

# Policy Catalog Master Permissions List

This document contains a list of cloud provider permissions required by each policy template in the Flexera Cloud Cost Optimization Policy Catalog.

- Required permissions may change as policy templates in the catalog are updated. An up-to-date version of this PDF file is <u>available in the Flexera Policy Template Github Repository</u>.
- *Required* permissions are required for the policy template in question to work correctly; *optional* permissions enable additional functionality.
- Permissions with a green *Read Only* label are read-only, while those with a red *Write* label can potentially make changes to your cloud environment.

### AKS Node Pools Without Autoscaling 3.0.6

## **Azure Resource Manager Required Permissions:**

Microsoft.ContainerService/managedClusters/agentPools/read Read Only Microsoft.ContainerService/managedClusters/read Read Only

## Flexera Required Permissions:

billing\_center\_viewer Read Only

## AKS Node Pools Without Zero Autoscaling 3.1.6

## **Azure Resource Manager Required Permissions:**

 $Microsoft. Container Service/managed Clusters/agent Pools/read \textit{Read Only} \\ Microsoft. Container Service/managed Clusters/read \textit{Read Only} \\$ 

## Flexera Required Permissions:

billing\_center\_viewer Read Only

#### AWS Account Credentials 0.1.8

### **AWS Required Permissions:**

sts:GetCallerIdentity Read Only

### Flexera Required Permissions:

## **AWS Accounts Missing Service Control Policies 3.0.5**

#### **AWS Required Permissions:**

organizations:ListAccounts Read Only organizations:ListPolicies Read Only organizations:ListPoliciesForTarget Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

### AWS Burstable EC2 Instances 4.4.5

#### **AWS Required Permissions:**

cloudwatch:GetMetricData Read Only cloudwatch:ListMetrics Read Only ec2:DescribeInstances Read Only ec2:DescribeRegions Read Only ec2:DescribeTags Read Only sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

ec2:DescribeInstanceStatus write ec2:ModifyInstanceAttribute write ec2:StartInstances write ec2:StopInstances write

### Flexera Required Permissions:

billing center viewer Read Only

## **AWS Cheaper Regions 1.0.4**

## Flexera Required Permissions:

billing center viewer Read Only

## AWS CloudTrail Not Enabled In All Regions 3.0.5

## **AWS Required Permissions:**

cloudtrail:DescribeTrails Read Only cloudtrail:GetEventSelectors Read Only cloudtrail:GetTrailStatus Read Only sts:GetCallerIdentity Read Only

### Flexera Required Permissions:

### AWS CloudTrail S3 Buckets Without Access Logging 3.0.5

#### **AWS Required Permissions:**

cloudtrail:DescribeTrails Read Only s3:GetBucketLocation Read Only s3:GetBucketLogging Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS CloudTrails Not Integrated With CloudWatch 3.0.5

#### **AWS Required Permissions:**

cloudtrail:DescribeTrails Read Only cloudtrail:GetTrailStatus Read Only sts:GetCallerIdentity Read Only

### Flexera Required Permissions:

billing center viewer Read Only

## AWS CloudTrails With Read Logging Enabled 0.1.6

### **AWS Required Permissions:**

cloudtrail:DescribeTrails Read Only cloudtrail:GetEventSelectors Read Only sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

cloudtrail:PutEventSelectors write

#### **Flexera Required Permissions:**

billing center viewer Read Only

## AWS CloudTrails Without Encrypted Logs 3.0.5

### **AWS Required Permissions:**

cloudtrail:DescribeTrails Read Only sts:GetCallerIdentity Read Only

## Flexera Required Permissions:

billing center viewer Read Only

## AWS CloudTrails Without Log File Validation Enabled 3.0.6

## **AWS Required Permissions:**

cloudtrail:DescribeTrails Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

# **AWS CloudTrails Without Object-level Events Logging Enabled** 3.0.5

#### **AWS Required Permissions:**

cloudtrail:DescribeTrails Read Only cloudtrail:GetEventSelectors Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **AWS Cost Report - EC2 Instance Cost Per Hour 0.2.3**

#### Flexera Required Permissions:

billing center viewer Read Only

# **AWS Customer Managed Keys (CMKs) Without Rotation Enabled** 3.0.5

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only kms:GetKeyRotationStatus Read Only kms:ListKeys Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **AWS Disallowed Regions** 5.0.6

### **AWS Required Permissions:**

ec2:DescribeInstances Read Only ec2:DescribeRegions Read Only sts:GetCallerIdentity Read Only

## **AWS Optional Permissions:**

ec2:StopInstances *write* ec2:TerminateInstances *write* 

## Flexera Required Permissions:

## AWS EC2 Compute Optimizer Recommendations 0.3.6

#### **AWS Required Permissions:**

compute-optimizer:GetEC2InstanceRecommendations Read Only

ec2:DescribeInstances Read Only

ec2:DescribeRegions Read Only

sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

ec2:ModifyInstanceAttribute Write

ec2:StartInstances write

ec2:StopInstances Write

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS EC2 Instances Time Stopped Report 0.2.6

#### **AWS Required Permissions:**

ec2:DescribeInstances Read Only

ec2:DescribeRegions Read Only

sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

ec2:DescribeInstanceStatus write

ec2:StopInstances Write

ec2:TerminateInstances write

#### **Flexera Required Permissions:**

billing center viewer Read Only

## AWS EC2 Instances not running FlexNet Inventory Agent 4.3.6

#### **AWS Required Permissions:**

ec2:DescribeInstances Read Only

ec2:DescribeRegions Read Only

## **AWS EKS Clusters Without Spot Instances 0.1.6**

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only

eks:DescribeCluster Read Only

eks:DescribeNodegroup Read Only

eks:ListClusters Read Only eks:ListNodegroups Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

### AWS Elastic Load Balancers With Unencrypted Listeners 4.0.6

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only elasticloadbalancing:DescribeListeners Read Only elasticloadbalancing:DescribeLoadBalancers Read Only elasticloadbalancing:DescribeTags Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS Expiring Reserved Instances 3.0.4

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS Expiring Savings Plans 3.0.4

## **AWS Required Permissions:**

savingsplans:DescribeSavingsPlans Read Only

## Flexera Required Permissions:

billing center viewer Read Only

## AWS GP3 Upgradeable Volumes 4.4.8

### **AWS Required Permissions:**

ec2:DescribeRegions Read Only ec2:DescribeVolumes Read Only pricing:GetProducts Read Only

## Flexera Required Permissions:

billing center viewer Read Only

## **AWS IAM Account Missing Support Role** 3.0.6

#### **AWS Required Permissions:**

iam:ListEntitiesForPolicy Read Only iam:ListPolicies Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

#### **AWS IAM Attached Admin Policies** 3.0.6

### **AWS Required Permissions:**

iam:GetPolicyVersion Read Only iam:ListPolicies Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **AWS IAM Expired SSL/TLS Certificates** 3.0.6

#### **AWS Required Permissions:**

iam:ListServerCertificates Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS IAM Insufficient Required Password Length 3.0.6

### **AWS Required Permissions:**

 $iam: Get Account Password Policy \textit{ Read Only} \\ sts: Get Caller I dentity \textit{ Read Only} \\$ 

#### **Flexera Required Permissions:**

billing center viewer Read Only

## AWS IAM Password Policy Not Restricting Password Reuse 3.0.6

#### **AWS Required Permissions:**

iam:GetAccountPasswordPolicy Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

#### AWS IAM Role Audit 3.0.8

#### **AWS Required Permissions:**

iam:ListRoleTags Read Only iam:ListRoles Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS IAM Root Account Access Keys 3.0.6

#### **AWS Required Permissions:**

iam:GetAccountSummary Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

### AWS IAM Root User Account Without Hardware MFA 3.0.6

#### **AWS Required Permissions:**

iam:GetAccountSummary Read Only iam:ListVirtualMFADevices Read Only sts:GetCallerIdentity Read Only

### Flexera Required Permissions:

billing center viewer Read Only

#### AWS IAM Root User Account Without MFA 3.0.6

### **AWS Required Permissions:**

iam:GetAccountSummary Read Only iam:ListVirtualMFADevices Read Only sts:GetCallerIdentity Read Only

### Flexera Required Permissions:

billing center viewer Read Only

## AWS IAM Root User Doing Everyday Tasks 3.0.6

## **AWS Required Permissions:**

iam:GenerateCredentialReport Read Only iam:GetCredentialReport Read Only sts:GetCallerIdentity Read Only

### Flexera Required Permissions:

billing center viewer Read Only

#### AWS IAM User Accounts Without MFA 3.0.6

### **AWS Required Permissions:**

iam:GenerateCredentialReport Read Only iam:GetCredentialReport Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **AWS IAM Users With Directly-Attached Policies 3.0.6**

#### **AWS Required Permissions:**

iam:ListAttachedUserPolicies Read Only iam:ListUserPolicies Read Only iam:ListUsers Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS IAM Users With Multiple Active Access Keys 3.0.6

#### **AWS Required Permissions:**

iam:ListAccessKeys Read Only iam:ListUsers Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **AWS IAM Users With Old Access Keys** 3.0.6

### **AWS Required Permissions:**

iam:GenerateCredentialReport Read Only iam:GetCredentialReport Read Only sts:GetCallerIdentity Read Only

