



Policy Catalog Azure Permissions List

This document contains a list of cloud provider permissions required by each Azure 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 [available in the Flexera Policy Template Github Repository](#).
- *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 3.0.3

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 3.1.3

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*

Azure AHUB Utilization with Manual Entry 4.0.3

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 0.1.2

Azure Resource Manager Required Permissions:

Microsoft.Advisor/recommendations/read *Read Only*

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure Advisor Compute Instances Recommendations 0.1.2

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 3.0.2

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 3.0.2

Azure Resource Manager Required Permissions:

Microsoft.Storage/storageAccounts/read *Read Only*

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure Blob Storage Optimization 4.0.5

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 0.3.3

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure Cheaper Regions 1.0.2

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure China Common Bill Ingestion 2.0.3

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 0.2.2

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 0.1.2

Azure Resource Manager Required Permissions:

Microsoft.Resources/subscriptions/read *Read Only*

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure Data Lake Optimization 0.1.1

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 Databricks Rightsize Compute Instances 0.4.1

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 Disallowed Regions 4.1.3

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 4.0.3

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 3.0.2

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure Expiring Savings Plans 0.1.3

Azure Resource Manager Required Permissions:

Microsoft.Billing/billingAccounts/read *Read Only*

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure Guest Users 3.0.3

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 5.1.4

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 4.3.1

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:

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 5.2.4

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 5.5.5

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 4.2.2

Azure Resource Manager Required Permissions:

Microsoft.Compute/virtualMachines/read *Read Only*

Azure Long Running Instances 6.1.3

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 6.0.2

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 0.1.3

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 3.0.2

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 3.0.2

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 3.0.2

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 3.0.2

Azure Resource Manager Required Permissions:

Microsoft.Network/networkSecurityGroups/read *Read Only*

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure New Marketplace Products 0.5.1

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure Old Snapshots 7.2.3

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 0.1.1

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 3.0.3

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 3.0.2**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 3.0.2**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 3.0.2**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 3.0.2**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 3.0.3

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 3.0.2

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 3.0.2

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 3.0.2

Azure Resource Manager Required Permissions:

Microsoft.Security/regulatoryComplianceStandards/read *Read Only*

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure Reserved Instances Recommendations 4.2.1

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 1.0.4

Azure Resource Manager Required Permissions:

Microsoft.Capacity/reservations/read *Read Only*

Azure Rightsize Compute Instances 6.2.1

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 2.6.1

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 0.2.3

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 0.2.3

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 2.0.6

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 0.1.4

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 6.0.1

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 0.2.4

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 0.3.3

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 0.1.3

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 2.0.1

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 2.0.1

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 3.0.2

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 3.0.2

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 3.0.2

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 3.0.2**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 3.0.2**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 3.0.2**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) 3.0.2**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 3.0.2

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 3.0.2

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 3.0.2

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 3.1.3

Azure Resource Manager Required Permissions:

Microsoft.CostManagement/benefitRecommendations/read *Read Only*

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure Savings Plan Utilization 0.1.3

Azure Resource Manager Required Permissions:

Microsoft.Billing/billingAccounts/read *Read Only*

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure Savings Realized from Reservations 3.9.4**Flexera Required Permissions:**

billing_center_viewer *Read Only*

Azure Schedule Instance 7.0.2**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 3.0.2**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 3.0.2**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 3.0.2**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 3.0.2**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 4.0.3**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 3.0.2**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 3.0.3**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 3.0.2**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 3.0.2

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 2.1.5

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 3.0.2

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 3.2.3

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 3.3.1

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 1.1.3

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 0.1.3

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 0.2.4

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 7.3.3

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 0.1.4

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 5.4.5

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*

Azure Resource Manager Optional Permissions:

Microsoft.Sql/servers/databases/delete *Write*

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure Unused Virtual Network Gateways 0.1.2

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 8.2.4

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 2.1.7

Flexera Required Permissions:

billing_center_viewer *Read Only*

Azure Usage Report - Instance Time Used 1.0.5**Flexera Required Permissions:**

billing_center_viewer *Read Only*

Azure Usage Report - Number of Instance Hours Used 2.1.6**Flexera Required Permissions:**

billing_center_viewer *Read Only*

Azure Usage Report - Number of Instance vCPUs Used 2.1.7**Flexera Required Permissions:**

billing_center_viewer *Read Only*

Azure VMs Not Using Managed Disks 4.0.2**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 0.2.2**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 3.0.2**Azure Resource Manager Required Permissions:**

Microsoft.Web/sites/read *Read Only*

Flexera Required Permissions:

billing_center_viewer *Read Only*

Common Bill Ingestion from Azure Blob Storage 0.2.1**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) 0.1.0**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*
