

Microsoft IT

Dynamics CRM  
**IMS APP Deployment Guide**



# DYNAMICS 365 MODERN IMMIGRATION MANAGEMENT SYSTEM

The solution provides end-to-end scenario to manage and track immigration cases for their employees.

## Contents

1. Summary .....	3
1.1 Overview .....	3
1.2 Document Overview .....	4
2. Prerequisites .....	4
2.1 Power Auto Number .....	4
2.2 Data Export Service .....	6
2.3 Email Lab Alerts .....	7
2.4 Voice of Customer (VOC) .....	8
2.5 CRM Hub Installation .....	10
2.6 Portal Installation and Configuration .....	12
2.7 System Settings .....	17
2.10 Azure Setup .....	18
3. Install IMS App Package .....	19
3.1. Download IMS-Master Components from Git-Hub .....	21
4. Download IMS App Azure Components .....	25
4.1 Create Azure Applications .....	26
a. AZURE_RESOURCEGROUP .....	26
b. AZURE_LOCATION .....	26
c. CRM_ORGNAME .....	26

d. AZURE_TENANT_ID and AZURE_CLIENT_ID.....	27
e. AZURE_SECRET.....	29
f. AZURE_SUBSCRIPTION_ID.....	31
g. Assigning Permissions For The App Registrations To Create Azure Resources .....	31
4.2 Azure Resources List .....	36
4.3 Publish Azure Resources .....	38
4.3.1 Web Applications.....	38
4.3.2 Web Jobs.....	45
5.Post Deployment Configuration .....	47
5.1 CRM Configurations.....	47
5.2 Azure Configurations.....	66
6.TroubleShooting Details .....	77
6.1 Azure Applications.....	77
6.1.1 Web Service Plan .....	77
6.1.2 Web Applications.....	78
6.2 FN Portal .....	83
6.3 Questionnaire Portal .....	84
7.Uninstalling Immigration AppSource System.....	84
8. Aspose License SetUp.....	85

## 1.Summary

### 1.1 Overview

Microsoft AppSource is our new destination to enable business users to explore and use line-of-business SaaS apps from Microsoft and our partners. Users can also discover add-ins for Microsoft business apps, like Dynamics 365, Power BI, Office and more. Through AppSource, ISVs (app publishers) and other partners can reach a broad range of customers right where the users are either through the AppSource portal or within the context of the Microsoft services they're already using.

**Existing customers who already have installed IMS application and trying to upgrade should skip this document and directly follow the Forms Configuration Guide available in the appsource.**

**New Customers who are installing IMS application for the first time need to follow the IMS deployment Guide first and then follow the Forms Configuration Guide later.**

## 1.2 Document Overview

This document describes the components of Immigration Management System (referred as “IMS” in the document) App and its related information including the prerequisites to be made available in the system before proceeding with the IMS App Solution installation and steps to download and import the solution.

This is a living document that will be used to support the CRM application and its associated portal. There are two deployment guides which describe the complete process of deployment of IMS applications:

- IMS Deployment Guide
- Forms Configuration Guide

## 2. Prerequisites

As a part of prerequisites to install the IMS App, the below solutions must be installed or imported into the user’s CRM organization. The user must login with Office 365 Administrator account to install the below apps.

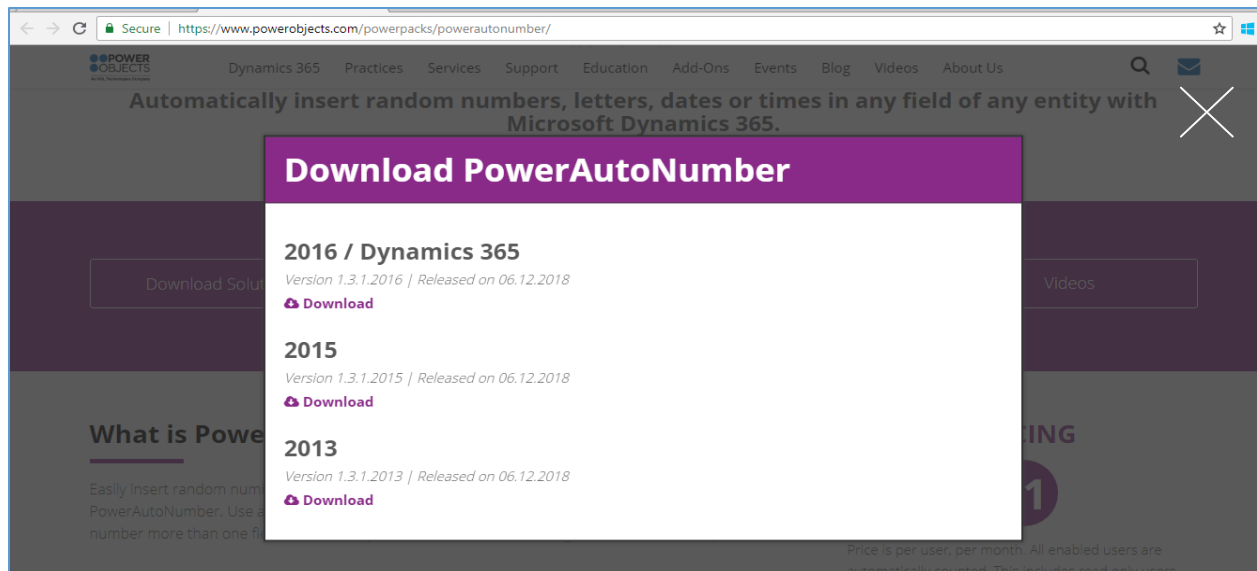
- Power Auto Number
- Data Export service
- Email Lab Alerts
- Voice of Customer
- CRM Hub Installation
- Portal Installation and Configuration(Custom Portal)

### 2.1 Power Auto Number

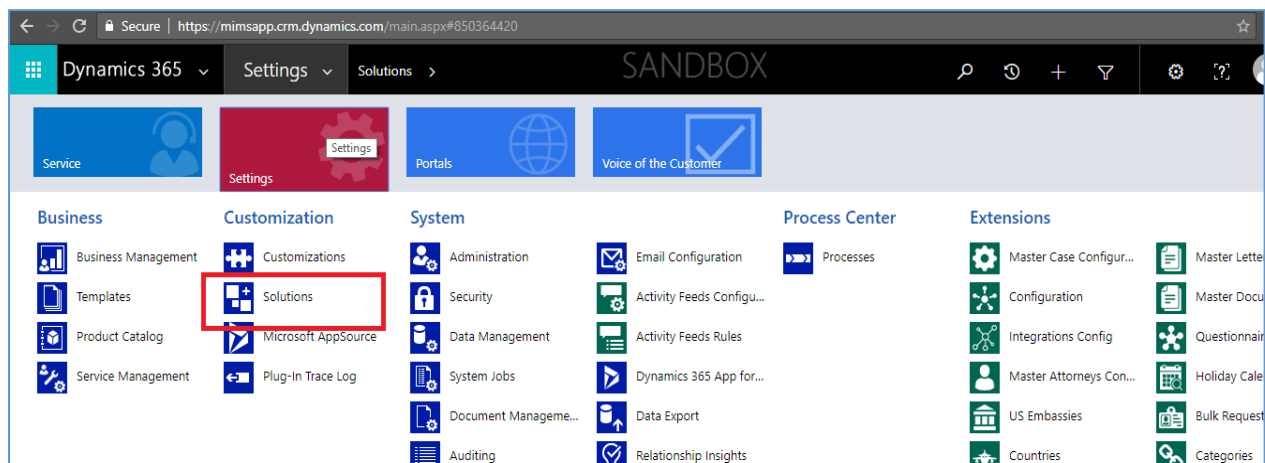
Power Auto Number is an app that enables automatic insertion of random numbers, letters, dates or times in any field of any entity in CRM. The app enables the use of combination of numbers, letters and dates in the CRM fields and provide the ability to number more than one field in each entity. Random numbers are guaranteed to be unique. Power Auto Number is used in this application to create a unique identifier in Foreign national entity.

The power Auto number solution can be downloaded from the below **web site**.

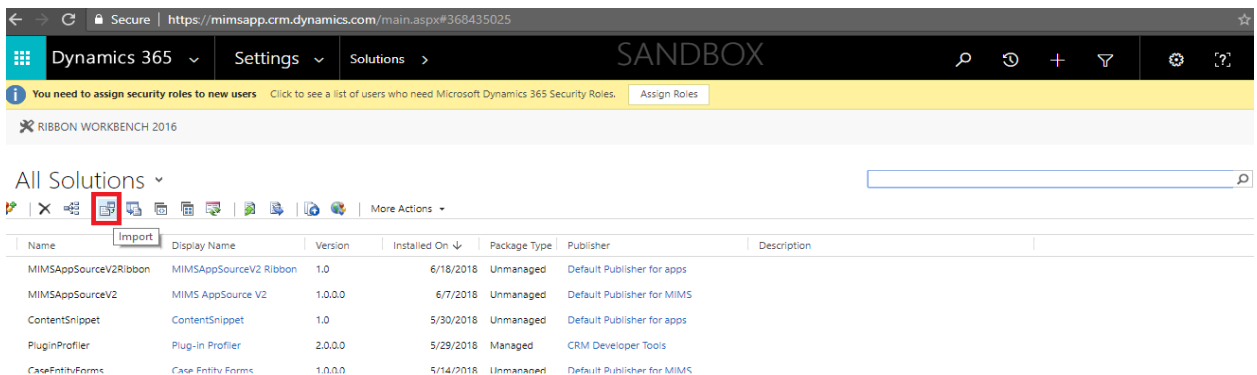
<https://www.powerobjects.com/powerpacks/powerautonumber>



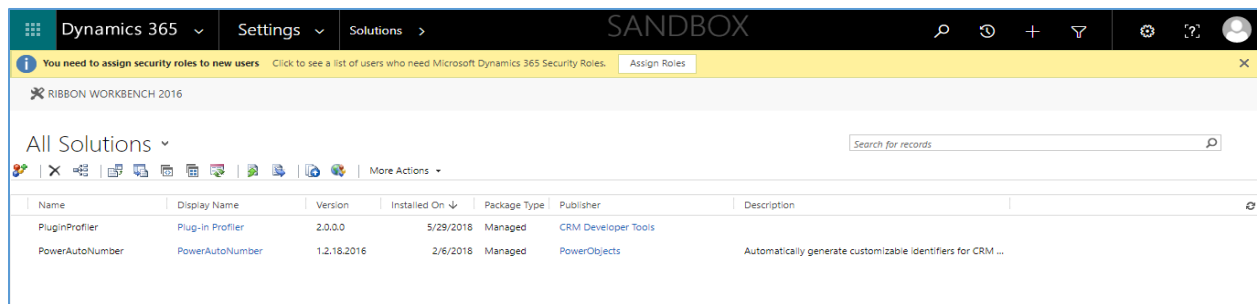
Import the same into the CRM system by navigating to **Settings -> Solutions**.



Click on **Import** button in the solutions page.



After importing the Power auto number, the same is available in the below imported list.



The screenshot shows the Dynamics 365 Sandbox interface. At the top, there's a navigation bar with 'Dynamics 365', 'Settings', and 'Solutions'. Below this is a yellow banner with a message about assigning security roles. The main area is titled 'All Solutions' and contains a table of installed solutions.

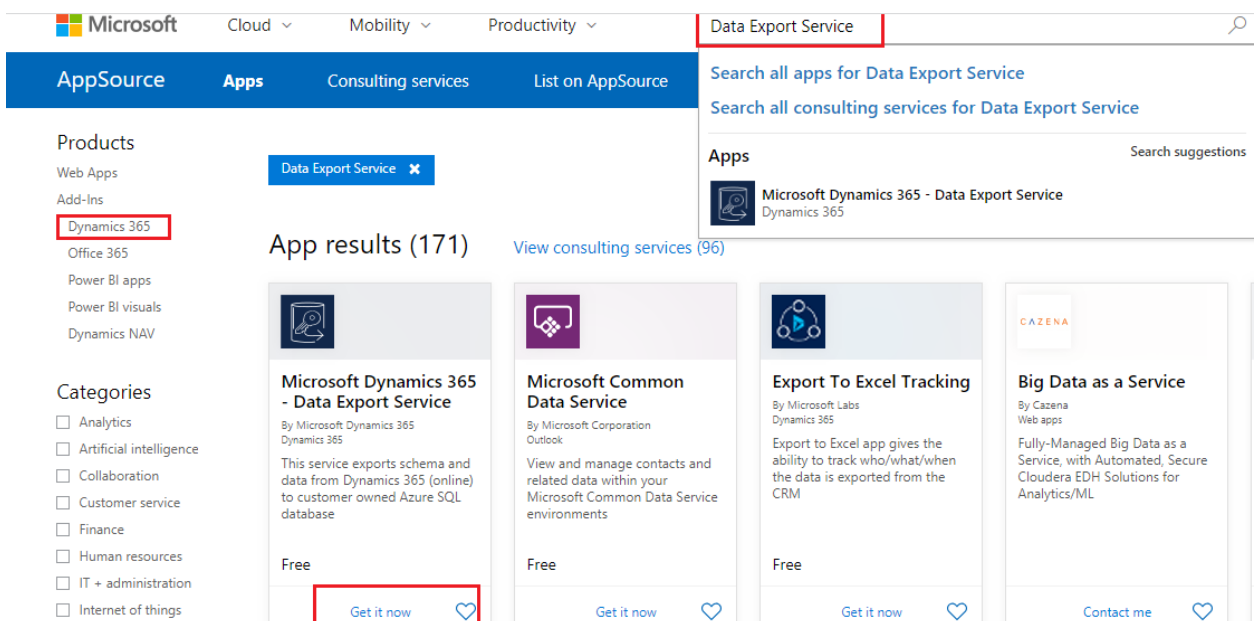
Name	Display Name	Version	Installed On	Package Type	Publisher	Description
PluginProfiler	Plug-In Profiler	2.0.0.0	5/29/2016	Managed	CRM Developer Tools	
PowerAutoNumber	PowerAutoNumber	1.2.18.2016	2/6/2016	Managed	PowerObjects	Automatically generate customizable identifiers for CRM ...

