



## **THE VEGA SETUP GUIDE**

# Configuring Azure for Vega Platform Integration

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**SECTION 01****AZURE CONSOLIDATED BILLING ADAPTER FOR SINGLE  
SUBSCRIPTION**

# Configure Azure Integration with the Vega Platform

Please complete these two tasks to enable integration with the Vega Platform. Within each task is a clickable link for further instructions. If you have any questions, please contact your Vega client success manager.

1. [\*\*Task 1: Set up Single Subscription Account in Azure\*\*](#)
2. [\*\*Task 2: Create Azure Export Configuration\*\*](#)

## SECTION 01

### TASK 1: SET UP SINGLE SUBSCRIPTION ACCOUNT IN AZURE

# Task 1: Set up Single Subscription Account in Azure

## Quick Setup Overview

1. Set up and Register an Application
2. Add a Role Assignment
3. Provide Access for Reservation
4. Register Resource Providers to Subscriptions

## Register an Application in Azure

Follow these steps to register Vega as an Application in Azure

### Collect the Tenant ID

1. Log in to the [Azure Management Portal](#) using admin credentials.
2. From the left-side menu, click **Azure Active Directory**.
3. Select **Properties** from the list.

### Register a New Application

1. In the Manage section of Azure Active Directory, click **App Registrations > New Registration**.
  - a. Enter a Name for your application.
  - b. Under **Support Account Types**, leave the default settings.
  - c. For **User Redirect URI**, leave the default drop down settings.
  - d. Click **Register**.
2. Copy the Application ID after successful registration. This is your **Client ID**.

## SECTION 02

### TASK 1: SET UP SINGLE SUBSCRIPTION ACCOUNT IN AZURE

#### Manage Certificates and Secrets

1. From the App Registration, locate **Manage > Certificates & secrets**
2. Under Client Secrets, click **New client secret**.
3. Add a Description for the secret and select an expiration time frame.
4. Click **Add**.

**Important:** Copy the Client Secret and save it immediately, you will not be able to view it again. This is your **Secret Key**

#### Assign Roles to your Registered App

First, follow these steps to create custom roles in Azure AD. Then, add the Role(s) to your Registered App.

#### Add a Role Assignment

Before you begin, ensure you must have created roles for billing and normal adapters in your Azure Single subscription account. See [Create a Custom Role for Azure Subscription](#)

1. In Azure, navigate to the Subscription List and select the Subscription.
  - a. Select **Access control (IAM) > Role Assignments tab**.
  - b. Click **Add > Role Assignment Option**.
2. Select the **Custom Role name** that was created previously > Assign access to **Azure AD User, Group, or Service Principal** > Select field type **Select Members**.
3. Select the previously registered App in the **Select members** field.
4. Click **Review + assign** to complete the role assignment.

## SECTION 02

### TASK 1: SET UP SINGLE SUBSCRIPTION ACCOUNT IN AZURE

#### Provide Access for Reservation

1. Go to reservations.
2. Select a reservation and then click on Reservation Order Id.
3. Select Access Control (IAM) and click + **Add**.
4. Add **Reader** role under the role tab of the Add role assignment window.
5. Go to **Members** tab and click **Select members**.
6. Select the registered app name in the **Select members** field and click **Review + assign**.
7. Repeat steps 1 through 6 for each reservation.

#### Register Resource Providers to Subscription

1. In the **Azure Subscription List**, click **Settings > Resource providers**.
2. In the "Filter by name..." search field, enter the Resource provider name (e.g. Microsoft.CostManagementExports).
3. Check the status of the Provider:
4. If the status is "Registered", take no action.
5. If the status is "NotRegistered", select a provider from the list and click **Register**.

#### Ensure the following Resource providers are Registered:

- Microsoft.Storage
- Microsoft.CostManagementExports
- Microsoft.Billing
- Microsoft.Consumption
- Microsoft.CostManagement
- Microsoft.Commerce
- Microsoft.Network
- Microsoft.AlertsManagement
- Microsoft.Compute
- Microsoft.Security
- Microsoft.insights
- Microsoft.PolicyInsights
- Microsoft.DBforMySQL