#### **Flexera Required Permissions:**

### **AWS Idle Compute Instances** 5.6.8

#### **AWS Required Permissions:**

cloudwatch:GetMetricData Read Only

cloudwatch:GetMetricStatistics Read Only

cloudwatch:ListMetrics Read Only

ec2:DescribeInstances Read Only

ec2:DescribeRegions Read Only

ec2:DescribeTags Read Only

#### **Flexera Required Permissions:**

billing center viewer Read Only

### AWS Idle NAT Gateways 0.1.7

#### **AWS Required Permissions:**

ec2:DescribeNatGateways Read Only

ec2:DescribeRegions Read Only

sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

ec2:DeleteNatGateway write

#### Flexera Required Permissions:

billing center viewer Read Only

#### AWS Internet-Accessible Elastic Load Balancers 4.0.6

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only

elasticloadbalancing:DescribeListeners Read Only

elasticloadbalancing:DescribeLoadBalancers Read Only

elasticloadbalancing:DescribeTags Read Only

sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

elasticloadbalancing:DeleteLoadBalancer write

#### **Flexera Required Permissions:**

billing center viewer Read Only

## AWS Lambda Functions With High Error Rate 5.0.6

## **AWS Required Permissions:**

cloudwatch:GetMetricData Read Only cloudwatch:ListMetrics Read Only ec2:DescribeRegions Read Only

lambda:ListFunctions Read Only lambda:ListTags Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS Lambda Functions Without Provisioned Concurrency 0.1.6

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only lambda:ListFunctions Read Only

lambda:ListProvisionedConcurrencyConfigs Read Only

lambda:ListTags Read Only

lambda:ListVersionsByFunction Read Only

sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **AWS Long Running Instances** 5.1.6

#### **AWS Required Permissions:**

ec2:DescribeInstances Read Only ec2:DescribeRegions Read Only sts:GetCallerIdentity Read Only

### **AWS Optional Permissions:**

ec2:DescribeInstanceStatus write

ec2:StopInstances Write

ec2:TerminateInstances write

#### **Flexera Required Permissions:**

billing center viewer Read Only

## AWS Long Stopped EC2 Instances 6.0.7

### **AWS Required Permissions:**

cloudwatch:GetMetricData Read Only cloudwatch:GetMetricStatistics Read Only cloudwatch:ListMetrics Read Only ec2:DescribeInstances Read Only ec2:DescribeRegions Read Only sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

ec2:DescribeInstanceStatus write

#### ec2:TerminateInstances write

### Flexera Required Permissions:

billing center viewer Read Only

### **AWS Missing Regions** 0.2.6

#### **AWS Required Permissions:**

ec2:DescribeInstances Read Only ec2:DescribeRegions Read Only sts:GetCallerIdentity Read Only

### Flexera Required Permissions:

billing\_center\_viewer Read Only

## **AWS New Marketplace Products** 0.3.7

### Flexera Required Permissions:

billing\_center\_viewer Read Only

## **AWS Object Storage Optimization 4.0.8**

## **AWS Required Permissions:**

s3:GetBucketLocation Read Only

s3:GetObject Read Only

s3:GetObjectTagging Read Only

s3:ListAllMyBuckets Read Only

s3:ListBucket Read Only

sts:GetCallerIdentity Read Only

### **AWS Optional Permissions:**

s3:DeleteObject *write* s3:PutObject *write* 

## Flexera Required Permissions:

billing center viewer Read Only

## **AWS Old Snapshots** 8.4.9

## AWS Required Permissions:

 $cloud trail: Look up Events \ {\it Read Only}$ 

ec2:DescribeImages Read Only

ec2:DescribeRegions Read Only

ec2:DescribeSnapshots Read Only

rds:DescribeDBClusterSnapshots Read Only

rds:DescribeDBClusters Read Only rds:DescribeDBInstances Read Only rds:DescribeDBSnapshots Read Only sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

ec2:DeleteSnapshot write ec2:DeregisterImage write rds:DeleteDBClusterSnapshot write rds:DeleteDBSnapshot write

### Flexera Required Permissions:

billing center viewer Read Only

### AWS Open S3 Buckets 3.1.6

### **AWS Required Permissions:**

s3:GetBucketAcl Read Only s3:GetBucketLocation Read Only s3:ListAllMyBuckets Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

#### AWS Oversized S3 Buckets 3.1.7

#### **AWS Required Permissions:**

cloudwatch:GetMetricData Read Only cloudwatch:ListMetrics Read Only s3:GetBucketLocation Read Only s3:GetBucketTagging Read Only s3:ListAllMyBuckets Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

#### AWS Overutilized EC2 Instances 0.1.5

#### **AWS Required Permissions:**

cloudwatch:GetMetricData Read Only cloudwatch:GetMetricStatistics Read Only cloudwatch:ListMetrics Read Only ec2:DescribeInstances Read Only ec2:DescribeRegions Read Only ec2:DescribeTags Read Only

#### sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

ec2:DescribeInstanceStatus write

ec2:ModifyInstanceAttribute write

ec2:StartInstances Write

ec2:StopInstances Write

#### **Flexera Required Permissions:**

billing center viewer Read Only

## AWS Publicly Accessible CloudTrail S3 Buckets 3.0.5

#### **AWS Required Permissions:**

cloudtrail:DescribeTrails Read Only

s3:GetBucketAcl Read Only

s3:GetBucketLocation Read Only

s3:GetBucketPolicy Read Only

sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

### **AWS Publicly Accessible RDS Instances** 5.1.4

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only

rds:DescribeDBInstances Read Only

rds:ListTagsForResource Read Only

sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

rds:DeleteDBInstance Write

rds:ModifyDBInstance write

#### Flexera Required Permissions:

billing center\_viewer Read Only

#### **AWS RDS Instances** 4.2.8

### **AWS Required Permissions:**

ec2: Describe Regions Read Only

 $rds: Describe DB In stances \ {\it Read Only}$ 

sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

## AWS RDS Instances With Unapproved Backup Settings 3.0.6

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only rds:DescribeDBInstances Read Only rds:ListTagsForResource Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing\_center\_viewer Read Only

### **AWS Regions Without Access Analyzer Enabled 4.0.6**

#### **AWS Required Permissions:**

access-analyzer:ListAnalyzers Read Only ec2:DescribeRegions Read Only sts:GetCallerIdentity Read Only

### Flexera Required Permissions:

billing center viewer Read Only

### AWS Regions Without Config Fully Enabled 3.0.6

### **AWS Required Permissions:**

config:DescribeConfigurationRecorderStatus Read Only ec2:DescribeRegions Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **AWS Regions Without Default EBS Encryption 4.0.5**

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only ec2:GetEbsEncryptionByDefault Read Only sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS Reserved Instances Coverage 3.0.4

## **AWS Required Permissions:**

ce:GetReservationCoverage Read Only

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### AWS Reserved Instances Recommendations 3.6.6

#### **AWS Required Permissions:**

ce:GetReservationPurchaseRecommendation Read Only

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### AWS Reserved Instances Utilization 3.0.4

#### **Flexera Required Permissions:**

billing center viewer Read Only

## AWS Resources Under Extended Support 0.2.6

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS Rightsize EBS Volumes 0.3.9

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only ec2:DescribeVolumes Read Only pricing:GetProducts Read Only

#### **AWS Optional Permissions:**

ec2:ModifyVolume write

#### Flexera Required Permissions:

billing\_center\_viewer Read Only

## AWS Rightsize EC2 Instances 5.4.5

#### **AWS Required Permissions:**

cloudwatch:GetMetricData Read Only cloudwatch:GetMetricStatistics Read Only cloudwatch:ListMetrics Read Only ec2:DescribeInstances Read Only ec2:DescribeRegions Read Only ec2:DescribeTags Read Only sts:GetCallerIdentity Read Only

### **AWS Optional Permissions:**

ec2:DescribeInstanceStatus Write

ec2:ModifyInstanceAttribute write

ec2:StartInstances Write

ec2:StopInstances Write

ec2:TerminateInstances write

#### Flexera Required Permissions:

billing center viewer Read Only

### AWS Rightsize ElastiCache 0.3.5

#### **AWS Required Permissions:**

cloudwatch:GetMetricData Read Only

ec2:DescribeRegions Read Only

elasticache:DescribeCacheClusters Read Only elasticache:ListTagsForResource Read Only

sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

elasticache:ModifyCacheCluster write

#### Flexera Required Permissions:

billing center viewer Read Only

## **AWS Rightsize RDS Instances** 5.8.6

#### **AWS Required Permissions:**

cloudwatch:GetMetricData Read Only

cloudwatch:GetMetricStatistics Read Only

ec2:DescribeRegions Read Only

rds:DescribeDBInstances Read Only

rds:DescribeOrderableDBInstanceOptions Read Only

rds:ListTagsForResource Read Only

sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

rds:DeleteDBInstance Write

rds:ModifyDBInstance Write

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS Rightsize Redshift 0.1.8

#### **AWS Required Permissions:**

cloudwatch:GetMetricData Read Only ec2:DescribeRegions Read Only redshift:DescribeClusters Read Only sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

redshift:ModifyCluster write

#### Flexera Required Permissions:

billing center viewer Read Only

### AWS Rule-Based Dimension From Account Tags 3.1.0

#### Flexera Required Permissions:

billing\_center\_viewer Read Only observer Read Only rule based dimensions manager Read Only