## 2.2 Data Export Service

Data Export Service is an add-on service for Dynamics 365 (online) that provides the ability to replicate sales, service and marketing data to a SQL store in a customer-owned Azure subscription. It simplifies the technical and administrative complexity of deploying and managing a data export solution managing schema and data.

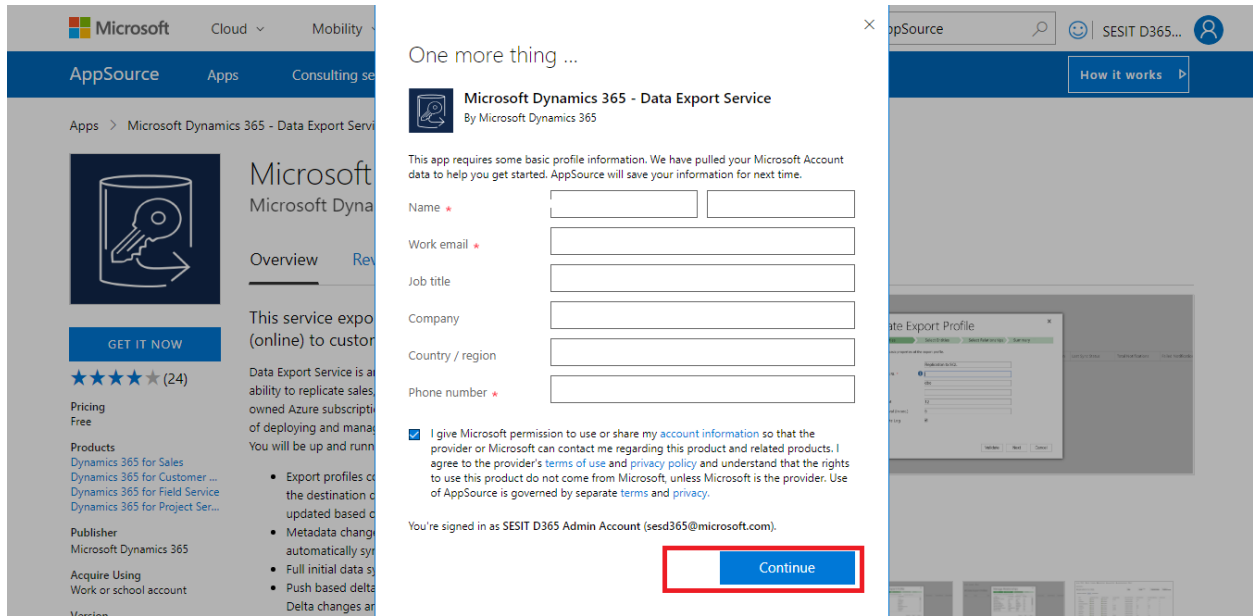
Navigate to the below URL , go to “Dynamics 365” Add-Ins and search with the name of “**Data Export Service**” as shown below

URL: <https://appsource.microsoft.com/en-us/marketplace>



The screenshot shows the Microsoft AppSource marketplace. The search bar at the top contains 'Data Export Service'. The left sidebar shows the navigation menu with 'Dynamics 365' highlighted under 'Add-Ins'. The main area displays 'App results (171)' and 'View consulting services (96)'. The first result is 'Microsoft Dynamics 365 - Data Export Service' by Microsoft Dynamics 365, which is free and has a 'Get it now' button highlighted with a red box. Other results include 'Microsoft Common Data Service', 'Export To Excel Tracking', and 'Big Data as a Service'.

The system will request the connection details like user name, organization name and other details as shown below. Enter the appropriate details and click on **Continue**.



The solution is imported into the system and the same is available in the Imported list as shown below.

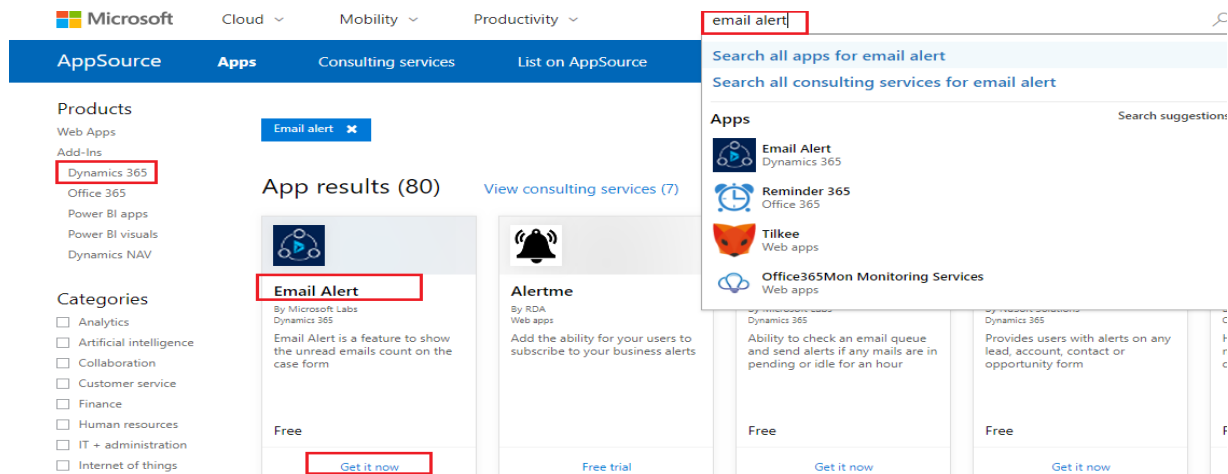
RIBBON WORKBENCH 2016					
Search Results					
dataexport					
Name	Display Name	Version	Package T...	Publisher	Description
DataExportService	Data Export Service fo...	1.0.0.0	Managed	Microsoft Dynamics 365	Data export service provides the ability for custo...

## 2.3 Email Lab Alerts

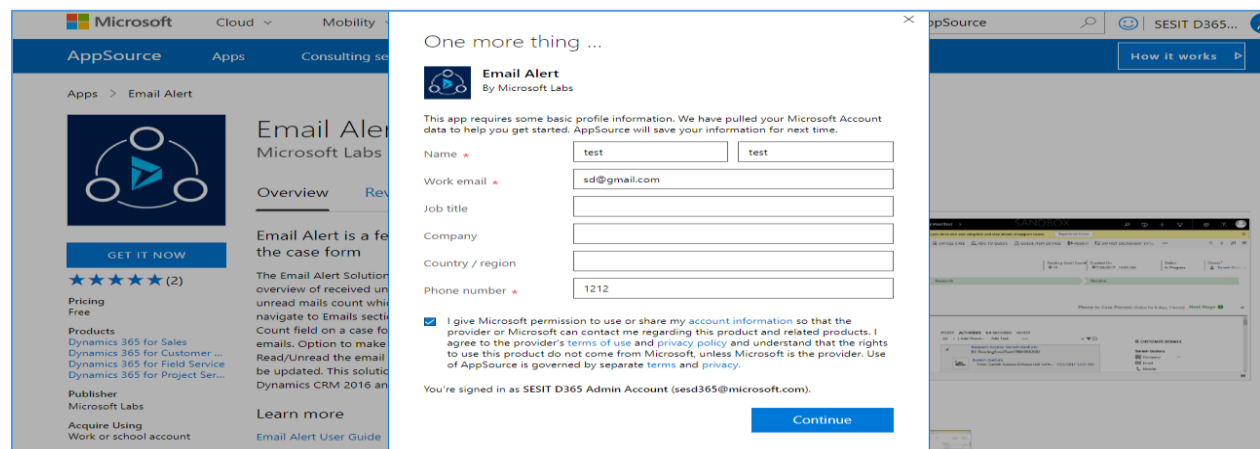
The Email Alert Solution is an add-on feature to dynamics 365 CRM which provides an overview of received and unread CRM emails on a Case. This is used in this application as it enables users to get the unread mails count which were received on a case.

Navigate to the below **URL** , go to “Dynamics 365” Add-Ins and search with the name of “**Email Alert**” as shown below

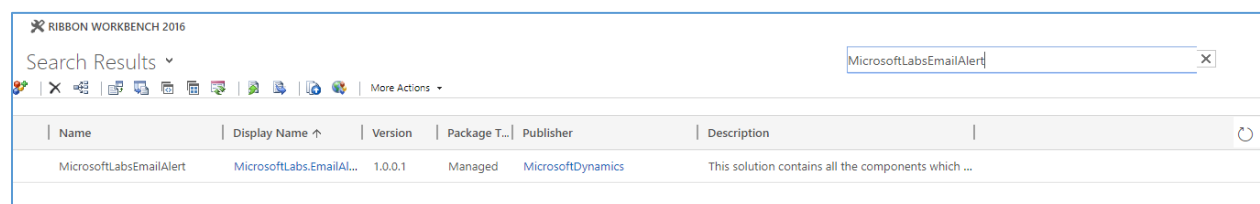
URL: <https://appsource.microsoft.com/en-us/marketplace>



The system will request the connection details like user name, organization name and other details as shown below. Enter the appropriate details and click on **Continue**.



The solution is imported into the system and the same is available in the Imported list as shown below.



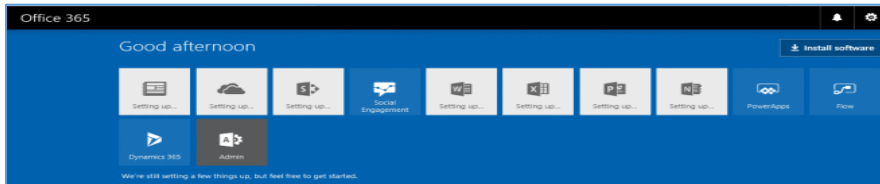
## 2.4 Voice of Customer (VOC)

Voice of the Customer is a new Dynamics CRM 2016 feature that was created to capture feedback regarding the product or service provided by the CRM. Voice of the Customer, enables setting up of surveys, survey distribution to contacts via workflows, and capture responses. These captured data can be utilized for generating reports and making appropriate changes to the product/service.

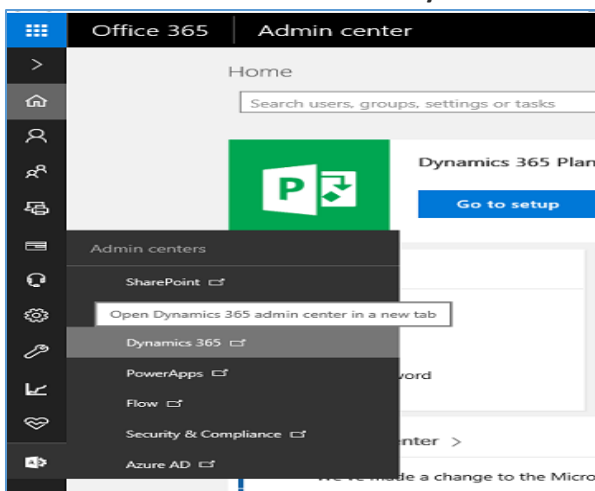


User can take advantage of the feature by installing Voice of the Customer solution. The Solution is available globally for Microsoft Dynamics CRM Online subscriptions.

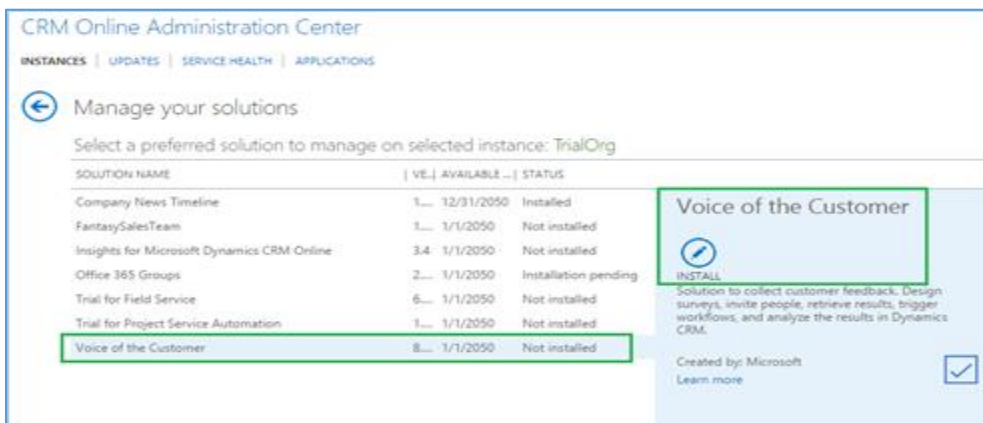
1. Access the link, <https://portal.office.com/> and click on the 'Admin' tile. User must be logged into the Office 365 Administrator account.