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## SECTION 02

### TASK 1: SET UP SINGLE SUBSCRIPTION ACCOUNT IN AZURE

- Microsoft.ResourceHealth
- Microsoft.DocumentDB
- Microsoft.Sql
- Microsoft.DBforPostgreSQL
- Microsoft.DBforMariaDB
- Microsoft.Authorization
- Microsoft.HDInsight
- Microsoft.KeyVault
- Microsoft.Web
- Microsoft.SqlVirtualMachine
- Microsoft.RecoveryServices
- Microsoft.ManagedIdentity
- Microsoft.Advisor
- Microsoft.ADHybridHealthService
- Microsoft.ClassicSubscription
- Microsoft.Features
- Microsoft.MarketplaceOrdering
- Microsoft.Portal
- Microsoft.SerialConsole
- Microsoft.support
- Microsoft.WorkloadMonitor
- Microsoft.VirtualMachineImages
- Microsoft.SecurityInsights
- Microsoft.OperationallInsights
- Microsoft.OperationsManagement

## SECTION 03

## TASK 2: CREATE AZURE EXPORT CONFIGURATION

# Task 2: Create Azure Export Configuration

Learn how to create an Azure Export Configuration in Cost Management and Billing. Vega Platform requires an Export Configuration in order to accurately report billing information. An Azure Export Configuration allows you to schedule daily exports to publish your billing data to a storage account.

## Create an Azure Export Configuration

1. Log in to your Azure Portal.
2. From **Home**, click the **left-hand menu > Cost Management + Billing**.
3. Click **Cost Management**.
4. In the left-hand menu under **Settings**, click **Exports**.
5. Click **+Add** in the top left of the window.
6. Enter a **Name**, **Metric**, **Export type**, and **Start date** for your Export.
7. Under **Storage**, if you want to use an existing Storage account, select **Use existing**. Otherwise, select **Create new**.
  - a. **Use existing:** Select a subscription and storage account. Enter details for Container and Directory.
  - b. **Create new:** Select a subscription and resource group for which you will create the storage account. Enter details for account name, location, container, and directory.



## SECTION 04

## CREATE A CUSTOM ROLE IN AZURE SUBSCRIPTION

# Create a Custom Role in Azure Subscription

Learn how to create a custom role for your Azure subscription, which will be used when setting up Accounts in Azure.

## Prerequisites

You must have [Owner](#) or [User Access Administer](#) permissions to create custom roles

## Create a Custom Role for Vega Billing Admin

1. In the Azure portal, open a subscription where a custom role is to be assigned to.
2. Click **Access control (IAM)** from the navigation panel.
3. On the Access control (IAM) page, click **Add**, and then click **Add custom role**.
4. **Create a custom role** page appears.
5. On the **Basics** tab, enter a name for the custom role in the **Custom role name** box. In the **Description** box, enter description for the custom role. Leave the **Baseline permissions** option set as Start from scratch.
6. Leave the **Permissions** and **Assignable scopes** tab data as it is.
7. Open the tab 'JSON'.
8. On the JSON tab, click **Edit**. In the section "**actions**" add the permissions listed on the next page.

## SECTION 04

### CREATE A CUSTOM ROLE IN AZURE SUBSCRIPTION

#### ReadOnly Access

#### JSON

```
"Microsoft.Storage/storageAccounts/listkeys/action",
"Microsoft.Storage/storageAccounts/read",
"Microsoft.Storage/storageAccounts/blobServices/containers/read"
"Microsoft.CostManagement/exports/read"
"Microsoft.CostManagement/query/action",
"Microsoft.CostManagement/forecast/action"
"Microsoft.Resources/subscriptions/resourceGroups/read",
"Microsoft.Compute/virtualMachines/read",
"Microsoft.Compute/virtualMachines/instanceView/read",
"Microsoft.Compute/disks/read",
"Microsoft.Compute/availabilitySets/read",
"Microsoft.Compute/snapshots/read",
"Microsoft.Network/virtualNetworks/read",
"Microsoft.Network/loadBalancers/read",
"Microsoft.Network/networkInterfaces/read",
"Microsoft.Network/publicIPAddresses/read",
"Microsoft.Network/routeTables/read",
"Microsoft.Network/networkSecurityGroups/read",
"Microsoft.Network/virtualNetworks/subnets/read",
"Microsoft.DBforMariaDB/servers/read",
"Microsoft.DBforPostgreSQL/servers/read",
"Microsoft.Sql/servers/read",
"Microsoft.Sql/servers/databases/read",
"Microsoft.Sql/servers/elasticPools/read",
```