## AWS S3 Buckets Accepting HTTP Requests 3.0.7

#### **AWS Required Permissions:**

s3:GetBucketLocation Read Only

s3:GetBucketPolicy Read Only

s3:GetBucketTagging Read Only

s3:ListAllMyBuckets Read Only

sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS S3 Buckets Without Default Encryption Configuration 3.0.6

### **AWS Required Permissions:**

s3: GetBucketLocation Read Only

s3: GetBucketTagging Read Only

s3:GetEncryptionConfiguration Read Only

s3:ListAllMyBuckets Read Only

sts:GetCallerIdentity Read Only

### **AWS Optional Permissions:**

s3:DeleteBucket Write

s3:PutEncryptionConfiguration Write

### Flexera Required Permissions:

## AWS S3 Buckets Without Intelligent Tiering 4.0.6

#### **AWS Required Permissions:**

s3:GetBucketLocation Read Only

s3:GetBucketTagging Read Only

s3:GetIntelligentTieringConfiguration Read Only

s3:ListAllMyBuckets Read Only

sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS S3 Buckets Without Lifecycle Configuration 0.1.5

#### **AWS Required Permissions:**

s3:GetBucketLocation Read Only

s3:GetBucketTagging Read Only

s3:GetLifecycleConfiguration Read Only

s3:ListAllMyBuckets Read Only

sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS S3 Buckets Without MFA Delete Enabled 3.0.6

#### **AWS Required Permissions:**

s3:GetBucketLocation Read Only

s3:GetBucketTagging Read Only

s3:GetBucketVersioning Read Only

s3:ListAllMyBuckets Read Only

sts:GetCallerIdentity Read Only

### Flexera Required Permissions:

billing center viewer Read Only

#### AWS S3 Buckets Without Public Access Blocked 3.0.6

#### **AWS Required Permissions:**

s3:GetBucketLocation Read Only

s3:GetBucketPublicAccessBlock Read Only

s3:GetBucketTagging Read Only

s3:ListAllMyBuckets Read Only

sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

## AWS S3 Buckets Without Server Access Logging 3.0.6

### **AWS Required Permissions:**

s3:GetBucketLocation Read Only

s3:GetBucketLogging Read Only

s3:GetBucketTagging Read Only

s3:ListAllMyBuckets Read Only

sts:GetCallerIdentity Read Only

### **AWS Optional Permissions:**

s3:PutBucketLogging Write

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS S3 Incomplete Multi-Part Uploads 0.1.4

#### **AWS Required Permissions:**

s3:GetBucketLocation Read Only

s3:GetBucketTagging Read Only

s3:ListAllMyBuckets Read Only

s3:ListBucketMultipartUploads Read Only

s3:ListMultipartUploadParts Read Only

sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

s3:AbortMultipartUpload *write* 

#### **Flexera Required Permissions:**

billing center viewer Read Only

## AWS S3 Usage Type Rule-Based Dimension 0.1.4

#### **Flexera Required Permissions:**

billing\_center\_viewer Read Only observer Read Only

rule based dimensions manager Read Only

## AWS Savings Plan Recommendations 3.3.7

## **AWS Required Permissions:**

ce: Get Savings Plans Purchase Recommendation Read Only

## Flexera Required Permissions:

## **AWS Savings Plan Utilization** 4.0.5

#### **AWS Required Permissions:**

ce:GetSavingsPlansUtilization Read Only savingsplans:DescribeSavingsPlans Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **AWS Savings Realized From Rate Reduction Purchases** 4.0.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### AWS Schedule Instance 8.0.5

### **AWS Required Permissions:**

ec2:CreateTags write

ec2:DeleteTags write

ec2:DescribeInstances Read Only

ec2:DescribeRegions Read Only

ec2:StartInstances Write

ec2:StopInstances Write

ec2:TerminateInstances Write

kms:CreateGrant write

kms:Decrypt Write

#### Flexera Required Permissions:

billing center viewer Read Only

#### AWS Scheduled EC2 Events 4.0.6

#### **AWS Required Permissions:**

ec2:DescribeInstanceStatus Read Only

ec2:DescribeInstances Read Only

ec2:DescribeRegions Read Only

sts:GetCallerIdentity Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## AWS Superseded EBS Volumes 6.3.10

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only ec2:DescribeVolumes Read Only pricing:GetProducts Read Only sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

ec2:ModifyVolume write

#### Flexera Required Permissions:

billing center viewer Read Only

### **AWS Superseded EC2 Instances 3.0.1**

#### **AWS Required Permissions:**

ec2:DescribeInstances Read Only ec2:DescribeRegions Read Only ec2:DescribeTags Read Only sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

ec2:DescribeInstanceStatus write ec2:ModifyInstanceAttribute write ec2:StartInstances write ec2:StopInstances write

#### **Flexera Required Permissions:**

billing center viewer Read Only

## **AWS Tag Cardinality Report** 3.1.7

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only organizations:ListAccounts Read Only organizations:ListTagsForResource Read Only tag:GetResources Read Only

### Flexera Required Permissions:

billing center viewer Read Only

## **AWS Unencrypted EBS Volumes** 5.0.6

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only ec2:DescribeVolumes Read Only sts:GetCallerIdentity Read Only

#### **Flexera Required Permissions:**

billing center viewer Read Only

## **AWS Unencrypted RDS Instances** 4.1.4

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only rds:DescribeDBInstances Read Only rds:ListTagsForResource Read Only sts:GetCallerIdentity Read Only

### **AWS Optional Permissions:**

rds:DeleteDBInstance Write

### Flexera Required Permissions:

billing center viewer Read Only

### AWS Untagged Resources 5.4.4

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only sts:GetCallerIdentity Read Only tag:GetResources Read Only

#### **AWS Optional Permissions:**

organizations:TagResource *write* tag:TagResources *write* 

#### **Flexera Required Permissions:**

billing center viewer Read Only

## AWS Unused Application Load Balancers 0.2.8

### **AWS Required Permissions:**

ec2:DescribeRegions Read Only
elasticloadbalancing:DescribeListeners Read Only
elasticloadbalancing:DescribeLoadBalancers Read Only
elasticloadbalancing:DescribeTags Read Only
elasticloadbalancing:DescribeTargetGroups Read Only
elasticloadbalancing:DescribeTargetHealth Read Only
sts:GetCallerIdentity Read Only

## **AWS Optional Permissions:**

elasticloadbalancing:DeleteLoadBalancer write

## Flexera Required Permissions:

#### AWS Unused Classic Load Balancers 6.4.8

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only elasticloadbalancing:DescribeInstanceHealth Read Only elasticloadbalancing:DescribeLoadBalancers Read Only elasticloadbalancing:DescribeTags Read Only sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

elasticloadbalancing:DeleteLoadBalancer write

#### Flexera Required Permissions:

billing center viewer Read Only

#### AWS Unused ECS Clusters 4.0.6

#### **AWS Required Permissions:**

ec2:DescribeRegions Read Only ecs:DescribeClusters Read Only ecs:ListClusters Read Only sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

ecs:DeleteCluster Write

### Flexera Required Permissions:

billing center viewer Read Only

### AWS Unused IAM Credentials 3.0.6

#### **AWS Required Permissions:**

iam:GenerateCredentialReport Read Only iam:GetCredentialReport Read Only sts:GetCallerIdentity Read Only

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### **AWS Unused IP Addresses** 9.2.8

#### **AWS Required Permissions:**

cloudtrail:LookupEvents Read Only ec2:DescribeAddresses Read Only ec2:DescribeRegions Read Only

sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

ec2:ReleaseAddress write

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### AWS Unused Network Load Balancers 0.2.8

### **AWS Required Permissions:**

ec2:DescribeRegions Read Only
elasticloadbalancing:DescribeListeners Read Only
elasticloadbalancing:DescribeLoadBalancers Read Only
elasticloadbalancing:DescribeTags Read Only
elasticloadbalancing:DescribeTargetGroups Read Only
elasticloadbalancing:DescribeTargetHealth Read Only
sts:GetCallerIdentity Read Only

#### **AWS Optional Permissions:**

elasticloadbalancing:DeleteLoadBalancer write

#### Flexera Required Permissions:

billing center viewer Read Only

#### AWS Unused Volumes 838

#### **AWS Required Permissions:**

cloudwatch:GetMetricData Read Only cloudwatch:GetMetricStatistics Read Only ec2:DescribeRegions Read Only ec2:DescribeSnapshots Read Only ec2:DescribeVolumes Read Only

#### **AWS Optional Permissions:**

ec2:CreateSnapshot Write ec2:CreateTags Write ec2:DeleteVolume Write ec2:DetachVolume Write