2. Click on **Admin Center** and select **Dynamics 365**.



3. Select the instance (organization) for which you want to install **Voice of Customer** and click on the **Edit** button, next to Solutions.
4. Select the **Voice of the Customer** and click on **Install**.

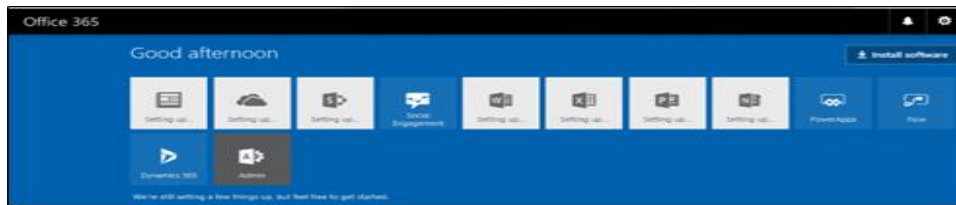


**Note:** When a solution is installed in CRM, the CRM Online site goes into maintenance mode and will be offline for a short period of time. It is advisable to install the solution in outside office hours.

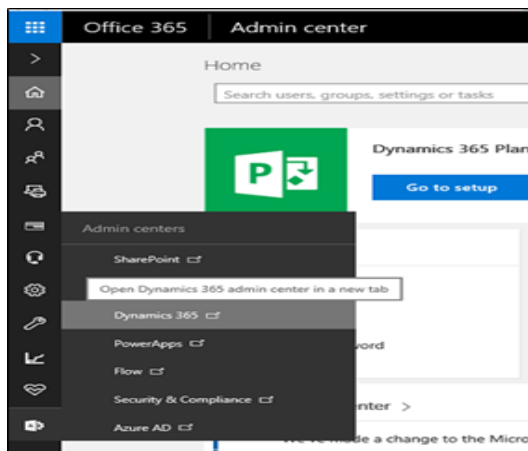
## 2.5 CRM Hub Installation

To enable UCI client and related features, end user need to install CRM Hub Installation.

1. Go to <https://portal.office.com/> and click on the '**Admin**' tile. User must be logged into the Office 365 Administrator account.

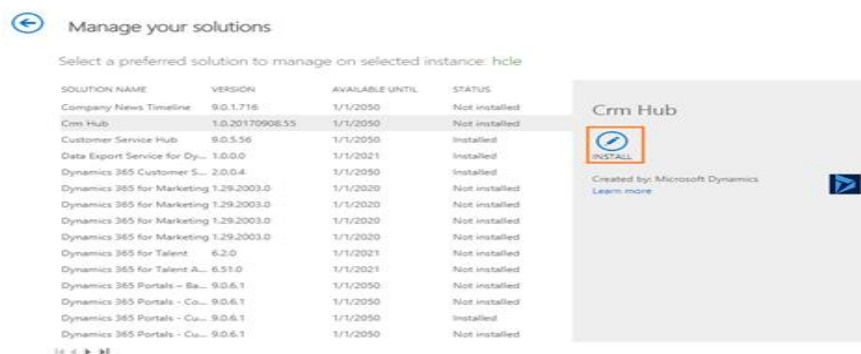


2. Click on 'Admin Center' and select 'Dynamics 365'.

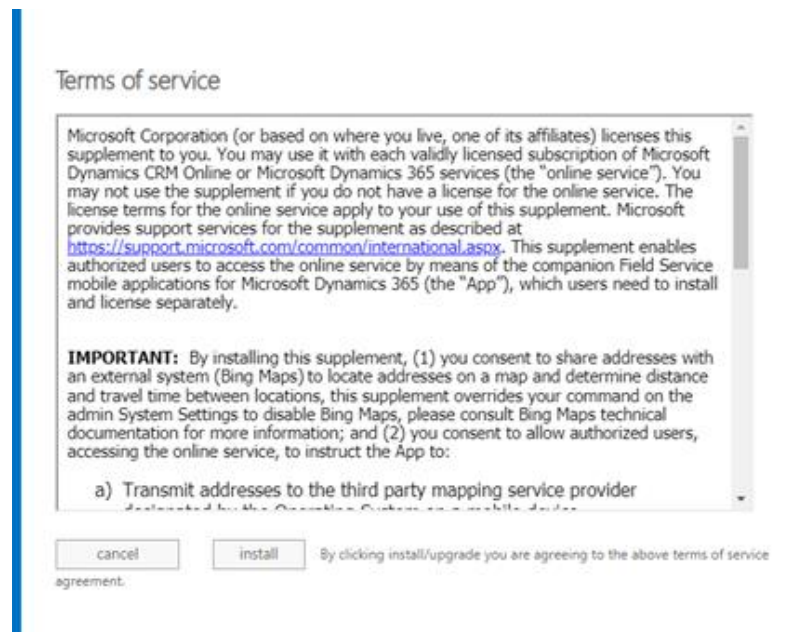


3. Select the instance (organization) for which you want to install 'CRM Hub' and click on the 'Edit' button, next to Solutions.

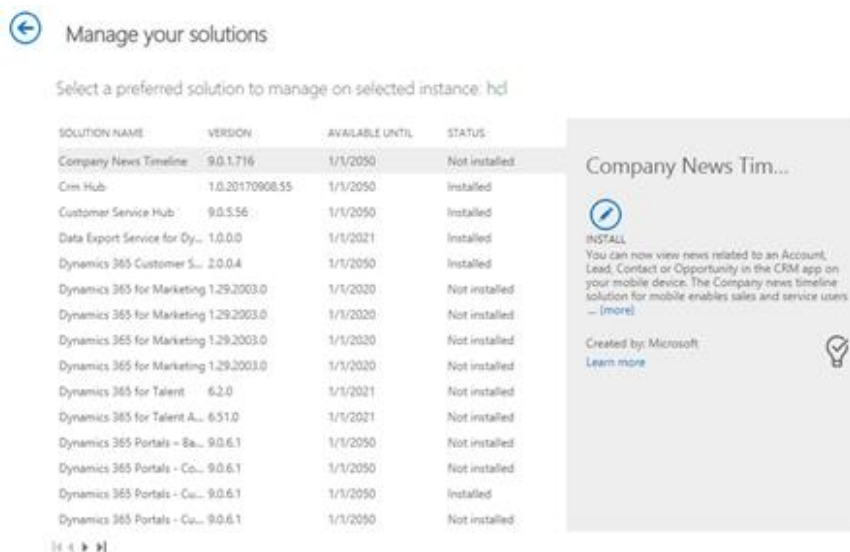
4. Select '**Crm Hub**' from the list and click on the '**Install**' button.



5. Click on 'Install' button in the pop-up.



6. The Status changes to 'Installed'.



7. Navigate to Dynamics 365 CRM Organization to verify and validate if the Managed solution for the "Crm Hub" is installed with the above steps.

All Solutions ▾

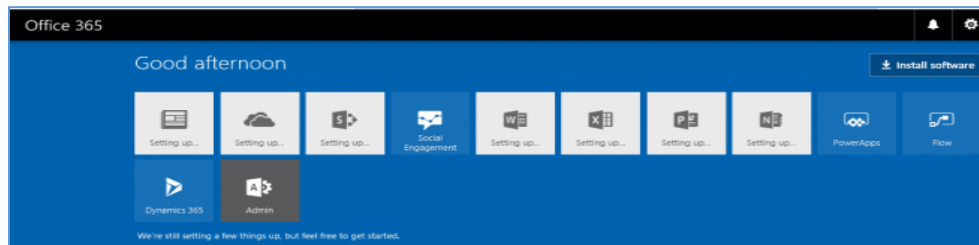
Search for records

Name	Display Name	Version	Installed On	Package T...	Publisher	Description
msdynce_CRMHub	Crm Hub	1.0.20170...	9/25/2018	Managed	Microsoft Dynamics	
MIMSAppSourceV2	IMS AppSource V2	1.0.0.0	9/25/2018	Managed	Default Publisher for MIMS	
TestSolution	TestSolution	1.0	9/14/2018	Unmanag...	Default Publisher for hcdff	
StarterPortal	Dynamics 365 Portals ...	9.0.6.1	9/13/2018	Managed	Microsoft	Portal capabilities that allow you to engage your...
BaseHtmlEditor_portal	Dynamics 365 Portals ...	1.1.1.1	9/13/2018	Managed	Microsoft Dynamics	This solution installs a html content designer in ...
PortalTimeline	Dynamics 365 Portals ...	8.4.0.3	9/13/2018	Managed	Microsoft	Portal Timeline extends Customer Service Portal ...
MicrosoftAzureStorage	Dynamics 365 Portals ...	8.3.0.0	9/13/2018	Managed	Microsoft	Includes web resource components that are use...
Feedback	Dynamics 365 Portals ...	8.3.0.1	9/13/2018	Managed	Microsoft	Extends portals by providing comments and rati...
MicrosoftWebForms	Dynamics 365 Portals ...	8.4.0.9	9/13/2018	Managed	Microsoft	Extends portals by exposing preconfigured or cu...
MicrosoftIdentityWork...	Dynamics 365 Portals ...	8.3.0.0	9/13/2018	Managed	Microsoft	Contains the workflow processes that are used b...
MicrosoftIdentitySyste...	Dynamics 365 Portals ...	8.3.0.0	9/13/2018	Managed	Microsoft	Contains the workflow processes that are used b...

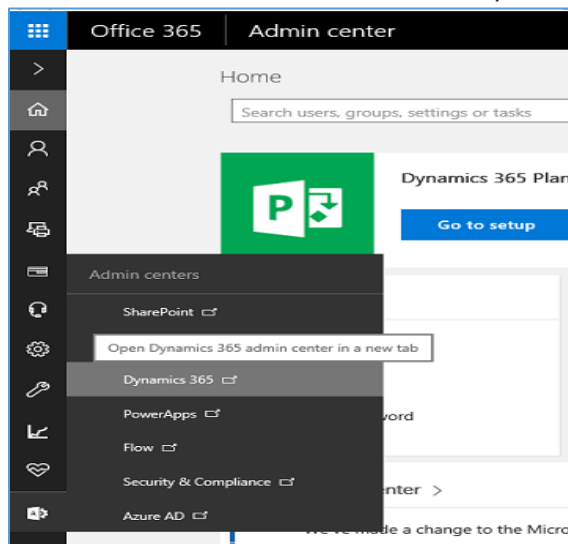
## 2.6 Portal Installation and Configuration

A portal is an independent running application that exposes specific CRM data and functionality to the respective users. It can be leveraged to model business processes that aren't easily modeled inside CRM or to provide a higher level of integration between your CRM and your clients. Users can range from full CRM users to external clients with minimal rights and access. Below is the step by step process to install and configure the portal:

1. Go to <https://portal.office.com/> and click on the '**Admin**' tile. User must be logged into the Office 365 Administrator account.



2. Click on 'Admin Center' and select 'Dynamics 365'.



3. Select the instance (organization) for which you want to install 'Custom Portal' and click on the 'Edit' button, next to Solutions.
4. Select 'Custom Portal' from the list and click on the 'Install' button.

**Manage your solutions**

Select a preferred solution to manage on selected instance: **CEWA-SMS**

SOLUTION NAME	VERSION	AVAILABLE UNTIL	STATUS
Community Portal	8.2.1.71	1/1/2050	Not installed
Company News Timeline	1.0.0.0	12/31/2050	Not installed
<b>Custom portal</b>	<b>8.2.1.71</b>	<b>1/1/2050</b>	<b>Not installed</b>
Customer Self-Service Portal	8.2.1.71	1/1/2050	Not installed
Dynamics 365 Customer Service Application	1.0.0.1	1/1/2050	Installed
Dynamics 365 Sales Application	1.0.0.1	1/1/2050	Installed
Employee Self-Service Portal	8.2.1.71	1/1/2050	Not installed
FantasySalesTeam	1.4.6	1/1/2050	Not installed
Field Service	6.1.2.90	1/1/2050	Not installed
Gamification	2017.2.0	1/1/2050	Not installed
Office 365 Groups	2.7.0.0	1/1/2050	Not installed
Partner Field Service	8.2.1.71	1/1/2050	Not installed
Partner Portal	8.2.1.71	1/1/2050	Not installed
Partner Project Service	8.2.1.71	1/1/2050	Not installed
Project Service Automation	1.1.2.45	1/1/2050	Not installed

**Custom portal**

**INSTALL**

Portal capabilities that allow you to engage your customers and external audiences. Includes profile management, configurable business components, rich web content publishing, and responsive ... [\(more\)](#)

Created by: Microsoft [Learn more](#)

5. Click on 'Install' button in the pop-up.

**Terms of service**

**PLEASE NOTE:** Microsoft Corporation (or based on where you reside, one of its affiliates) licenses this supplement to you. You may use it with each validly licensed subscription of Microsoft Dynamics 365 Online service (the "Online Service"). You may not use this supplement if you do not have a license for the Online Service. Microsoft provides support services for this supplement as described in the Service Level Agreement for Microsoft Online Services. Please note that "User Hours" are defined as users of the Online Service and not users of this supplement.