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## SECTION 04

### CREATE A CUSTOM ROLE IN AZURE SUBSCRIPTION

```
"Microsoft.DBforMySQL/servers/read",
"Microsoft.Storage/storageAccounts/read",
"Microsoft.Insights/metrics/read",
"Microsoft.Insights/metricDefinitions/read",
"Microsoft.Commerce/*/read",
"Microsoft.Cache/redis/read",
"Microsoft.DocumentDB/databaseAccounts/services/read",
"Microsoft.Web/staticSites/Read",
"Microsoft.Web/kubeEnvironments/read",
"Microsoft.Kubernetes/connectedClusters/Read",
"Microsoft.Kubernetes/RegisteredSubscriptions/read",
"Microsoft.DataProtection/backupVaults/read",
"Microsoft.DocumentDB/cassandraClusters/read",
"Microsoft.DocumentDB/cassandraClusters/dataCenters/read",
"Microsoft.DocumentDB/databaseAccounts/cassandraKeyspaces/read",
"Microsoft.DesktopVirtualization/applicationgroups/read",
"Microsoft.DesktopVirtualization/hostpools/read",
"Microsoft.DesktopVirtualization/workspaces/read"
```

## SECTION 04

### CREATE A CUSTOM ROLE IN AZURE SUBSCRIPTION

#### Read & Write Access

##### JSON

```
"Microsoft.Storage/storageAccounts/listkeys/action",
"Microsoft.Storage/storageAccounts/read",
"Microsoft.Storage/storageAccounts/blobServices/containers/read"
"Microsoft.CostManagement/exports/*"
"Microsoft.CostManagement/query/action",
"Microsoft.CostManagement/forecast/action",
"*/read",
"Microsoft.Storage/storageAccounts/write",
"Microsoft.Storage/storageAccounts/delete",
"Microsoft.Compute/virtualMachines/*/action",
"Microsoft.Compute/*/delete",
"Microsoft.Network/*/delete",
"Microsoft.Compute/*/write",
"Microsoft.Network/*/write",
"Microsoft.DBforMariaDB/servers/*/action",
"Microsoft.DBforMariaDB/servers/delete",
"Microsoft.DBforMariaDB/servers/write",
"Microsoft.DBforMySQL/servers/*/action",
"Microsoft.DBforMySQL/servers/delete",
"Microsoft.DBforMySQL/servers/write",
"Microsoft.DBforMySQL/flexibleServers/delete",
"Microsoft.DBforMySQL/flexibleServers/write",
"Microsoft.Sql/servers/delete",
"Microsoft.Sql/servers/write",
"Microsoft.Sql/servers/databases/*/action",
"Microsoft.Sql/servers/databases/delete",
"Microsoft.Sql/servers/databases/write",
"Microsoft.Sql/servers/elasticPools/delete",
"Microsoft.Sql/servers/elasticPools/write",
"Microsoft.DBforPostgreSQL/servers/delete",
```

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## SECTION 04

## CREATE A CUSTOM ROLE IN AZURE SUBSCRIPTION

```
"Microsoft.DBforPostgreSQL/servers/write",
"Microsoft.DBforPostgreSQL/servers/*/action",
"Microsoft.Cache/redis/read",
"Microsoft.DocumentDB/databaseAccounts/services/read",
"Microsoft.Web/staticSites/Read",
"Microsoft.Web/kubeEnvironments/read",
"Microsoft.Kubernetes/connectedClusters/Read",
"Microsoft.Kubernetes/RegisteredSubscriptions/read",
"Microsoft.DataProtection/backupVaults/read",
"Microsoft.DataProtection/backupVaults/*/read",
"Microsoft.RecoveryServices/*/read",
"Microsoft.DocumentDB/cassandraClusters/read",
"Microsoft.DocumentDB/cassandraClusters/dataCenters/read",
"Microsoft.DocumentDB/databaseAccounts/cassandraKeyspaces/read",
"Microsoft.DocumentDB/databaseAccounts/cassandraKeyspaces/*/read",
"Microsoft.DesktopVirtualization/applicationgroups/read",
"Microsoft.DesktopVirtualization/applicationgroups/*/read",
"Microsoft.DesktopVirtualization/hostpools/read",
"Microsoft.DesktopVirtualization/hostpools/*/read",
"Microsoft.DesktopVirtualization/workspaces/read",
"Microsoft.DesktopVirtualization/workspaces/*/read"
```

9. When finished editing JSON body, click **Save**.
10. Open the tab 'Review + Create'. Check the role details and click **Create** to create a custom role.
11. After a few moments, a message box appears indicating your custom role was successfully created. If any errors are detected, a message will be displayed.
12. View your new custom role in the **Roles** list. If you don't see your custom role, click **Refresh**.

**Once you have completed all of the steps outlined in this guide, please provide the following to your Vega Client Success Manager:**

- Client ID
- Secret Key
- Tenant ID

**If you have any questions, please contact  
your client success manager**



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