### Flexera Required Permissions:

billing center viewer Read Only

## **AWS Usage Forecast - Instance Time Used 1.1.3**

## Flexera Required Permissions:

## **AWS Usage Forecast - Number of Instance Hours Used 3.3.8**

### Flexera Required Permissions:

billing\_center\_viewer Read Only

## AWS Usage Forecast - Number of Instance vCPUs Used 3.3.8

#### Flexera Required Permissions:

billing center viewer Read Only

### AWS Usage Report - Instance Time Used 1.1.3

#### **Flexera Required Permissions:**

billing center viewer Read Only

## **AWS Usage Report - Number of Instance Hours Used 4.1.7**

#### Flexera Required Permissions:

billing center viewer Read Only

## **AWS Usage Report - Number of Instance vCPUs Used 4.1.7**

## Flexera Required Permissions:

billing\_center\_viewer Read Only

## AWS VPCs Without FlowLogs Enabled 4.0.6

## **AWS Required Permissions:**

ec2:DescribeFlowLogs Read Only

ec2:DescribeRegions Read Only

ec2:DescribeVpcs Read Only

sts:GetCallerIdentity Read Only

#### **Flexera Required Permissions:**

billing center viewer Read Only

## **Applied Policy Template Errors** 4.0.5

### Flexera Required Permissions:

policy viewer Read Only

### **Automation Reports** 0.1.3

#### Flexera Required Permissions:

policy viewer Read Only

#### **Flexera Optional Permissions:**

policy\_manager write

## **Azure AHUB Utilization with Manual Entry 4.0.6**

#### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/virtualMachines/read Read Only
Microsoft.Compute/virtualMachines/vmSizes/read Read Only

#### Flexera Required Permissions:

billing\_center\_viewer Read Only

### **Azure Advisor Carbon Reduction Recommendations** 0.1.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Advisor/recommendations/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Advisor Compute Instances Recommendations 0.1.5

### **Azure Resource Manager Required Permissions:**

Microsoft.Advisor/recommendations/read Read Only Microsoft.Compute/virtualMachines/read Read Only

#### Azure Resource Manager Optional Permissions:

Microsoft.Compute/virtualMachines/write write

### Flexera Required Permissions:

billing center viewer Read Only

## Azure Blob Storage Accounts Without Logging Enabled 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Storage/storageAccounts/read Read Only

#### **Azure Storage Required Permissions:**

Microsoft.Storage/storageAccounts/blobServices/containers/list Read Only Microsoft.Storage/storageAccounts/blobServices/containers/properties/read Read Only

#### **Flexera Required Permissions:**

billing center viewer Read Only

## Azure Blob Storage Accounts Without Soft Delete Enabled 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Storage/storageAccounts/read Read Only

### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Blob Storage Optimization 4.0.8**

#### **Azure Resource Manager Required Permissions:**

Microsoft.Storage/storageAccounts/read Read Only

#### **Azure Storage Required Permissions:**

Microsoft.Storage/storageAccounts/blobServices/containers/blobs/read Read Only Microsoft.Storage/storageAccounts/blobServices/containers/list Read Only

#### **Azure Storage Optional Permissions:**

Microsoft.Storage/storageAccounts/blobServices/containers/blobs/delete *write* Microsoft.Storage/storageAccounts/blobServices/containers/blobs/write *write* 

### Flexera Required Permissions:

billing center viewer Read Only

## Azure Bring-Your-Own-License (BYOL) Report 0.3.6

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Cheaper Regions** 1.0.4

### Flexera Required Permissions:

billing center viewer Read Only

## **Azure China Common Bill Ingestion** 2.0.5

## **Azure China Enterprise Agreement Required Permissions:**

Enterprise Agreement Read Only

## Flexera Required Permissions:

## Azure Compute Instances Time Powered Off Report 0.2.5

### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/virtualMachines/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Compute/virtualMachines/delete *write*Microsoft.Compute/virtualMachines/powerOff/action *write*Microsoft.Compute/virtualMachines/write *write* 

#### Flexera Required Permissions:

billing center viewer Read Only

#### Azure Credential 0.1.5

### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Data Lake Optimization 0.1.4

### **Azure Resource Manager Required Permissions:**

Microsoft.Storage/storageAccounts/read Read Only

#### **Azure Storage Required Permissions:**

 $Microsoft. Storage/storageAccounts/blobServices/containers/blobs/read~{\it Read~Only}~Microsoft. Storage/storageAccounts/blobServices/containers/list~{\it Read~Only}~$ 

### **Azure Storage Optional Permissions:**

Microsoft.Storage/storageAccounts/blobServices/containers/blobs/delete *write* Microsoft.Storage/storageAccounts/blobServices/containers/blobs/write *write* 

#### **Flexera Required Permissions:**

billing center viewer Read Only

## **Azure Databricks Rightsize Compute Instances** 0.5.0

## **Azure Resource Manager Required Permissions:**

Microsoft.Compute/skus/read Read Only
Microsoft.Compute/virtualMachines/read Read Only
Microsoft.Insights/metrics/read Read Only

## Flexera Required Permissions:

## **Azure Disallowed Regions 4.1.6**

#### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/virtualMachines/read Read Only

### **Azure Resource Manager Optional Permissions:**

Microsoft.Compute/virtualMachines/write Write

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Expiring Certificates** 4.0.6

#### **Azure Resource Manager Required Permissions:**

Microsoft.Web/certificates/read Read Only

### **Azure Resource Manager Optional Permissions:**

Microsoft.Web/certificates/delete Write

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Expiring Reserved Instances 3.0.4

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Expiring Savings Plans 0.1.5

## **Azure Resource Manager Required Permissions:**

Microsoft.Billing/billingAccounts/read Read Only

## Flexera Required Permissions:

billing center viewer Read Only

#### **Azure Guest Users** 3.0.5

## **Microsoft Graph Required Permissions:**

Directory.Read.All Read Only User.Read.All Read Only

### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Hybrid Use Benefit for Linux Server** 5.1.7

#### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/virtualMachines/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Compute/virtualMachines/write Write

#### **Flexera Required Permissions:**

billing center viewer Read Only

### Azure Hybrid Use Benefit for SQL 4.3.4

#### **Azure Resource Manager Required Permissions:**

 $Microsoft. Sql/managedInstances/read \ {\it Read Only}$ 

Microsoft.Sql/servers/read Read Only

Microsoft.SqlVirtualMachine/sqlVirtualMachines/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Sql/managedInstances/write *write* 

Microsoft.Sql/servers/write *write* 

Microsoft.SqlVirtualMachine/sqlVirtualMachines/write Write

#### **Flexera Required Permissions:**

billing center viewer Read Only

## **Azure Hybrid Use Benefit for Windows Server** 5.2.7

#### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/virtualMachines/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Compute/virtualMachines/write Write

#### Flexera Required Permissions:

billing center viewer Read Only

### Azure Idle Compute Instances 5.5.7

#### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/virtualMachines/read Read Only Microsoft.Insights/metrics/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Compute/virtualMachines/write Write

#### Flexera Required Permissions:

## Azure Instances not running FlexNet Inventory Agent 4.2.4

#### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/virtualMachines/read Read Only

### Azure Long Running Instances 6.1.6

#### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/virtualMachines/read Read Only

### **Azure Resource Manager Optional Permissions:**

Microsoft.Compute/virtualMachines/write Write

#### Flexera Required Permissions:

billing center viewer Read Only

### **Azure Long Stopped Compute Instances** 6.0.4

#### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/disks/read Read Only

Microsoft.Compute/virtualMachines/instanceView/read Read Only

Microsoft.Compute/virtualMachines/read Read Only

Microsoft.Insights/eventtypes/management/read Read Only

Microsoft.Resources/subscriptions/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Compute/virtualMachines/delete Write

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Missing Subscriptions** 0.1.5

## **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only

#### **Flexera Required Permissions:**

billing center viewer Read Only

## **Azure MySQL Flexible Servers Without Secure TLS** 3.0.5

## **Azure Resource Manager Required Permissions:**

Microsoft.DBforMySQL/flexibleServers/configurations/read Read Only

Microsoft.DBforMySQL/flexibleServers/read Read Only

Microsoft.Resources/subscriptions/read Read Only

#### **Flexera Required Permissions:**

billing center viewer Read Only

## Azure MySQL Servers Without Enforced SSL 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.DBforMySQL/servers/read Read Only Microsoft.Resources/subscriptions/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Network Security Groups With Inbound RDP Open 3.0.5**

#### **Azure Resource Manager Required Permissions:**

Microsoft.Network/networkSecurityGroups/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Network Security Groups With Inbound SSH Open 3.0.5**

#### **Azure Resource Manager Required Permissions:**

Microsoft.Network/networkSecurityGroups/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure New Marketplace Products 0.5.3

### Flexera Required Permissions:

billing\_center\_viewer Read Only

## **Azure Old Snapshots** 7.2.6

## **Azure Resource Manager Required Permissions:**

Microsoft.Compute/snapshots/read Read Only

## **Azure Resource Manager Optional Permissions:**

Microsoft.Compute/snapshots/delete Write

### Flexera Required Permissions:

### Azure Overutilized Compute Instances 0.1.4

#### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/locations/vmSizes/read Read Only

Microsoft.Compute/skus/read Read Only

Microsoft.Compute/virtualMachines/read Read Only

Microsoft.Insights/metrics/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Compute/virtualMachines/write Write

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Policy Audit** 3.0.6

#### **Azure Resource Manager Required Permissions:**

Microsoft.Authorization/policyAssignments/read Read Only Microsoft.Authorization/policyDefinitions/read Read Only

#### **Flexera Required Permissions:**

billing center viewer Read Only

### **Azure PostgreSQL Servers With Bad Log Settings 3.0.5**

#### **Azure Resource Manager Required Permissions:**

Microsoft.DBForPostgreSql/servers/read Read Only Microsoft.Resources/subscriptions/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure PostgreSQL Servers With Insufficient Log Retention 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.DBForPostgreSql/servers/read Read Only Microsoft.Resources/subscriptions/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure PostgreSQL Servers Without Connection Throttling 3.0.5**