The license terms for the Online Service apply to your use of this supplement, except as follows:

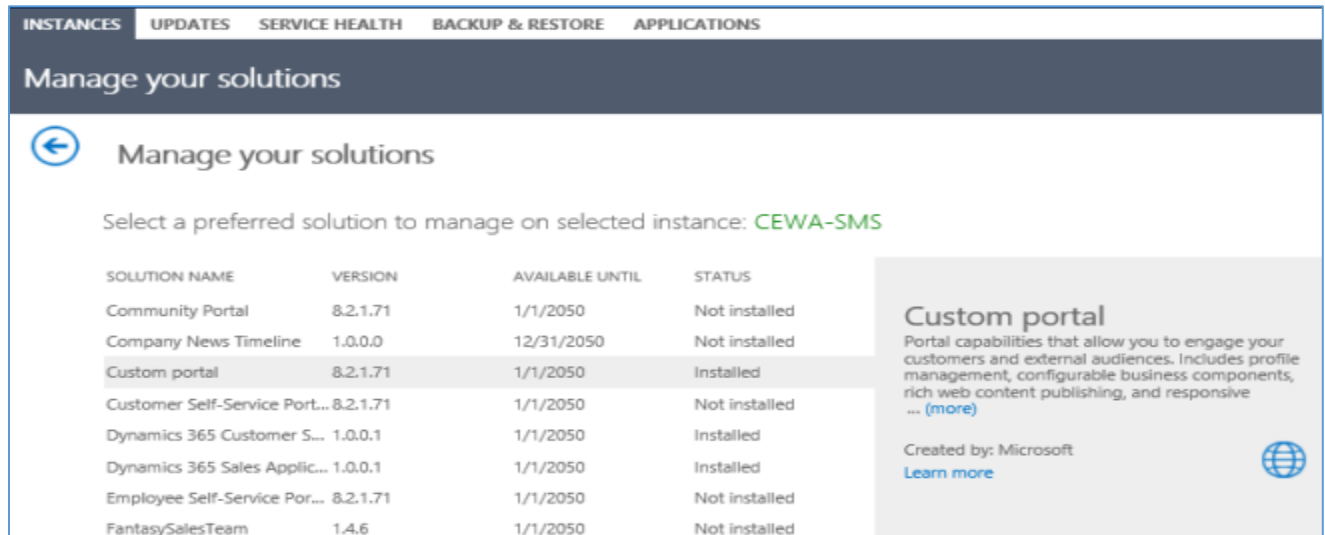
- Customer is explicitly prohibited from using the supplement to design and transmit promotional SMS messages either via the Twilio integration feature or as otherwise may be possible.

If you do not agree to these additional terms, do not install this supplement.

**IMPORTANT:** By installing this supplement, you consent to allow authorized users of Microsoft Dynamics 365 to configure and enable certain functionality, including but not limited to:

By clicking install/upgrade you are agreeing to the above terms of service agreement.

6. The Status changes to 'Installed'.



**INSTANCES** **UPDATES** **SERVICE HEALTH** **BACKUP & RESTORE** **APPLICATIONS**

## Manage your solutions

Select a preferred solution to manage on selected instance: **CEWA-SMS**

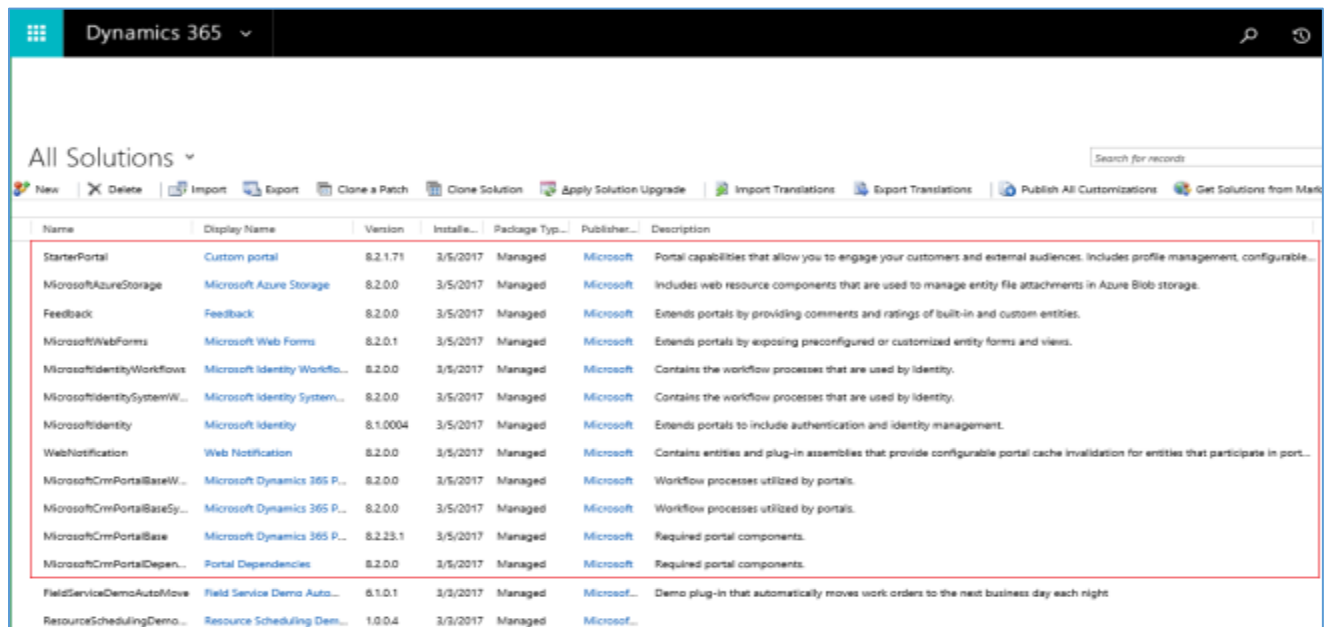
SOLUTION NAME	VERSION	AVAILABLE UNTIL	STATUS
Community Portal	8.2.1.71	1/1/2050	Not installed
Company News Timeline	1.0.0.0	12/31/2050	Not installed
Custom portal	8.2.1.71	1/1/2050	Installed
Customer Self-Service Port...	8.2.1.71	1/1/2050	Not installed
Dynamics 365 Customer S...	1.0.0.1	1/1/2050	Installed
Dynamics 365 Sales Applic...	1.0.0.1	1/1/2050	Installed
Employee Self-Service Por...	8.2.1.71	1/1/2050	Not installed
FantasySalesTeam	1.4.6	1/1/2050	Not installed

### Custom portal

Portal capabilities that allow you to engage your customers and external audiences. Includes profile management, configurable business components, rich web content publishing, and responsive ... [\(more\)](#)

Created by: Microsoft  
[Learn more](#)

7. Navigate to Dynamics 365 CRM Organization to verify and validate all the Managed solution for the Custom portal installed with the above steps.



**Dynamics 365**

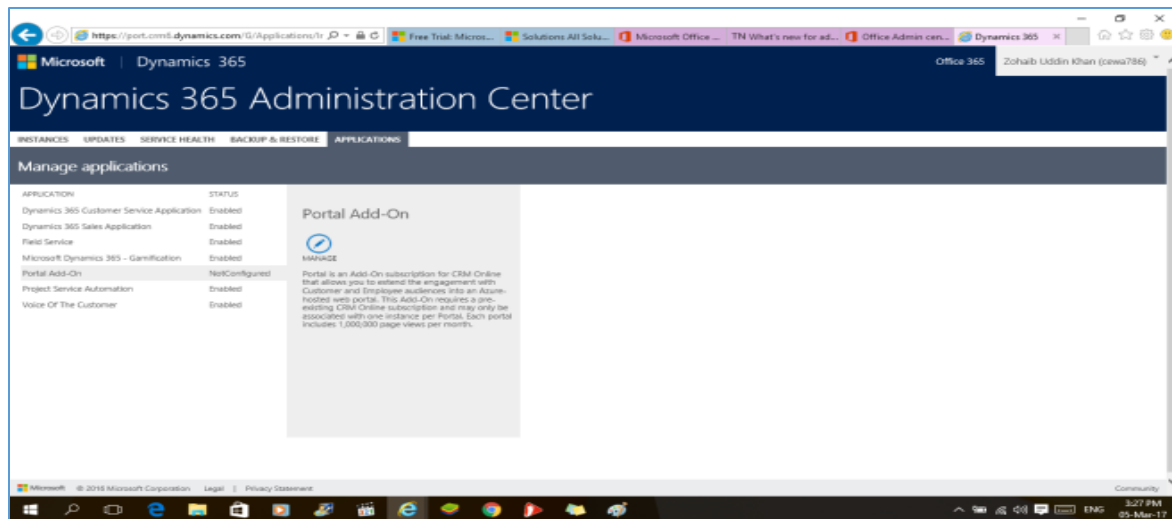
## All Solutions

Search for records

New Delete Import Export Clone a Patch Clone Solution Apply Solution Upgrade Import Translations Export Translations Publish All Customizations Get Solutions from Mark

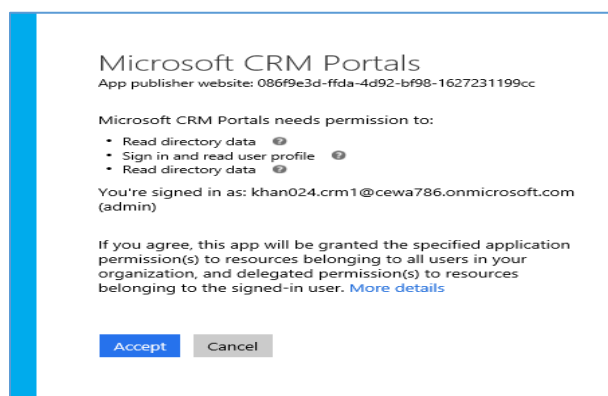
Name	Display Name	Version	Installe...	Package Typ...	Publisher...	Description
StarterPortal	Custom portal	8.2.1.71	3/5/2017	Managed	Microsoft	Portal capabilities that allow you to engage your customers and external audiences. Includes profile management, configurable...
MicrosoftAzureStorage	Microsoft Azure Storage	8.2.0.0	3/5/2017	Managed	Microsoft	Includes web resource components that are used to manage entity file attachments in Azure Blob storage.
Feedback	Feedback	8.2.0.0	3/5/2017	Managed	Microsoft	Extends portals by providing comments and ratings of built-in and custom entities.
MicrosoftWebForms	Microsoft Web Forms	8.2.0.1	3/5/2017	Managed	Microsoft	Extends portals by exposing preconfigured or customized entity forms and views.
MicrosoftIdentityWorkflows	Microsoft Identity Workflows	8.2.0.0	3/5/2017	Managed	Microsoft	Contains the workflow processes that are used by Identity.
MicrosoftIdentitySystemW...	Microsoft Identity System...	8.2.0.0	3/5/2017	Managed	Microsoft	Contains the workflow processes that are used by Identity.
MicrosoftIdentity	Microsoft Identity	8.1.0004	3/5/2017	Managed	Microsoft	Extends portals to include authentication and identity management.
WebNotification	Web Notification	8.2.0.0	3/5/2017	Managed	Microsoft	Contains entities and plug-in assemblies that provide configurable portal cache invalidation for entities that participate in port...
MicrosoftCrmPortalBaseW...	Microsoft Dynamics 365 P...	8.2.0.0	3/5/2017	Managed	Microsoft	Workflow processes utilized by portals.
MicrosoftCrmPortalBaseSy...	Microsoft Dynamics 365 P...	8.2.0.0	3/5/2017	Managed	Microsoft	Workflow processes utilized by portals.
MicrosoftCrmPortalBase	Microsoft Dynamics 365 P...	8.2.23.1	3/5/2017	Managed	Microsoft	Required portal components.
MicrosoftCrmPortalDepen...	Portal Dependencies	8.2.0.0	3/5/2017	Managed	Microsoft	Required portal components.
FieldServiceDemoAutoMove	Field Service Demo Auto...	6.1.0.1	3/3/2017	Managed	Microsoft...	Demo plug-in that automatically moves work orders to the next business day each night
ResourceSchedulingDemo...	Resource Scheduling Dem...	1.0.0.4	3/3/2017	Managed	Microsoft...	

8. Access the website <https://portal.office.com>, select 'Admin Center' and 'Dynamics 365' and click on 'Application' tab.

