

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:

billing center viewer Read Only

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:

billing center viewer Read Only

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:

billing center viewer Read Only

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:

billing center viewer Read Only

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:

billing_center_viewer Read Only

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 3.6.7

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 5.4.6

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:

billing center viewer Read Only

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 4.0.5

Flexera Required Permissions:

billing center viewer Read Only

AWS Schedule Instance 8.0.6

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:

billing_center_viewer Read Only

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:

billing_center_viewer Read Only

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:

billing_center_viewer Read Only

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:

billing center viewer Read Only

Azure Deprecated Storage Accounts 0.1.0

Azure Resource Manager Required Permissions:

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

Flexera Required Permissions:

billing center viewer Read Only

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 Read Only
Microsoft.Sql/servers/read Read Only
Microsoft.SqlVirtualMachine/sqlVirtualMachines/read Read Only

Azure Resource Manager Optional Permissions:

 $\label{lem:microsoft.sql/managedInstances/write w_{\it rite}$ \\ Microsoft.Sql/servers/write w_{\it rite}$ \\ Microsoft.SqlVirtualMachine/sqlVirtualMachines/write w_{\it rite}$ \\$

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:

billing center viewer Read Only

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 6.0.5

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:

 $Microsoft. Network/network Security Groups/read {\it Read Only}$

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:

billing center viewer Read Only

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:

billing center viewer Read Only

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 6.2.5

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

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.Sgl/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

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

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 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. Cost Management/benefit Recommendations/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

billing center viewer Read Only

Azure Schedule Instance 7.0.8

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

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:

billing center viewer Read Only

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

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/virtualMachines/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.Sql/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

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

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:

 $manage_organization \textit{ Read Only }$

Currency Conversion 5.1.0

Flexera Required Permissions:

enterprise manager Read Only

Dynamic Dashboards 0.1.0

Flexera Required Permissions:

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 0.1.3

Flexera Required Permissions:

 org_owner Read Only

Flexera One API Event Report 0.1.3

Flexera Required Permissions:

iam admin Read Only

Flexera One User Access Report 0.1.4

Flexera Required Permissions:

iam admin Read Only

Flexera Users With Explicit Roles 4.0.4

Flexera Required Permissions:

iam admin Read Only

GitHub Available Seats 3.0.4

Flexera Required Permissions:

billing center viewer Read Only

GitHub Required Permissions:

GitHub Repositories Without Admin Team 3.0.4

Flexera Required Permissions:

billing center viewer Read Only

GitHub Required Permissions:

admin:org Read Only

GitHub Repository Branches Without Protection 3.0.4

Flexera Required 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

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

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:

 $compute. addresses. list \textit{Read Only} \\ recommender. compute Address Idle Resource Recommendations. list \textit{Read Only} \\$

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.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.computeImageIdleResourceRecommendations.list Read Only recommender.computeImageIdleResourceRecommendations.list Read Only recommender.computeInstanceGroupManagerMachineTypeRecommendations.list 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 6.0.6

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
resourcemanager.projects.update write
storage.buckets.update 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

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:

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:

 $READ_ONLY\ ADMIN\ \textit{Read Only}$

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:

Allow group to use db-systems in tenancy Write

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 0.2.2

Flexera Required Permissions:

billing_center_viewer Read Only csm bill upload admin Read Only

Spot Security - Compliance Report 0.1.3

Flexera Required Permissions:

Vendor Spend Commitment Forecast 4.0.5

Flexera Required Permissions:

billing_center_viewer Read Only