#### **Azure Resource Manager Required Permissions:**

Microsoft.DBForPostgreSql/servers/read Read Only Microsoft.Resources/subscriptions/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure PostgreSQL Servers Without Infrastructure Encryption 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.DBForPostgreSql/servers/read Read Only Microsoft.Resources/subscriptions/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

### **Azure Publicly-Accessible Blob Containers 3.0.6**

#### **Azure Resource Manager Required Permissions:**

Microsoft.Storage/storageAccounts/read Read Only

#### **Azure Storage Required Permissions:**

Microsoft.Storage/storageAccounts/blobServices/containers/list Read Only Microsoft.Storage/storageAccounts/blobServices/containers/properties/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Publicly-Accessible SQL Managed Instances 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only Microsoft.Sql/managedInstances/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Sql/managedInstances/delete *write* Microsoft.Sql/managedInstances/update *write* 

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Queue Storage Accounts Without Logging Enabled 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Storage/storageAccounts/read Read Only

#### **Azure Storage Required Permissions:**

Storage Queue Data Reader Read Only

#### Flexera Required Permissions:

## **Azure Regulatory Compliance 3.0.5**

#### **Azure Resource Manager Required Permissions:**

Microsoft.Security/regulatoryComplianceStandards/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Azure Reserved Instances Recommendations 4.2.4**

#### **Azure Resource Manager Required Permissions:**

Microsoft.Consumption/reservationRecommendations/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Billing/billingAccounts/read Read Only

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### Azure Reserved Instances Utilization 4.0.0

#### Flexera Required Permissions:

billing center viewer Read Only

#### Azure Reserved Instances Utilization MCA 1.0.5

#### Azure Resource Manager Required Permissions:

Microsoft.Capacity/reservations/read Read Only

## Azure Rightsize Compute Instances 6.2.4

#### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/locations/vmSizes/read Read Only

Microsoft.Compute/skus/read Read Only

Microsoft.Compute/virtualMachines/read Read Only

Microsoft.Insights/metrics/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Compute/virtualMachines/delete write

Microsoft.Compute/virtualMachines/powerOff/action Write

Microsoft.Compute/virtualMachines/start/action Write

Microsoft.Compute/virtualMachines/write Write

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### Azure Rightsize Managed Disks 2.6.4

#### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/disks/read Read Only Microsoft.Compute/virtualMachines/read Read Only Microsoft.Insights/metrics/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Rightsize MySQL Flexible Servers 0.2.6

#### **Azure Resource Manager Required Permissions:**

Microsoft.DBforMySQL/flexibleServers/read Read Only Microsoft.Insights/metrics/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.DBforMySQL/flexibleServers/delete *write* Microsoft.DBforMySQL/flexibleServers/update *write* 

#### **Flexera Required Permissions:**

billing center viewer Read Only

## Azure Rightsize MySQL Single Servers 0.2.6

## **Azure Resource Manager Required Permissions:**

Microsoft.DBforMySQL/servers/read Read Only Microsoft.Insights/metrics/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.DBforMySQL/servers/delete *write* Microsoft.DBforMySQL/servers/update *write* 

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Rightsize NetApp Resources 2.0.9

## **Azure Resource Manager Required Permissions:**

Microsoft.Insights/metrics/read Read Only
Microsoft.NetApp/netAppAccounts/capacityPools/read Read Only
Microsoft.NetApp/netAppAccounts/capacityPools/volumes/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.NetApp/netAppAccounts/capacityPools/volumes/write *write* Microsoft.NetApp/netAppAccounts/capacityPools/write *write* 

#### **Flexera Required Permissions:**

billing center viewer Read Only

## Azure Rightsize SQL Database Storage 0.1.7

#### **Azure Resource Manager Required Permissions:**

Microsoft.Insights/metrics/read Read Only
Microsoft.Sql/servers/databases/metrics/read Read Only
Microsoft.Sql/servers/databases/read Read Only
Microsoft.Sql/servers/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Rightsize SQL Databases** 6.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Insights/metrics/read Read Only
Microsoft.Sql/servers/databases/metrics/read Read Only
Microsoft.Sql/servers/databases/read Read Only
Microsoft.Sql/servers/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Sql/servers/databases/delete *write* Microsoft.Sql/servers/databases/update *write* 

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Rightsize SQL Managed Instance Storage 0.2.7

#### **Azure Resource Manager Required Permissions:**

Microsoft.Insights/metrics/read Read Only
Microsoft.Sql/managedInstances/metrics/read Read Only
Microsoft.Sql/managedInstances/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Sql/managedInstances/update Write

#### Flexera Required Permissions:

billing center viewer Read Only

#### Azure Rightsize SQL Managed Instances 0.3.6

#### **Azure Resource Manager Required Permissions:**

Microsoft.Insights/metrics/read Read Only
Microsoft.Sql/managedInstances/metrics/read Read Only
Microsoft.Sql/managedInstances/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Sql/managedInstances/delete *write* Microsoft.Sql/managedInstances/update *write* 

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Rightsize Synapse SQL Pools 0.1.6

#### **Azure Resource Manager Required Permissions:**

Microsoft.Insights/metrics/read Read Only

Microsoft. Synapse/sqlPools/delete Read Only

Microsoft.Synapse/sqlPools/pause/action Read Only

Microsoft.Synapse/sqlPools/read Read Only

Microsoft.Synapse/sqlPools/resume/action Read Only

Microsoft.Synapse/sqlPools/write Read Only

Microsoft.Synapse/workspaces/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Rule-Based Dimension From Resource Group Tags 2.1.0

#### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/providers/read Read Only Microsoft.Resources/subscriptions/resources/read Read Only Microsoft.Resources/tags/read Read Only

#### Flexera Required Permissions:

billing\_center\_viewer Read Only observer Read Only rule\_based\_dimensions\_manager Read Only

## Azure Rule-Based Dimension From Subscription Tags 2.1.0

## **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/providers/read Read Only Microsoft.Resources/subscriptions/resources/read Read Only Microsoft.Resources/tags/read Read Only

#### Flexera Required Permissions:

billing\_center\_viewer Read Only observer Read Only rule based dimensions manager Read Only

## Azure SQL Databases Without Encryption 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only
Microsoft.Sql/servers/databases/read Read Only
Microsoft.Sql/servers/databases/transparentDataEncryption/read Read Only
Microsoft.Sql/servers/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

# Azure SQL Servers Vulnerability Assessment Does Not Notify Admins 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only
Microsoft.Sql/servers/read Read Only
Microsoft.Sql/servers/vulnerabilityAssessments/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

# Azure SQL Servers Vulnerability Assessment Without Email Notifications 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only
Microsoft.Sql/servers/read Read Only
Microsoft.Sql/servers/vulnerabilityAssessments/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

# Azure SQL Servers Vulnerability Assessment Without Periodic Scans 3.0.5

## **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only
Microsoft.Sql/servers/read Read Only
Microsoft.Sql/servers/vulnerabilityAssessments/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure SQL Servers With Insufficient Auditing Retention 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only Microsoft.Sql/servers/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

#### Azure SQL Servers Without Active Directory Admin 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only Microsoft.Sql/servers/administrators/read Read Only Microsoft.Sql/servers/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

#### Azure SQL Servers Without Advanced Threat Protection (ATP) 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only
Microsoft.Sql/servers/read Read Only
Microsoft.Sql/servers/securityAlertPolicies/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure SQL Servers Without Auditing Enabled 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only Microsoft.Sql/servers/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure SQL Servers Without Elastic Pools** 3.0.5

## **Azure Resource Manager Required Permissions:**

Microsoft.Sql/servers/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

# Azure SQL Servers Without Vulnerability Assessment (VA) Enabled 3.0.5

#### **Azure Resource Manager Required Permissions:**

 $Microsoft. Resources/subscriptions/read \ {\it Read Only}$ 

Microsoft.Sql/servers/read Read Only

Microsoft.Sql/servers/vulnerabilityAssessments/read Read Only

#### Flexera Required Permissions:

billing\_center\_viewer Read Only

#### Azure Savings Plan Recommendations 3.1.6

#### **Azure Resource Manager Required Permissions:**

Microsoft.CostManagement/benefitRecommendations/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

#### Azure Savings Plan Utilization 0.1.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Billing/billingAccounts/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Savings Realized from Reservations 3.9.6

#### Flexera Required Permissions:

billing center viewer Read Only

#### Azure Schedule Instance 7.0.7

#### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/virtualMachines/deallocate/action write

Microsoft.Compute/virtualMachines/delete Write

Microsoft.Compute/virtualMachines/read Read Only

Microsoft.Compute/virtualMachines/start/action write

Microsoft.Compute/virtualMachines/write Write

#### Flexera Required Permissions:

billing\_center\_viewer Read Only

## Azure Storage Accounts Allowing Default Network Access 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Storage/storageAccounts/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Storage Accounts Without Secure TLS** 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Storage/storageAccounts/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Azure Storage Accounts Without Secure Transfer 3.0.5**