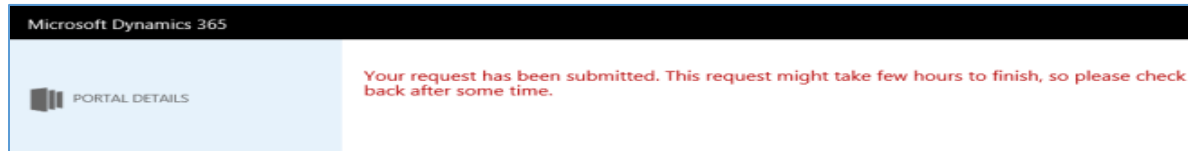


9. On the 'Configure your Portal', enter the necessary information. Enter the below details:
  - a. Name, URL for the portal
  - b. **Portal Audience:** Customer
  - c. **Portal Binding:** Custom

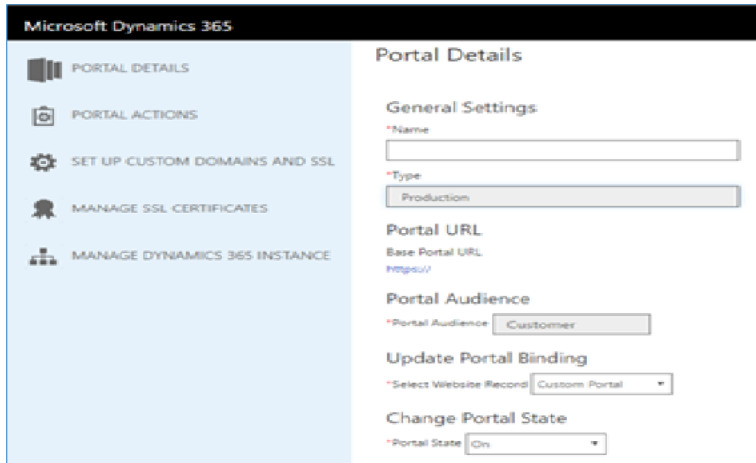
10. Click on 'Accept' in the Permissions pop up for Dynamics 365 Portal.



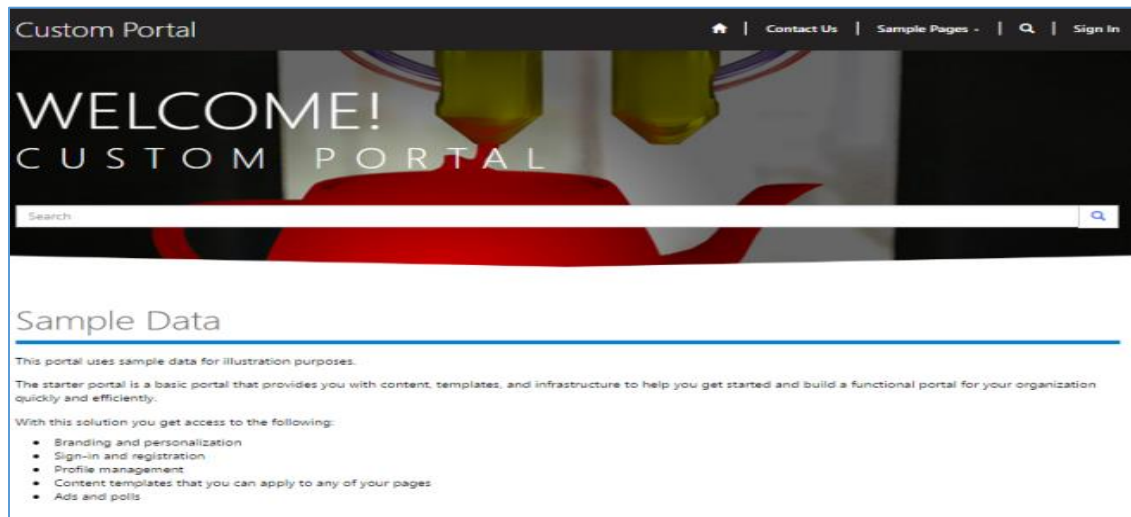
11. Navigate to 'Portal Details'. As appearing in the below message, it might take time to configure the portal, check back in some time and the 'Custom Portal' will be ready for use.



12. Once the portal set up is complete the page will display the below set of options.



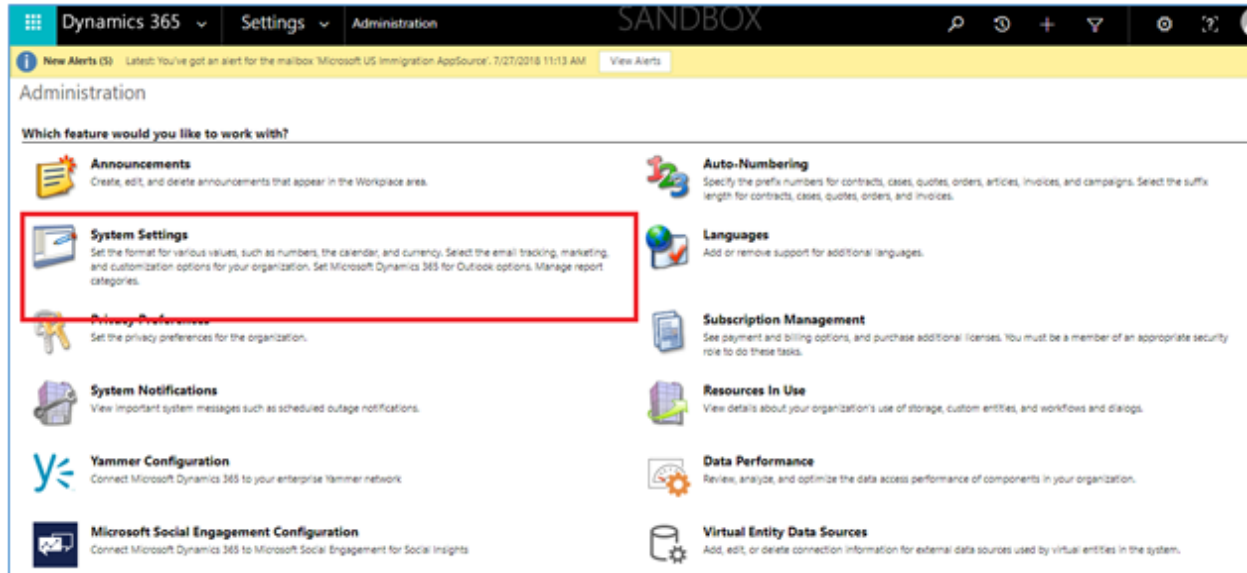
13. Click on the 'Base Portal URL', a new window will open and the Dynamics 365 Custom Portal is ready for Branding.



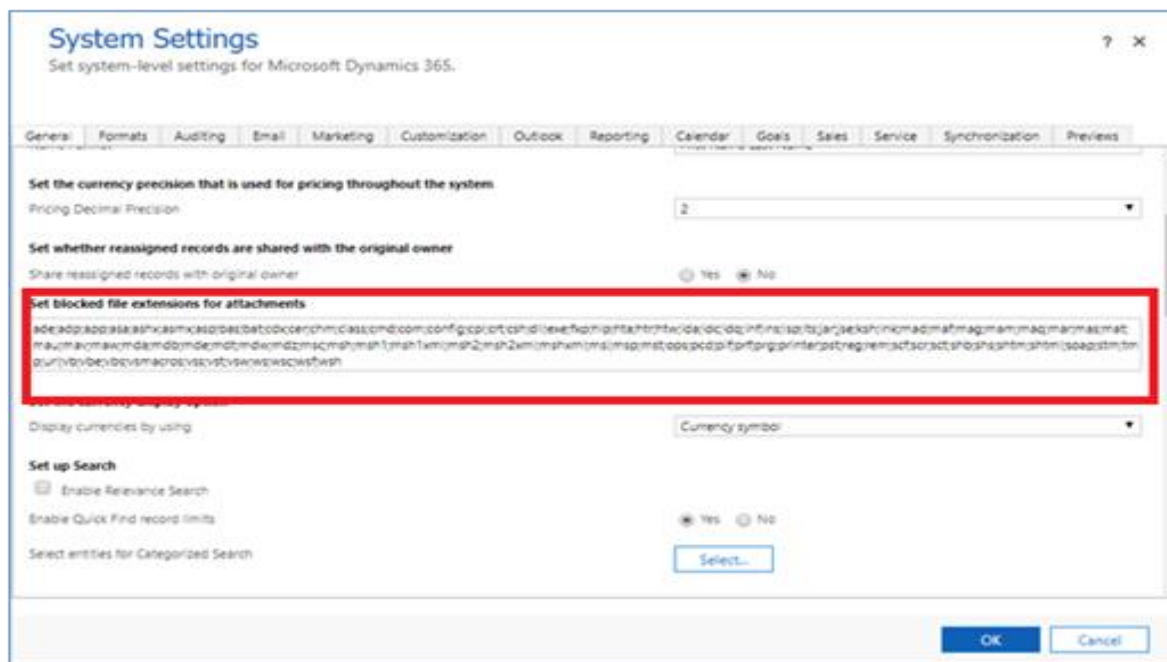


## 2.7 System Settings

As a part of deployment process, the following changes are required in the general tab of system setting. To access system settings, navigate to Setting -> Administration -> System Settings:



Navigate to general tab -> Set blocked extensions for attachments. Remove JS from the extensions.



## 2.10 Azure Setup

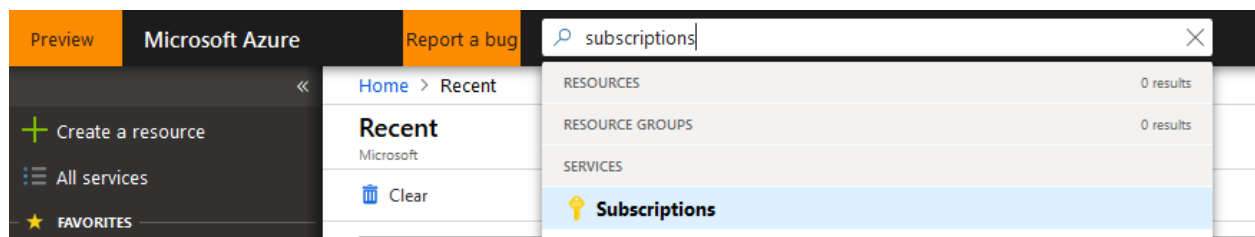
Use the below link to get more information about the azure subscription

<https://azure.microsoft.com/en-in/features/azure-portal/>

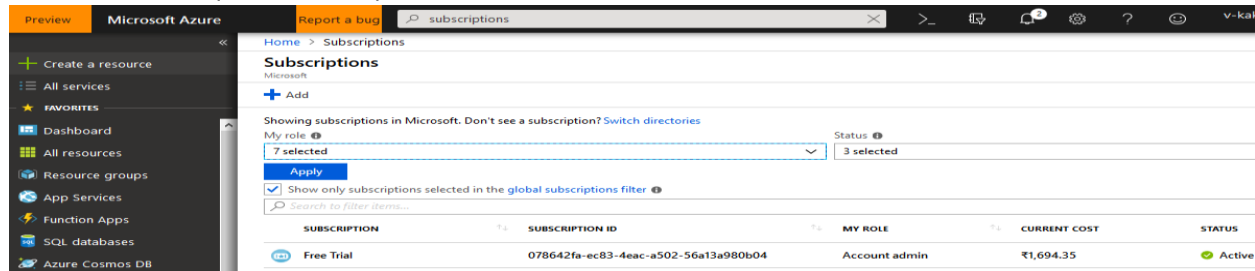
- Login to azure portal using <https://portal.azure.com>
- Sign-In to portal using service admin/co-admin role

### How to get the Subscription Id ?

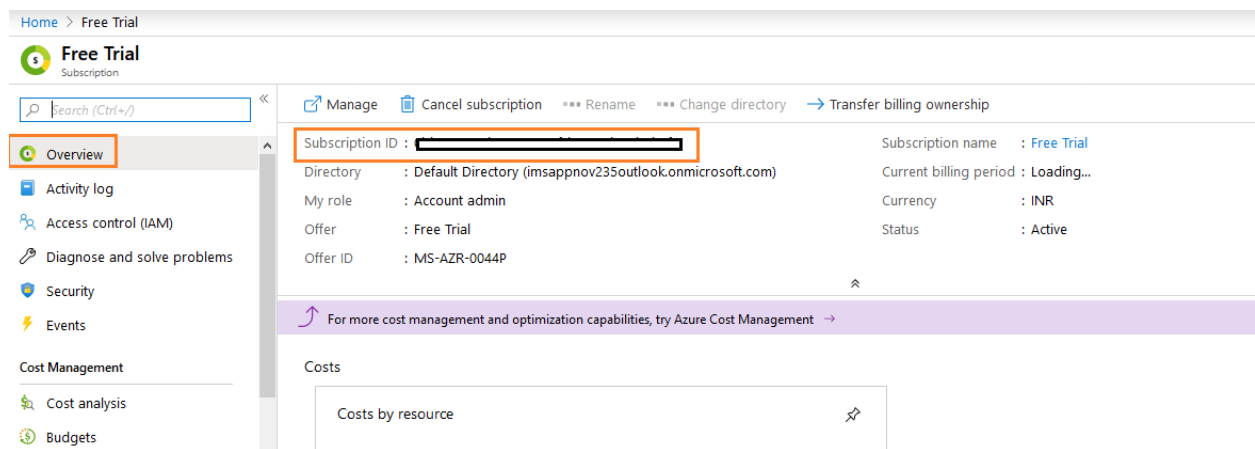
- Search for Subscriptions like showing below .



