Generate/Retrieve the API Key

- Log in as an Enterprise Administrator
- Click Reports on the left navigation
- Click the Download Usage tab
- Click API Access Key
- Under Enrollment Access Keys, select *generate/key symbol* to generate either the Primary or Secondary Key
- Select Expand Key to view the generate API Access Key in its entirety
- Select Copy to retrieve the API Access Key for immediate use

Note: If you intend to provide use of API Access Keys to individuals who are not Enterprise Administrators on your enrollment, please be sure to:

- 1. Click Manage on the left navigation
- 2. Click the *blue pencil* next to DA view charges (Department Administrator view charges)
- 3. Select Enabled and save
- 4. Click the *blue pencil* next to AO view charges (Account Owner view charges)
- 5. Select *Enabled* and save

This action will provide API Access Key holders with access to cost/pricing information on the usage reports

 Passing keys in the API - The API key needs to be passed for each call for Authentication and Authorization. The following property needs to be to the HTTP headers

Request Header Key	Value
Authorization	Specify the value in this format: bearer {API_KEY} Example: bearer eyr09

Consumption APIs

A Swagger endpoint is available <u>here</u> for the APIs described below which should enable easy introspection of the API and the ability to generate client SDKs using <u>AutoRest</u> or <u>Swagger CodeGen</u>. Data beginning May 1, 2014 is available through this API.

- Balance and Summary The <u>Balance and Summary API</u> offers a monthly summary of information on balances, new purchases, Azure Marketplace service charges, adjustments and overage charges.
- Usage Details The <u>Usage Detail API</u> offers a daily breakdown of consumed quantities and estimated charges by an Enrollment. The result also includes information on instances, meters and departments. The API can be queried by Billing period or by a specified start and end date.
- Marketplace Store Charge The Marketplace Store Charge API returns the usage-based marketplace charges breakdown by day for the specified Billing Period or start and end dates (one time fees are not included).
- Price Sheet The <u>Price Sheet API</u> provides the applicable rate for each Meter for the given Enrollment and Billing Period.

Helper APIs

List Billing Periods - The <u>Billing Periods API</u> returns a list of billing periods that have consumption data for the specified Enrollment in reverse chronological order. Each Period contains a property pointing to the API route for the four sets of data - BalanceSummary, UsageDetails, Marketplace Charges, and PriceSheet.

API Response Codes

Response	Message	Description
Status Code		
200	OK	No error

401	Unauthorized	API Key not found, Invalid, Expired etc.
404	Unavailable	Report endpoint not found
400	Bad Request	Invalid params – Date ranges, EA numbers etc.
500	Server Error	Unexpected error processing request

Update frequency of the usage and billing data

- The files are currently updated every 24 hours for current billing month.
- There may be data latency of up to 3 days. Ex. usage incurred on Monday may not appear in the file until Thursday.

Calling the API for POC / development:

* If you are a partner or a developer and want to access the API but don't have an Enterprise Azure enrollment, you can use the test enrollment (EnrollmentNumber 100) and the <u>test enrollment access key</u> to call the API and see sample data.

Azure service catalog

We post a catalog of all Azure services in CSV format on a blob. This catalog is useful if you need to build a curated catalog of all Azure services for your system. Click here to find the current catalog:

Catalog

URL: https://azurecatalog.blob.core.windows.net/catalog/AzureCatalog.csv

Catalog Column Details

The charts below share the properties of each report API exposed.

Usage Summary

This Json format is generated from the csv report. As a result, the whole format is same as the summary csv format.

As you see the column name is wield, we suggest you de-serialize into a DATA TABLE when you consume the json summary data.

CSV Column Name	Json Column Name	Json new Column	Comment
AccountOwnerId	AccountOwnerLiveId	AccountOwnerLiveId	
Account Name	AccountName	AccountName	
ServiceAdministratorId	ServiceAdministratorLiveId	ServiceAdministratorLiveId	
SubscriptionId	SubscriptionId	SubscriptionId	
SubscriptionGuid	MOCPSubscriptionGuid	SubscriptionGuid	
Subscription Name	SubscriptionName	SubscriptionName	
Date	Date	Date	This field indicates the date on which this service catalog report was run. (Date String only without time stamp)
Month	Month	Month	
Day	Day	Day	
Year	Year	Year	
Product	BillableItemName	Product	
Meter ID	ResourceGUID	MeterId	
Meter Category	Service	MeterCategory	Helps in narrowing down the services. Especially relevant for services that have multiple ServiceType, example: Virtual Machines.

Meter Sub-Category Meter Region	ServiceType ServiceRegion	MeterSubCategory MeterRegion	Provides second level of details regarding a service. Example: A1 VM (Non-Windows)
			level of detail required for a service, this field helps narrow down to the region context of the ResourceGUID.
Meter Name	ServiceResource	MeterName	The name of the service.
Consumed Quantity	ResourceQtyConsumed	ConsumedQuantity	
ResourceRate	ResourceRate	ResourceRate	
ExtendedCost	ExtendedCost	ExtendedCost	
Resource Location	ServiceSubRegion	ResourceLocation	
Consumed Service	ServiceInfo	ConsumedService	
Instance ID	Component	InstanceId	
ServiceInfo1	ServiceInfo1	ServiceInfo1	
ServiceInfo2	ServiceInfo2	ServiceInfo2	
AdditionalInfo	AdditionalInfo	AdditionalInfo	
Tags	Tags	Tags	
Store Service Identifier	OrderNumber	StoreServiceIdentifier	
Department Name	DepartmentName	DepartmentName	
Cost Center	CostCenter	CostCenter	
Unit of Measure	UnitOfMeasure	UnitOfMeasure	Sample Values: Hours, GB, Events, Pushes, Unit, Unit Hours, MB, Daily Units
ResourceGroup	ResourceGroup	ResourceGroup	

Azure Marketplace Report

CSV Column Name	Json Column Name	Json new Column
AccountOwnerId	AccountOwnerId	AccountOwnerId
Account Name	AccountName	AccountName
SubscriptionId	SubscriptionId	SubscriptionId
SubscriptionGuid	SubscriptionGuid	SubscriptionGuid
Subscription Name	SubscriptionName	SubscriptionName
Date	BillingCycle	Date (Date String only without time stamp)
Month	Month	Month
Day	Day	Day
Year	Year	Year
Meter ID	MeterResourceId	MeterId
Publisher Name	PublisherFriendlyName	PublisherName
Offer Name	OfferFriendlyName	OfferName
Plan Name	PlanFriendlyName	PlanName
Consumed Quantity	BilledQty	ConsumedQuantity
ResourceRate	ResourceRate	ResourceRate
ExtendedCost	ExtendedCost	ExtendedCost
Unit of Measure	UnitOfMeasure	UnitOfMeasure
Instance Id	InstanceId	InstanceId
Additional Info	AdditionalInfo	AdditionalInfo
Tags	Tags	Tags
Order Number	OrderNumber	OrderNumber
Department Name	DepartmentNames	DepartmentName
Cost Center	CostCenters	CostCenter
Resource Group	ResourceGroup	ResourceGroup

Price Sheet

CSV Column Name	Json Column Name	Comment
Service	Service	No change to price
Unit of Measure	UnitOfMeasure	
Overage Part Number	ConsumptionPartNumber	
Overage Unit Price	ConsumptionPrice	

Currency Code	CurrencyCode	
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