#### **Azure Resource Manager Required Permissions:**

Microsoft.Storage/storageAccounts/read Read Only

## Flexera Required Permissions:

billing center viewer Read Only

# **Azure Storage Accounts Without Trusted Microsoft Services Access** 3.0.5

## **Azure Resource Manager Required Permissions:**

Microsoft.Storage/storageAccounts/read Read Only

#### Flexera Required Permissions:

billing\_center\_viewer Read Only

## **Azure Storage Accounts without Lifecycle Management Policies** 4.0.6

## **Azure Resource Manager Required Permissions:**

Microsoft.Storage/storageAccounts/read Read Only

## Flexera Required Permissions:

## **Azure Subscriptions Without High Severity Alerts 3.0.4**

#### Azure Resource Manager Required Permissions:

Microsoft.Resources/subscriptions/read Read Only Microsoft.Security/securityContacts/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Subscriptions Without Log Analytics Auto-Provisioning 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only Microsoft.Security/autoProvisioningSettings/read Read Only

#### **Flexera Required Permissions:**

billing\_center\_viewer Read Only

## **Azure Subscriptions Without Owner Security Alerts 3.0.5**

#### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only Microsoft.Security/securityContacts/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Subscriptions Without Security Contact Email 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/read Read Only Microsoft.Security/securityContacts/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Superseded Compute Instances 3.0.2

## **Azure Resource Manager Required Permissions:**

Microsoft.Compute/virtualMachines/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Compute/virtualMachines/write write

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Table Storage Accounts Without Logging Enabled 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Storage/storageAccounts/read Read Only

#### **Azure Storage Required Permissions:**

Storage Table Data Reader Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

#### Azure Tag Cardinality Report 3.2.6

#### **Azure Resource Manager Required Permissions:**

Microsoft.Resources/resourceGroups/read Read Only

Microsoft.Resources/subscriptions/providers/read Read Only

Microsoft.Resources/subscriptions/read Read Only

Microsoft.Resources/subscriptions/resources/read Read Only

Microsoft.Resources/tags/read Read Only

#### **Flexera Required Permissions:**

billing center viewer Read Only

## Azure Untagged Resources 3.3.4

## **Azure Resource Manager Required Permissions:**

Microsoft.Resources/subscriptions/providers/read Read Only

Microsoft.Resources/subscriptions/resourceGroups/read Read Only

Microsoft.Resources/subscriptions/resources/read Read Only

Microsoft.Resources/tags/read Read Only

#### Azure Resource Manager Optional Permissions:

Microsoft.Resources/tags/write write

#### Flexera Required Permissions:

billing center viewer Read Only

## Azure Untagged Virtual Machines 1.1.6

## **Azure Resource Manager Required Permissions:**

Microsoft. Compute/virtual Machines/read Read Only

Microsoft.Resources/tags/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Compute/virtualMachines/write *write* Microsoft.Resources/tags/write *write* 

#### Flexera Required Permissions:

billing center viewer Read Only

#### Azure Unused App Service Plans 0.1.6

#### **Azure Resource Manager Required Permissions:**

Microsoft.Web/serverfarms/read Read Only Microsoft.Web/sites/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Web/serverfarms/delete write

#### Flexera Required Permissions:

billing center viewer Read Only

#### Azure Unused Firewalls 0.2.7

#### **Azure Resource Manager Required Permissions:**

Microsoft.Insights/metrics/read Read Only
Microsoft.Network/azureFirewalls/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Network/azureFirewalls/delete write

## Flexera Required Permissions:

billing center viewer Read Only

#### Azure Unused IP Addresses 7.3.6

#### **Azure Resource Manager Required Permissions:**

Microsoft.Insights/eventtypes/values/read Read Only Microsoft.Network/publicIPAddresses/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Network/publicIPAddresses/delete write

#### Flexera Required Permissions:

billing center viewer Read Only

#### Azure Unused Load Balancers 0.1.7

#### **Azure Resource Manager Required Permissions:**

Microsoft.Insights/metrics/read Read Only
Microsoft.Network/loadBalancers/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Network/loadBalancers/delete write

#### Flexera Required Permissions:

billing center viewer Read Only

#### Azure Unused SQL Databases 5.4.7

#### **Azure Resource Manager Required Permissions:**

Microsoft.Insights/metrics/read Read Only
Microsoft.Sql/servers/databases/metrics/read Read Only
Microsoft.Sql/servers/databases/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Sgl/servers/databases/delete write

#### Flexera Required Permissions:

billing\_center\_viewer Read Only

#### Azure Unused Storage Accounts 0.1.3

## **Azure Resource Manager Required Permissions:**

Microsoft.Insights/metrics/read Read Only
Microsoft.Resources/subscriptions/read Read Only
Microsoft.Storage/storageAccounts/read Read Only

## **Azure Resource Manager Optional Permissions:**

Microsoft.Storage/storageAccounts/delete write

## Flexera Required Permissions:

billing center viewer Read Only

## Azure Unused Virtual Network Gateways 0.1.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Network/connections/read Read Only
Microsoft.Network/virtualNetworkGateways/read Read Only

## **Azure Resource Manager Optional Permissions:**

Microsoft.Network/virtualNetworkGateways/delete write

## Flexera Required Permissions:

billing center viewer Read Only

#### **Azure Unused Volumes** 8.2.7

#### **Azure Resource Manager Required Permissions:**

Microsoft.Compute/disks/read Read Only Microsoft.Insights/metrics/read Read Only

#### **Azure Resource Manager Optional Permissions:**

Microsoft.Compute/disks/write write
Microsoft.Compute/snapshots/write write
Microsoft.Compute/virtualMachines/read write
Microsoft.Compute/virtualMachines/write write

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Usage Report - Amount of Instance Memory Used 2.1.8**

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Usage Report - Instance Time Used 1.0.8**

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Usage Report - Number of Instance Hours Used 2.1.7**

## Flexera Required Permissions:

billing center viewer Read Only

## **Azure Usage Report - Number of Instance vCPUs Used 2.1.8**

## Flexera Required Permissions:

billing center viewer Read Only

## **Azure VMs Not Using Managed Disks 4.0.5**

## **Azure Resource Manager Required Permissions:**

Microsoft.Compute/virtualMachines/read Read Only

## Flexera Required Permissions:

billing center\_viewer Read Only

#### Azure Web Apps With Unoptimized Scaling 0.2.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Insights/autoscalesettings/read Read Only Microsoft.Web/sites/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

## **Azure Web Apps Without Secure TLS** 3.0.5

#### **Azure Resource Manager Required Permissions:**

Microsoft.Web/sites/read Read Only

#### Flexera Required Permissions:

billing center viewer Read Only

#### Billing Center Access Report 3.1.5

#### **Flexera Required Permissions:**

billing\_center\_viewer Read Only enterprise\_manager Read Only

#### **Budget Alerts** 3.4.2

#### **Flexera Required Permissions:**

billing center viewer Read Only

## **Budget vs Actual Spend Report** 2.5.6

## Flexera Required Permissions:

billing\_center\_viewer Read Only budget viewer Read Only

## **Cheaper Regions** 2.4.6

## Flexera Required Permissions:

billing\_center\_viewer Read Only policy\_designer Read Only policy\_manager Read Only policy\_publisher Read Only

## **Cloud Bill Processing Error Notification 2.6.3**

#### Flexera Required Permissions:

ca\_user Read Only
csm\_bill\_upload\_admin Read Only
enterprise\_manager Read Only
observer Read Only

## **Cloud Cost Anomaly Alerts** 4.0.2

#### Flexera Required Permissions:

billing\_center\_viewer Read Only policy\_manager Read Only

## Cloud Spend Forecast - Straight-Line 4.0.4

#### Flexera Required Permissions:

billing center viewer Read Only

## Cloud Spend Moving Average Report 4.0.4

#### Flexera Required Permissions:

billing center viewer Read Only

## Common Bill Ingestion from AWS S3 Object Storage 0.2.3

#### **AWS Optional Permissions:**

s3:GetObject Read Only

#### **Flexera Required Permissions:**

billing\_center\_viewer Read Only csm\_bill\_upload\_admin Read Only

## Common Bill Ingestion from AWS S3 Object Storage (Iterating)

0.1.1

## AWS Optional Permissions:

s3:GetObject Read Only s3:ListBucket Read Only

#### Flexera Required Permissions:

billing\_center\_viewer Read Only csm bill upload admin Read Only

## Common Bill Ingestion from Azure Blob Storage 0.2.3

#### **Azure Storage Required Permissions:**

Microsoft.Storage/storageAccounts/blobServices/containers/blobs/read Read Only

#### Flexera Required Permissions:

billing\_center\_viewer Read Only csm bill upload admin Read Only

## Common Bill Ingestion from Azure Blob Storage (Iterating) 0.1.1

#### **Azure Storage Required Permissions:**

Microsoft.Storage/storageAccounts/blobServices/containers/blobs/list/action Read Only Microsoft.Storage/storageAccounts/blobServices/containers/blobs/read Read Only Microsoft.Storage/storageAccounts/blobServices/containers/read Read Only