- Select the required subscription from the list below



- On click of the subscription, in the overview we can find the subscription id



## How To find the Resource Group ?

- Click on Subscription name and select ResourceGroups from left navigation links.
- If there are no resourcegroup, a new resourcegroup will be created while doing azure deployment.

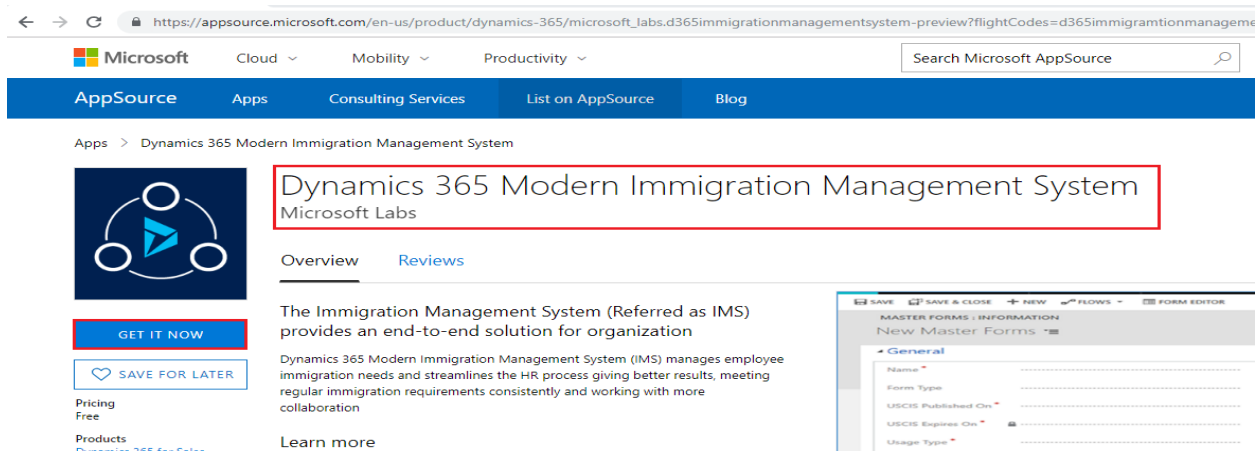
## 3. Install IMS App Package

**Alert: This solution import may impact any of the existing CRM functionalities already there in the system. It is advised to do this on New/Vanilla instance of CRM.**

- Go through the below link and click on “GET IT NOW” as shown below  
[https://appsource.microsoft.com/en-us/product/dynamics-365/microsoft\\_labs.d365immigrationmanagementsystem?tab=Overview](https://appsource.microsoft.com/en-us/product/dynamics-365/microsoft_labs.d365immigrationmanagementsystem?tab=Overview)

Or

- Open Microsoft appsource and search for “Dynamics 365 Modern Immigration Management System”.



- On Click on “GET IT NOW” shows below image

One more thing ...



## Dynamics 365 Modern Immigration Management System

By Microsoft Labs

This app requires some basic profile information. You have provided the information already so you're good to go! [Edit](#)

- ☒ I give Microsoft permission to use or share my [account information](#) so that the provider or Microsoft can contact me regarding this product and related products. I agree to the provider's [terms of use](#) and [privacy policy](#) and understand that the rights to use this product do not come from Microsoft, unless Microsoft is the provider. Use of AppSource is governed by separate [terms](#) and [privacy](#).

You're signed in as test testapp (test@.onmicrosoft.com).

Continue

- Select the check box to agree the Microsoft terms and privacy policy , Also validate the organization username on which crm you are going to install the IMS App and Click on Continue will install the IMS App in your CRM as shown below.

The screenshot shows the Dynamics 365 interface with the 'Solutions' tab selected. A table lists installed solutions. The first row, 'IMSAppSource', is highlighted with a red box. Below it, other solutions like 'VoiceOfTheCustomer', 'StarterPortal', and 'BaseHtmlEditor\_portal' are listed.

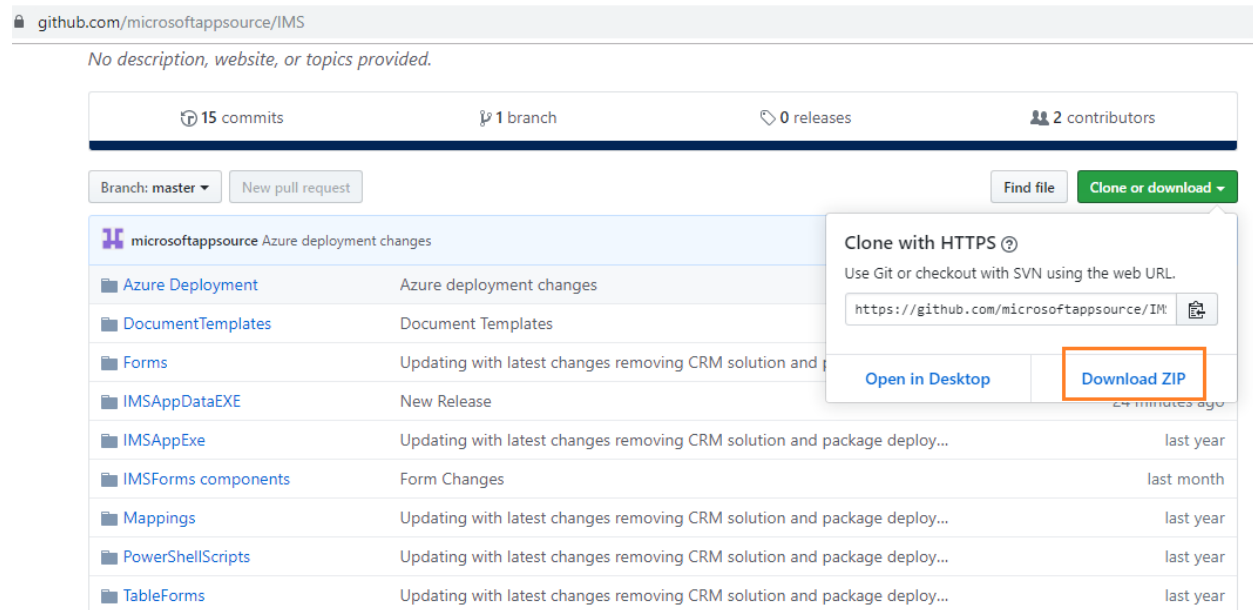
Name	Display Name	Version	Installed On	Package T...	Publisher	Description
IMSAppSource	IMSAppSource	1.0.0.0	10/15/2018	Managed	Default Publisher for IMS	
<input type="checkbox"/> VoiceOfTheCustomer	Voice of the Customer...	9.0.1162.11	10/15/2018	Managed	Microsoft Dynamics 365	With Voice of the Customer for Microsoft Dyna...
StarterPortal	Dynamics 365 Portals ...	9.0.6.1	10/14/2018	Managed	Microsoft	Portal capabilities that allow you to engage your...
BaseHtmlEditor_portal	Dynamics 365 Portals ...	1.1.1.1	10/14/2018	Managed	Microsoft Dynamics 365	This solution installs a html content designer in ...
PortalTimeline	Dynamics 365 Portals ...	8.4.0.3	10/14/2018	Managed	Microsoft	Portal Timeline extends Customer Service Portal ...
MicrosoftAzureStorage	Dynamics 365 Portals ...	8.3.0.0	10/14/2018	Managed	Microsoft	Includes web resource components that are use...
Feedback	Dynamics 365 Portals ...	8.3.0.1	10/14/2018	Managed	Microsoft	Extends portals by providing comments and rati...
MicrosoftWebForms	Dynamics 365 Portals ...	8.4.0.9	10/14/2018	Managed	Microsoft	Extends portals by exposing preconfigured or cu...

- Solution import will take time from 60 – 90 minutes. Check if the below two solutions are installed:
  - IMSAPPSOURCE
  - IMSFORMSSOLUTION
- If only IMSAPPSOURCE solution is installed, Re-install the IMS App Package from the AppSource from the same link mentioned above.
- Once both the solutions are imported and available in solutions, Run the data executable available in GITHUB. **Only New customers who are installing the IMS application for the first time need to run this data executable. Customers who are upgrading the solution, should not run this.**

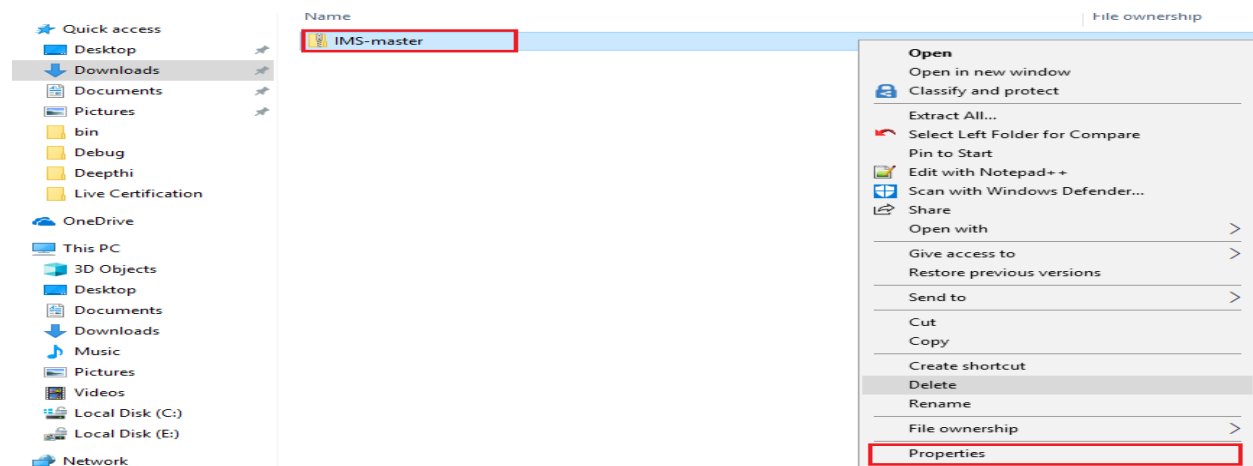
**Note: If existing customers, who already have installed the data run this data executable application, all the data will be Reset.**

### 3.1. Download IMS-Master Components from Git-Hub

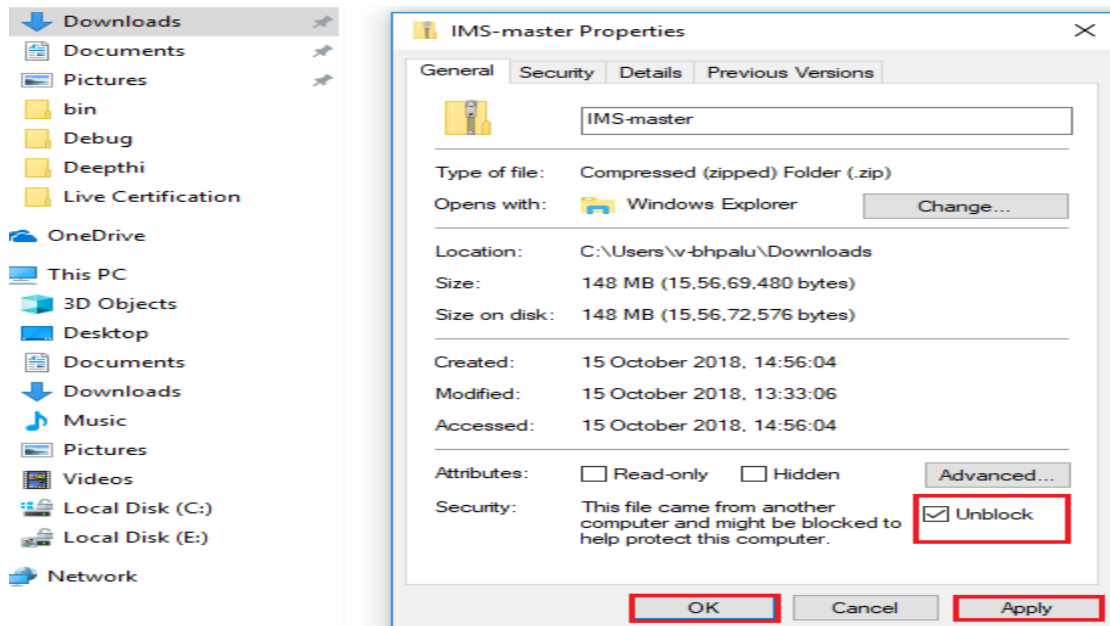
- Go through the below link  
<https://github.com/microsoftappsource/IMS>
- Download the components as shown below



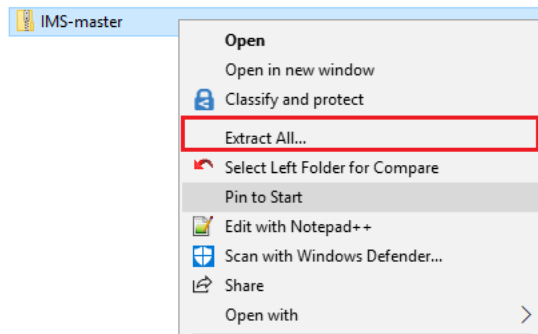
- Unblock the zip file which you downloaded from github as shown below
- Navigate to Zip File -> Properties



- Click on Properties and check the unblock checkbox and click on "Ok" as shown below



- Extract the folder which contains all the IMS App Components



- Run the data executable console application i.e. IMSAppDataExecutable folder provided in the GitHub (<https://github.com/microsoftappsource/IMS/tree/master/IMSAppDataEXE> ), which will do the data import upsert operation.

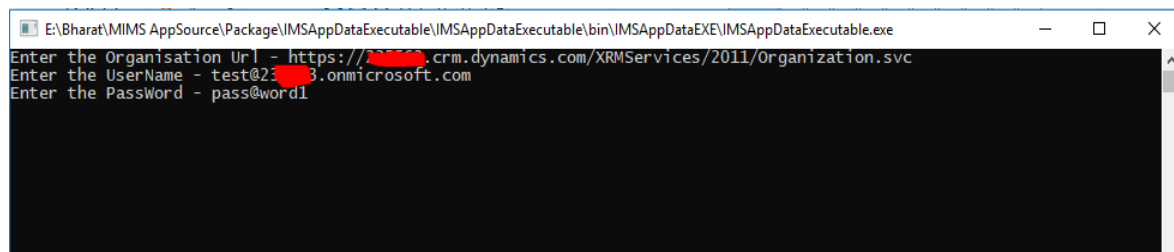
Navigate to Downloaded "IMS-master" Folder -> IMSAppDataExe

View

C > Downloads > IMS-master > IMS-master > IMSAppDataEXE

Name	File ownership	Date modified	Type	Size
IMSAppDataExecutable		15-10-2018 00:49	Application	22 KB
IMSAppDataExecutable.exe		15-10-2018 00:49	XML Configuratio...	1 KB
IMSAppDataExecutable.pdb		15-10-2018 00:49	Program Debug D...	28 KB
IMSAppDataExecutable.vshost		15-10-2018 00:49	Application	23 KB
IMSAppDataExecutable.vshost.exe		15-10-2018 00:49	XML Configuratio...	1 KB
MasterData		15-10-2018 00:49	XML File	14,158 KB
MasterDataUpdate		15-10-2018 00:49	File	46 KB
Microsoft.Azure.KeyVault.Core.dll		15-10-2018 00:49	Application extens	14 KB
Microsoft.Azure.KeyVault.Core		15-10-2018 00:49	XML File	7 KB
Microsoft.Crm.Sdk.Proxy.dll		15-10-2018 00:49	Application extens	274 KB
Microsoft.IdentityModel.Clients.ActiveDi...		15-10-2018 00:49	Application extens	187 KB
Microsoft.IdentityModel.Clients.ActiveDi...		15-10-2018 00:49	Application extens	50 KB
Microsoft.Xrm.Sdk.Deployment.dll		15-10-2018 00:49	Application extens	91 KB
Microsoft.Xrm.Sdk.dll		15-10-2018 00:49	Application extens	519 KB
Microsoft.Xrm.Tooling.Connector.dll		15-10-2018 00:49	Application extens	211 KB

- Open the “IMSAppDataExecutable” Application shown in above image will run the application as shown below.



- Enter the Organization Service URL, UserName and PassWord of CRM

### Organization URL

Navigate to CRM -> Settings -> Customizations -> Developer Resources

**Dynamics 365** Settings Customizations

Apps for Dynamics 365 View Dynamics 365 information on the go with apps for your phone, tablet, Outlook, and more! Get Apps for Dynamics 365

### Developer Resources

**Getting Started**

Developer Center Developer Forums SDK NuGet Packages

SDK Download Sample Code Developer Overview

**Connect your apps to this instance of Dynamics 365**

**Instance Web API**  
HTTP REST API providing access to this instance of Dynamics 365. For more information see [Microsoft Dynamics 365 Web API](#).

Service Root URL [https://\[redacted\].api.crm.dynamics.com/api/data/v9.0/](https://[redacted].api.crm.dynamics.com/api/data/v9.0/)

[Download OData Metadata](#)

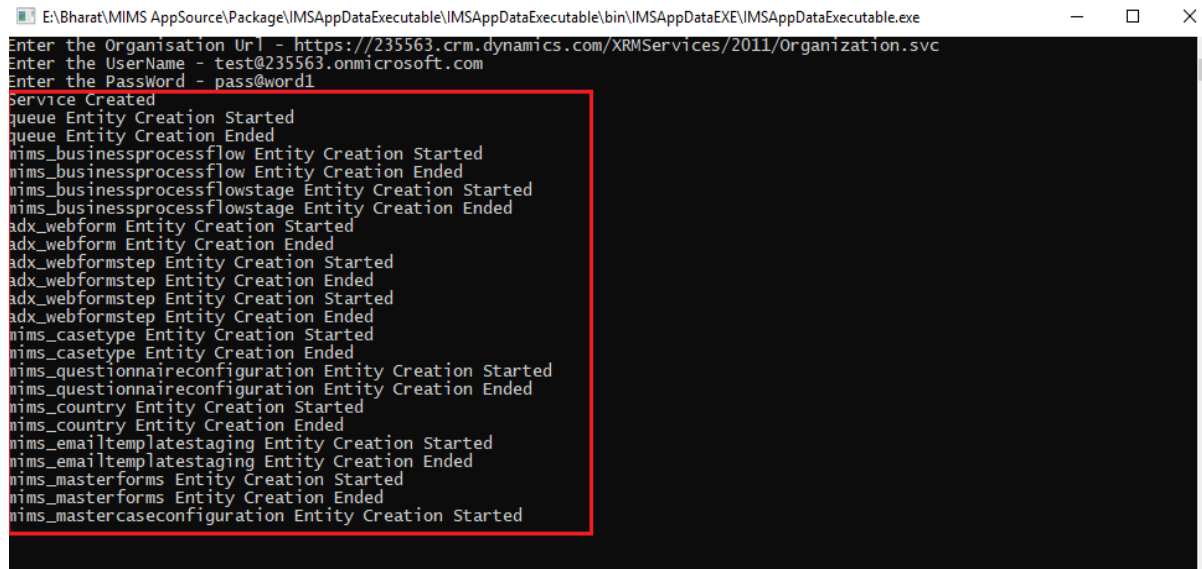
**Instance Reference Information**  
Use this information to uniquely identify this instance of Dynamics 365. You can use this to retrieve the

**Organization Service**  
SOAP Service providing access to this instance of Dynamics 365. For more information see [Use the IOrganizationService web service to read and write data or metadata](#).

Endpoint Address [https://\[redacted\].api.crm.dynamics.com/XRMServices/2011/Organization.svc](https://[redacted].api.crm.dynamics.com/XRMServices/2011/Organization.svc)

[Download WSDL](#)

Creating the records In CRM as shown below and closes the application once the records are created in CRM



```
E:\Bharat\MIMS AppSource\Package\IMSAppDataExecutable\IMSAppDataExecutable\bin\IMSAppDataEXE\IMSAppDataExecutable.exe
Enter the Organisation Url - https://235563.crm.dynamics.com/XRMServices/2011/Organization.svc
Enter the UserName - test@235563.onmicrosoft.com
Enter the Password - pass@word1
Service Created
queue Entity Creation Started
queue Entity Creation Ended
nims_businessprocessflow Entity Creation Started
nims_businessprocessflow Entity Creation Ended
nims_businessprocessflowstage Entity Creation Started
nims_businessprocessflowstage Entity Creation Ended
adx_webform Entity Creation Started
adx_webform Entity Creation Ended
adx_webformstep Entity Creation Started
adx_webformstep Entity Creation Ended
adx_webformstep Entity Creation Started
adx_webformstep Entity Creation Ended
nims_casetype Entity Creation Started
nims_casetype Entity Creation Ended
nims_questionnaireconfiguration Entity Creation Started
nims_questionnaireconfiguration Entity Creation Ended
nims_country Entity Creation Started
nims_country Entity Creation Ended
nims_emailtemplatestaging Entity Creation Started
nims_emailtemplatestaging Entity Creation Ended
nims_masterforms Entity Creation Started
nims_masterforms Entity Creation Ended
nims_mastercaseconfiguration Entity Creation Started
```

Below are the entities for which data will be installed. Check in CRM if records are created for the below entities.

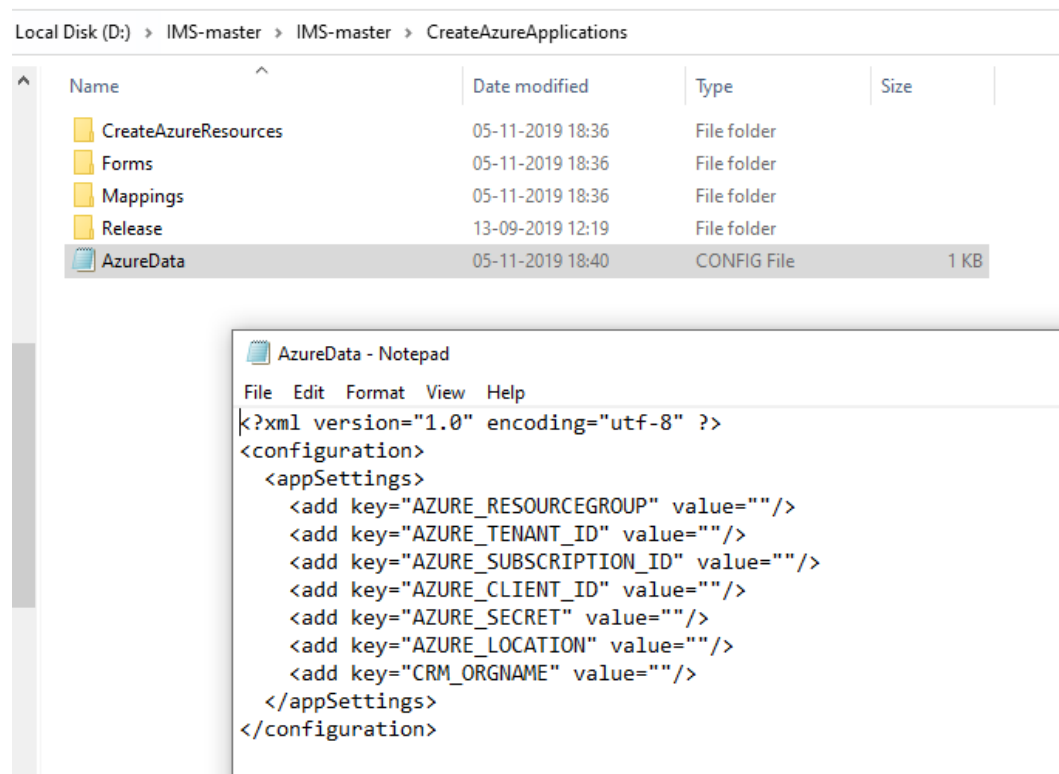
1. Queue
2. Business Process Flows
3. Business Process Flow Stages
4. Web Form
5. Web Form Step
6. Case Type
7. Questionnaire Configuration
8. Country
9. Email Template Staging
10. Master Forms
11. Master Case Configuration
12. Configuration Steps for Questionnaire
13. Business Unit
14. Category
15. Master Documents
16. Master Letters
17. Master Steps
18. Case Steps Config
19. Case Tabs Config
20. Configuration
21. Integrations Config
22. Master Attorney Configuration
23. US Embassy
24. Task Categories



- 25. Tags
- 26. Entity Form
- 27. Entity List
- 28. Web Template
- 29. Page Template
- 30. Web Page
- 31. Web File
- 32. Note
- 33. Site Marker
- 34. Site Setting
- 35. Content Snippet
- 36. Web Role
- 37. Entity Permission
- 38. Web Form Metadata
- 39. Entity Form Metadata
- 40. Team
- 41. Documents Config
- 42. Stage Queue Mapping

## 4. Download IMS App Azure Components

- Navigate to IMS-master→ Azure Deployment→Create Azure Applications
- Open the"CreateAzureApplications" and find the "AzureData.xml" File and Open as shown below.



Enter the ResourceGroup , SubscriptionId and Organization UniqueName.

- The steps to get the Subscription Id are mentioned in 2.10 Azure Setup.