#### Flexera Required Permissions:

billing\_center\_viewer Read Only csm bill upload admin Read Only

## **Configure Custom Branding** 0.1.3

#### Flexera Optional Permissions:

manage organization Read Only

## **Currency Conversion** 5.1.0

#### Flexera Required Permissions:

enterprise manager Read Only

## **Dynamic Dashboards** 0.1.0

## Flexera Required Permissions:

billing\_center\_viewer Read Only csm\_dashboard\_admin Read Only

## **Email Cost Optimization Recommendations 0.6.3**

## Flexera Required Permissions:

billing\_center\_viewer Read Only

## FinOps Dashboards 0.1.2

## Flexera Required Permissions:

 $csm\_dashboard\_admin \textit{ Read Only}$ 

## Fixed Cost Common Bill Ingestion 0.3.1

#### Flexera Required Permissions:

billing\_center\_viewer Read Only csm bill upload admin Read Only

#### Flexera Automation Disallowed Credentials 0.1.3

#### **Flexera Required Permissions:**

credential viewer Read Only

#### **Flexera Optional Permissions:**

iam admin write

#### Flexera Automation Expiring Credentials 0.1.3

#### Flexera Required Permissions:

credential viewer Read Only

#### **Flexera Optional Permissions:**

iam admin write

## Flexera Automation Outdated Applied Policies 0.2.6

#### Flexera Required Permissions:

policy viewer Read Only

#### **Flexera Optional Permissions:**

policy manager Write

## Flexera Billing Centers from Dimension Values 0.1.6

#### Flexera Required Permissions:

billing center admin Read Only

## Flexera CCO Delete All Billing Centers 1.1.4

#### Flexera Required Permissions:

billing\_center\_admin Read Only policy manager Read Only

## Flexera FOCUS Report 0.1.6

Flexera Required Permissions: billing_center_viewer Read Only	
Flexera Onboarding o.	1.3
Flexera Required Permisorg_owner Read Only	sions:
Flexera One API Even	t Report 0.1.3
Flexera Required Permis iam_admin Read Only	sions:
Flexera One User Acc	ess Report 0.1.4
Flexera Required Permis iam_admin Read Only	sions:
Flexera Users With Ex	rplicit Roles 4.0.4
Flexera Required Permis iam_admin Read Only	sions:
GitHub Available Seat	<b>ts</b> 3.0.4
Flexera Required Permis billing_center_viewer Read On	
GitHub Required Permise admin:org Read Only	sions:

## Flexera Required Permissions:

billing\_center\_viewer Read Only

## **GitHub Required Permissions:**

admin:org Read Only

## $\textbf{GitHub Repository Branches Without Protection} \ 3.0.4$

## ${\bf Flexera} \,\, {\bf Required} \,\, {\bf Permissions:}$

billing center viewer Read Only

#### **GitHub Required Permissions:**

admin:org Read Only

#### GitHub Undersized Repositories 3.0.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### **GitHub Required Permissions:**

admin:org Read Only

## GitHub Unpermitted Outside Collaborators 3.0.4

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### **GitHub Required Permissions:**

admin:org Read Only

#### GitHub Unpermitted Repository Names 3.0.4

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### **GitHub Required Permissions:**

admin:org Read Only

## GitHub Unpermitted Top-Level Teams 3.0.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### **GitHub Required Permissions:**

admin:org Read Only

## Google Cheaper Regions 1.0.4

#### **Flexera Required Permissions:**

billing center viewer Read Only

## **Google Cloud Run Anomaly Detection** 0.2.2

#### **Google Cloud Required Permissions:**

compute.regions.list Read Only monitoring.timeSeries.list Read Only resourcemanager.projects.get Read Only run.services.list Read Only

## Google Cloud Storage Without Lifecycle Configuration 0.2.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

resourcemanager.projects.get Read Only storage.buckets.list Read Only

#### Google Committed Use Discount Recommender 4.3.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

compute.regions.list Read Only recommender.usageCommitmentRecommendations.list Read Only resourcemanager.projects.get Read Only

#### **Google Cloud Optional Permissions:**

billing.accounts.getSpendingInformation Read Only billing.resourceCosts.get Read Only

## Google Committed Use Discount Report 3.1.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

compute.commitments.get Read Only resourcemanager.projects.get Read Only

## Google Credential 0.1.5

#### Flexera Required Permissions:

billing\_center\_viewer Read Only

#### **Google Cloud Required Permissions:**

resourcemanager.projects.get Read Only

#### Google Expiring Committed Use Discounts (CUD) 3.1.4

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

compute.commitments.get Read Only resourcemanager.projects.get Read Only

#### Google Idle Cloud SQL Instance Recommender 4.1.7

#### Flexera Required Permissions:

billing center\_viewer Read Only

#### **Google Cloud Required Permissions:**

cloudsql.instances.list Read Only recommender.cloudsqlIdleInstanceRecommendations.list Read Only resourcemanager.projects.get Read Only

#### **Google Cloud Optional Permissions:**

cloudsql.instances.delete *write* cloudsql.instances.update *write* 

## Google Idle IP Address Recommender 4.3.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

compute.addresses.list  $_{Read\ Only}$  recommender.computeAddressIdleResourceRecommendations.list  $_{Read\ Only}$  resourcemanager.projects.get  $_{Read\ Only}$ 

#### **Google Cloud Optional Permissions:**

compute.addresses.delete write

## Google Idle Persistent Disk Recommender 4.3.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

compute.disks.list Read Only
logging.logEntries.list Read Only
logging.privateLogEntries.list Read Only
logging.views.access Read Only
recommender.computeDiskIdleResourceRecommendations.list Read Only

resourcemanager.projects.get Read Only

#### **Google Cloud Optional Permissions:**

compute.disks.createSnapshot write compute.disks.delete write compute.globalOperations.get write compute.snapshots.create write compute.zoneOperations.get write

#### Google Label Cardinality Report 0.2.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

bigguery.datasets.get Read Only bigguery.datasets.list Read Only bigguery.tables.get Read Only bigguery.tables.list Read Only cloudsql.instances.get Read Only cloudsql.instances.list Read Only compute.addresses.get Read Only compute.addresses.list Read Only compute.disks.get Read Only compute.disks.list Read Only compute.images.get Read Only compute.images.list Read Only compute.instances.get Read Only compute.instances.list Read Only compute.snapshots.get Read Only compute.snapshots.list Read Only compute.storagePools.get Read Only compute.storagePools.list Read Only compute.vpnGateways.get Read Only compute.vpnGateways.list Read Only compute.vpnTunnels.get Read Only compute.vpnTunnels.list Read Only resourcemanager.projects.get Read Only resourcemanager.projects.list Read Only storage.buckets.get Read Only storage.buckets.list Read Only

## **Google Long Stopped VM Instances** 4.1.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

compute.instances.get Read Only
compute.instances.list Read Only
monitoring.metricDescriptors.list Read Only
monitoring.timeSeries.list Read Only
resourcemanager.projects.get Read Only

#### **Google Cloud Optional Permissions:**

compute.instances.delete *write* compute.instances.stop *write* 

## Google Missing Projects 0.1.3

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

resourcemanager.projects.get Read Only

#### Google Object Storage Optimization 3.0.8

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

resourcemanager.projects.get Read Only storage.buckets.list Read Only storage.objects.list Read Only

#### **Google Cloud Optional Permissions:**

storage.objects.create *write* storage.objects.delete *write* 

## Google Old Snapshots 5.2.4

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

billing.accounts.get Read Only
compute.disks.list Read Only
compute.regions.list Read Only
compute.snapshots.get Read Only
compute.snapshots.list Read Only
compute.zones.list Read Only
resourcemanager.projects.get Read Only

#### **Google Cloud Optional Permissions:**

compute.snapshots.delete Write

## Google Open Buckets 3.2.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

resourcemanager.projects.get Read Only storage.buckets.get Read Only storage.buckets.getIamPolicy Read Only storage.buckets.list Read Only

#### Google Overutilized VM Instances 0.1.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

compute.instances.get Read Only
compute.instances.list Read Only
compute.machineTypes.list Read Only
monitoring.metricDescriptors.list Read Only
monitoring.timeSeries.list Read Only
resourcemanager.projects.get Read Only

#### **Google Cloud Optional Permissions:**

compute.instances.setMachineType write compute.instances.start write compute.instances.stop write

## Google Recommenders 3.1.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

resourcemanager.projects.get Read Only

#### **Google Cloud Optional Permissions:**

recommender.cloudSecurityGeneralRecommendations.list Read Only recommender.cloudsqlIdleInstanceRecommendations.list Read Only recommender.cloudsqlInstanceOutOfDiskRecommendations.list Read Only recommender.cloudsqlOverprovisionedInstanceRecommendations.list Read Only recommender.computeAddressIdleResourceRecommendations.list Read Only recommender.computeDiskIdleResourceRecommendations.list Read Only

 $recommender. compute Image Idle Resource Recommendations. list {\it Read~Only} \\ recommender. compute Instance Group Manager Machine Type Recommendations. list {\it Read~Only} \\$ 

recommender.computeInstanceIdleResourceRecommendations.list Read Only recommender.computeInstanceMachineTypeRecommendations.list Read Only recommender.containerDiagnosisRecommendations.list Read Only recommender.iamPolicyRecommendations.list Read Only recommender.loggingProductSuggestionContainerRecommendations.list Read Only recommender.monitoringProductSuggestionComputeRecommendations.list Read Only recommender.resourcemanagerProjectUtilizationRecommendations.list Read Only recommender.runServiceSecurityRecommendations.list Read Only recommender.usageCommitmentRecommendations.list Read Only

## Google Rightsize Cloud SQL Recommender 0.2.4

#### Flexera Required Permissions:

billing\_center\_viewer Read Only

#### **Google Cloud Required Permissions:**

cloudsql.instances.list Read Only recommender.cloudsqlIdleInstanceRecommendations.list Read Only recommender.cloudsqlOverprovisionedInstanceRecommendations.list Read Only resourcemanager.projects.get Read Only

#### **Google Cloud Optional Permissions:**

cloudsql.instances.delete write cloudsql.instances.update write

## Google Rightsize VM Recommender 3.2.4

## Flexera Required Permissions:

billing center viewer Read Only

## **Google Cloud Required Permissions:**

compute.instances.get Read Only
compute.instances.list Read Only
monitoring.metricDescriptors.list Read Only
monitoring.timeSeries.list Read Only
resourcemanager.projects.get Read Only

## **Google Cloud Optional Permissions:**

compute.instances.delete write compute.instances.setMachineType write compute.instances.start write compute.instances.stop write

recommender.computeInstanceIdleResourceRecommendations.list Read Only recommender.computeInstanceMachineTypeRecommendations.list Read Only

#### Google Rule-Based Dimension From Project Labels 2.1.0

#### **Flexera Required Permissions:**

billing\_center\_viewer Read Only observer Read Only rule based dimensions manager Read Only

#### **Google Cloud Required Permissions:**

resourcemanager.projects.get Read Only

## **Google Schedule Instance** 6.0.5

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Google Cloud Required Permissions:**

compute.instances.delete write
compute.instances.get Read Only
compute.instances.list Read Only
compute.instances.setLabels write
compute.instances.start write
compute.instances.stop write
compute.instances.list Read Only
resourcemanager.projects.get Read Only

## Google Unlabeled Resources 3.2.4

#### Flexera Required Permissions:

billing center viewer Read Only

## **Google Cloud Required Permissions:**

compute.disks.list Read Only
compute.externalVpnGateways.list Read Only
compute.images.list Read Only
compute.instances.list Read Only
compute.snapshots.list Read Only
compute.vpnGateways.list Read Only
resourcemanager.projects.get Read Only
storage.buckets.list Read Only

## **Google Cloud Optional Permissions:**

compute.disks.setLabels write compute.externalVpnGateways.setLabels write compute.images.setLabels write compute.instances.setLabels write compute.snapshots.setLabels write compute.vpnGateways.setLabels write

## **Hidden Policy Templates** 0.1.4

#### Flexera Required Permissions:

policy\_designer Read Only policy manager Read Only

## ITAM Asset Report 0.1.3

#### Flexera Required Permissions:

di\_viewer Read Only policy viewer Read Only

## **ITAM Expiring Licenses** 2.4.5

#### Flexera Required Permissions:

fnms user Read Only

## **ITAM Ignored Recent Inventory Dates** 2.4.4

#### **Flexera Required Permissions:**

fnms user Read Only

## ITAM Installed Application Report 0.1.3

## Flexera Required Permissions:

di\_viewer Read Only policy viewer Read Only

## ITAM License Report 0.1.3

## Flexera Required Permissions:

di\_viewer Read Only policy\_viewer Read Only

## **ITAM Missing Active Machines** 2.4.4

## Flexera Required Permissions:

fnms\_user Read Only

#### ITAM Overused Licenses 2.4.5

#### **Flexera Required Permissions:**

fnms user Read Only

## **Kubecost Cluster Rightsizing Recommendation** 0.4.3

#### Flexera Required Permissions:

billing center viewer Read Only

## Kubecost Container Request Rightsizing Recommendations 0.4.5

#### Flexera Required Permissions:

billing\_center\_viewer Read Only

#### **Kubernetes - Rightsizing Recommendations** 0.2.1

#### Flexera Required Permissions:

policy viewer Read Only

#### Low Usage Report 3.1.4

#### Flexera Required Permissions:

billing center viewer Read Only

## **Master Org Cost Policy 2.0.4**

#### Flexera Required Permissions:

billing center viewer Read Only

## **Master Org Cost Policy with Currency Conversion 2.0.4**

#### Flexera Required Permissions:

billing center viewer Read Only

New Usage 3.0.6

#### Flexera Required Permissions:

billing center viewer Read Only

## Office 365 Security Alerts 3.0.4

#### **Microsoft Graph Required Permissions:**

SecurityEvents.Read.All Read Only

#### Flexera Required Permissions:

billing\_center\_viewer Read Only

#### Okta Inactive Users 3.0.4

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Okta Required Permissions:**

READ ONLY ADMIN Read Only

## Oracle Cloud Advisor: Object Storage Without Lifecycle

Management 0.1.0

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Required Permissions:**

Allow group to read optimizer-api-family in tenancy Read Only Allow group to read optimizer-resource-metadata in tenancy Read Only

## Oracle Cloud Advisor: Rightsize Autonomous Database Service 0.1.0

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Required Permissions:**

Allow group to read optimizer-api-family in tenancy Read Only Allow group to read optimizer-resource-metadata in tenancy Read Only

#### **Optional Permissions:**

Allow group to use autonomous-databases in tenancy write

## Oracle Cloud Advisor: Rightsize Base Database Service 0.1.1

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### **Required Permissions:**

Allow group to read optimizer-api-family in tenancy Read Only
Allow group to read optimizer-resource-metadata in tenancy Read Only

#### **Optional Permissions:**

## Oracle Cloud Advisor: Rightsize Load Balancers 0.1.0

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Required Permissions:**

Allow group to read optimizer-api-family in tenancy Read Only Allow group to read optimizer-resource-metadata in tenancy Read Only

#### **Optional Permissions:**

Allow group to use load-balancers in tenancy write

## Oracle Cloud Advisor: Rightsize Virtual Machines 0.2.2

#### Flexera Required Permissions:

billing center viewer Read Only

#### **Required Permissions:**

Allow group to read optimizer-api-family in tenancy Read Only Allow group to read optimizer-resource-metadata in tenancy Read Only

#### **Optional Permissions:**

Allow group to manage instance-family in tenancy write Allow group to use instance-family in tenancy write Allow group to use virtual-network-family in tenancy write Allow group to use volume-family in tenancy write

#### Oracle Cloud Advisor: Unattached Volumes 0.1.1

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### **Required Permissions:**

Allow group to read optimizer-api-family in tenancy Read Only Allow group to read optimizer-resource-metadata in tenancy Read Only

#### **Optional Permissions:**

Allow group to manage volume-family in tenancy write

## Oracle Cloud Common Bill Ingestion 3.3.3

## Flexera Required Permissions:

org owner Read Only

#### **Required Permissions:**

define tenancy usage-report as Read Only endorse group to read objects in tenancy usage-report Read Only

## Orgs and Clouds Vendor Accounts 2.0.4

#### Flexera Required Permissions:

enterprise manager Read Only

## Percentage Cost Common Bill Ingestion 0.1.1

#### Flexera Required Permissions:

billing\_center\_viewer Read Only csm bill upload admin Read Only

## **Policy Template Synchronization 3.0.4**

#### **Flexera Required Permissions:**

policy\_designer Read Only policy manager Read Only

## Rule-Based Dimension From Custom Tags 0.1.3

#### Flexera Required Permissions:

billing\_center\_viewer Read Only observer Read Only rule\_based\_dimensions\_manager Read Only

## **SaaS Manager - Deactivated Users 3.1.5**

#### Flexera Required Permissions:

SaaS Manager: Viewer Read Only

## **SaaS Manager - Deactivated Users for Integrated Applications** 3.1.5

## Flexera Required Permissions:

SaaS Manager: Viewer Read Only

## SaaS Manager - Duplicate User Accounts 3.1.5

## Flexera Required Permissions:

SaaS Manager: Viewer Read Only

## SaaS Manager - Redundant Apps 3.1.5

#### Flexera Required Permissions:

SaaS Manager: Viewer Read Only

## SaaS Manager - Renewal Reminder 3.2.5

#### Flexera Required Permissions:

SaaS Manager: Viewer Read Only

#### SaaS Manager - SaaS App User Report by Category 3.0.4

#### Flexera Required Permissions:

SaaS Manager: Viewer Read Only

## SaaS Manager - Suspicious Users 3.1.5

#### Flexera Required Permissions:

SaaS Manager: Viewer Read Only

## SaaS Manager - Unsanctioned Applications with Existing Contract $^{3.2.5}$

#### Flexera Required Permissions:

SaaS Manager: Viewer Read Only

## SaaS Manager - Unsanctioned Spend 3.1.5

## Flexera Required Permissions:

SaaS Manager: Viewer Read Only

## Schedule ITAM Report 0.2.3

#### **Flexera Required Permissions:**

fnms user Read Only

## **Scheduled Report** 4.0.4

## Flexera Required Permissions:

billing center viewer Read Only

## **Scheduled Report for Unallocated Costs 0.3.3**

#### **Flexera Required Permissions:**

billing center viewer Read Only

## Scheduled Report with Markups and Markdowns 2.0.2

#### Flexera Required Permissions:

billing center viewer Read Only

## **ServiceNow Inactive Approvers** 3.0.4

#### **Flexera Required Permissions:**

billing center viewer Read Only

#### **ServiceNow Required Permissions:**

user admin Read Only

## Spot Ocean - Common Bill Ingest 0.2.1

#### Flexera Required Permissions:

billing\_center\_viewer Read Only csm bill upload admin Read Only

## **Spot Security - Compliance Report** 0.1.3

#### Flexera Required Permissions:

policy\_viewer Read Only

## **Vendor Spend Commitment Forecast** 4.0.5

## Flexera Required Permissions:

billing\_center\_viewer Read Only