## 4.1 Create Azure Applications



\*AzureData - Notepad

File Edit Format View Help

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
  <appSettings>
    <add key="AZURE_RESOURCEGROUP" value=""/>
    <add key="AZURE_TENANT_ID" value=""/>
    <add key="AZURE_SUBSCRIPTION_ID" value=""/>
    <add key="AZURE_CLIENT_ID" value=""/>
    <add key="AZURE_SECRET" value=""/>
    <add key="AZURE_LOCATION" value=""/>
    <add key="CRM_ORGNAME" value=""/>
  </appSettings>
</configuration>
```

### a. AZURE\_RESOURCEGROUP

If you have any specific resourcegroup in which you want to create the azure applications, give the resource group name in the AzureData file or **else leave it blank**. If you leave the resource group as blank, a new resource group named “**IMSAppResourceGroup**” will be created.

We need to fill the rest of the parameters in this file.

### b. AZURE\_LOCATION

Provide the location in which you want the azure resources to get created. E.g. “eastus”, “westus”

### c. CRM\_ORGNAME

In CRM, navigate to Settings -> Customizations -> Developer resources as shown below and copy down the Unique name.

**Dynamics 365** ▾ **Settings** ▾ Customizations 🔍 ↺ + ▾

**Apps for Dynamics 365** View Dynamics 365 information on the go with apps for your phone, tablet, Outlook, and more! [Get Apps for Dynamics 365](#)

## Developer Resources

### Getting Started

[Developer Center](#) [Developer Forums](#) [SDK NuGet Packages](#)

[SDK Download](#) [Sample Code](#) [Developer Overview](#)

### Connect your apps to this instance of Dynamics 365

#### Instance Web API

HTTP REST API providing access to this instance of Dynamics 365. For more information see [Microsoft Dynamics 365 Web API](#).

Service Root URL

[Download OData Metadata](#)

#### Organization Service

SOAP Service providing access to this instance of Dynamics 365. For more information see [Use the IOrganizationService web service to read and write data or metadata](#).

Endpoint Address

[Download WSDL](#)

#### Instance Reference Information

Use this information to uniquely identify this instance of Dynamics 365. You can use this to retrieve the current URL for this instance. For more information see [Azure extensions for Microsoft Dynamics 365](#).

ID

Unique Name

#### d. AZURE\_TENANT\_ID and AZURE\_CLIENT\_ID

To fill the remaining values, we need to create an App registration in azure active directory. Navigate to azure portal and click on azure active directory as shown below:

[+ Create a resource](#)  
[Home](#)  
[Dashboard](#)  
[All services](#)  
[FAVORITES](#)  
[All resources](#)  
[Resource groups](#)  
[Quickstart Center](#)  
[App Services](#)  
[Function App](#)  
[SQL databases](#)  
[Azure Cosmos DB](#)  
[Virtual machines](#)  
[Load balancers](#)  
[Storage accounts](#)  
[Virtual networks](#)  
[Azure Active Directory](#)

### Resources

NAME	TYPE
Free Trial	Subscription
ImsAppKeyVaultsg123	Key vault
IMSAppPrintAllgh123	App Service
SAP_ResourceGroup	Resource group
IMSAppServicePlan	App Service plan
IMSAppBindergh123	App Service
Defaultt1ua	App Service plan
CSSTest	Key vault
sapSecureData	Key vault

Open App Registrations and click on “New registration”.

Home > Default Directory - App registrations

## Default Directory - App registrations

Azure Active Directory

Search (Ctrl+/)

+ New registration Endpoints Troubleshooting Got feedback?

Welcome to the new and improved App registrations (now Generally Available). See what's new →

Looking to learn how it's changed from App registrations (Legacy)? [Learn more](#)  
Still want to use App registrations (Legacy)? [Go back and tell us why](#)

All applications Owned applications Applications from personal account

We didn't find your item. Try searching in All Applications.  
[View all applications in the directory](#)

Overview  
Getting started  
Manage  
Users  
Groups  
Organizational relationships  
Roles and administrators  
Enterprise applications  
Devices  
App registrations  
Identity Governance

Provide the name as “**CreateAzureApps**” and give any test URL in RedirectURI. Click on Register.

### Register an application

The user-facing display name for this application (this can be changed later).

CreateAzureApps ✓

#### Supported account types

Who can use this application or access this API?

☒ Accounts in this organizational directory only (Default Directory only - Single tenant)  
☐ Accounts in any organizational directory (Any Azure AD directory - Multitenant)  
☐ Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)

[Help me choose...](#)

#### Redirect URI (optional)

We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios.

Web https://testuri.com ✓

By proceeding, you agree to the [Microsoft Platform Policies](#)

[Register](#)

A new App registration will be created with the given name as shown below. Navigate to “**Overview**” where you can find Client ID and Tenant ID. Provide these IDs in the AzureData file.

Home > Default Directory - App registrations > CreateAzureApps

### CreateAzureApps

Search (Ctrl+/)

- Overview
- Quickstart
- Manage
  - Branding
  - Authentication
  - Certificates & secrets
  - API permissions

Delete Endpoints

Got a second? We would love your feedback on Microsoft identity platform (previously Azure)

Display name : CreateAzureApps

Application (client) ID : 63826d9d-f025-4c56-bb3f-fcbdf338f4e2

Directory (tenant) ID : a3528edd-2358-48cf-afe0-229e3b9f08c3

Object ID : 8e301b24-6ef6-42a5-8285-08b82242b9a4

Welcome to the new and improved App registrations. Looking to learn how it's changed from

#### e. AZURE\_SECRET

For the Client secret parameter, Open **Certificates & secrets** for the app registration. Click on **New client Secret**.

Home > Default Directory - App registrations > CreateAzureApps - Certificates & secrets

### CreateAzureApps - Certificates & secrets

Search (Ctrl+/)

- Overview
- Quickstart
- Manage
  - Branding
  - Authentication
  - Certificates & secrets
  - API permissions
  - Expose an API
  - Owners
  - Roles and administrators (Prev...
  - Manifest
- Support + Troubleshooting

Credentials enable applications to identify themselves to the authentication service when receiving tokens at a web addressable location (us higher level of assurance, we recommend using a certificate (instead of a client secret) as a credential.

#### Certificates

Certificates can be used as secrets to prove the application's identity when requesting a token. Also can be referred to as public keys.

Upload certificate

No certificates have been added for this application.

Thumbprint	Start Date	Expires
------------	------------	---------

#### Client secrets

A secret string that the application uses to prove its identity when requesting a token. Also can be referred to as application password.

New client secret

Description	Expires	Value
-------------	---------	-------

Give a name for the client secret and select as expires **Never**. Add this secret.

## Add a client secret

### Description

testsecret1

### Expires

- ☐ In 1 year
- ☐ In 2 years
- ☒ Never

Add

Cancel

Client secrets

Copy the Value for the secret and give it in the client secret parameter.

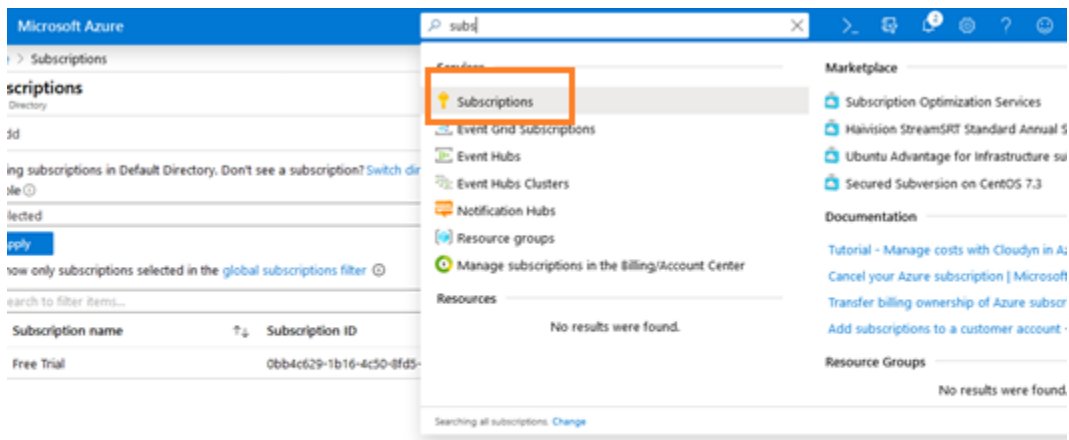
## Client secrets

A secret string that the application uses to prove its identity when requesting a token. Also can be referred to as application password.

+ New client secret

Description	Expires	Value
testsecret1	12/31/2299	ulvD=0PdnNThPUV:s4@K67mrciBjqpV: 

Search for “subscriptions” in the azure portal. It will open up the list of active subscriptions. Select the required active subscription.



## f. AZURE\_SUBSCRIPTION\_ID

Copy the subscription ID and fill it in the PreInformationData file.

Home > Subscriptions

## Subscriptions

Default Directory

+ Add

Showing subscriptions in Default Directory. Don't see a subscription?[Switch directories](#)

My role ⓘ

8 selected

▼



Status ⓘ

3 selected

Apply

☒ Show only subscriptions selected in the [global subscriptions filter](#) ⓘ

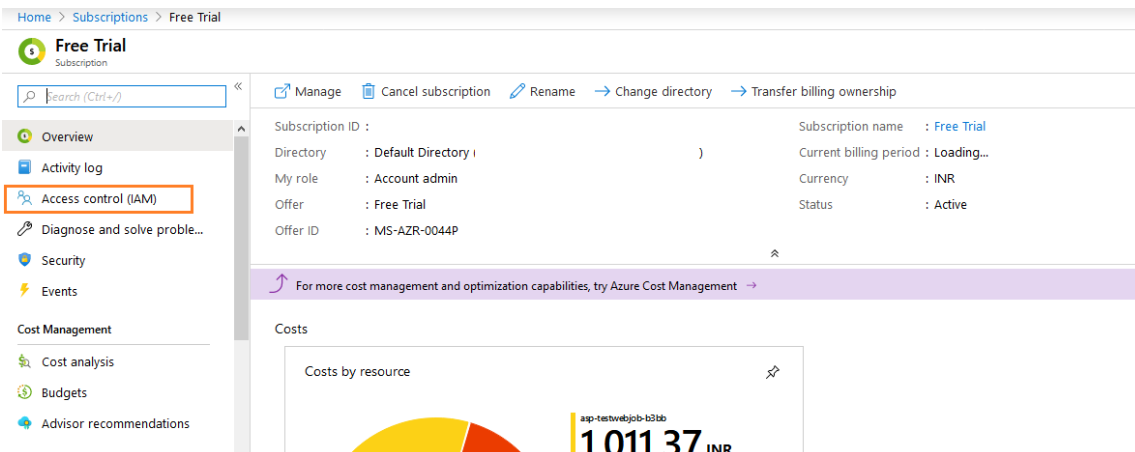
🔍 Search to filter items...

Subscription name	↑↓	Subscription ID	↑↓	My role	↑↓	Current cost	Status
 Free Trial		<div></div>		Account admin		₹1,858.38	 Active

After filling all the data in the AzureData file, we need to do some configurations in azure portal.

Navigate to Subscriptions and open the active subscription record in the azure and open “**Access control (IAM)**” as shown below.

## g. Assigning Permissions For The App Registrations To Create Azure Resources



Home > Subscriptions > Free Trial

**Free Trial**  
Subscription

Search (Ctrl+ /)

Overview  
Activity log  
**Access control (IAM)**  
Diagnose and solve problem...  
Security  
Events  
Cost Management  
Cost analysis  
Budgets  
Advisor recommendations

Manage Cancel subscription Rename Change directory Transfer billing ownership

Subscription ID :  
Directory : Default Directory  
My role : Account admin  
Offer : Free Trial  
Offer ID : MS-AZR-0044P

Subscription name : Free Trial  
Current billing period : Loading...  
Currency : INR  
Status : Active

For more cost management and optimization capabilities, try Azure Cost Management →

Costs

Costs by resource

asp-testwebjob-b3bb  
1,011.37 INR

Open Role assignments and click on “+Add” to create a new role assignment.

Home > Subscriptions > Free Trial - Access control (IAM)

## Free Trial - Access control (IAM)

Subscription

Search (Ctrl+/)

+ Add Edit columns Refresh Remove Got feedback?

Check access **Role assignments** Deny assignments Classic administrators Roles

Manage access to Azure resources for users, groups, service principals and managed identities at this scope by creating role assignments. [Learn more](#)

Name Type Role Scope

Search by name or email All Contributor All scopes

Group by

Role

1 items (1 Service Principals)

Name	Type	Role	Scope
Loading...			

Give "Contributor" role and in select box **select the app registration** that you have created.

Home > Subscriptions > Free Trial - Access control (IAM)

## Free Trial - Access control (IAM)

Subscription

Search (Ctrl+/)

+ Add Edit columns Refresh Remove Got feedback?

**Add role assignment** Deny assignments Classic administrators Roles

Add co-administrator  
Manage access to Azure resources for users, groups, service principals and managed identities at this scope by creating role assignments. [Learn more](#)

Name Type Role

Search by name or email All Contributor

Group by

Role

1 items (1 Service Principals)

Name	Type	Role
Contributor		
<input type="checkbox"/> Testconnection	App	Contributor

**Add role assignment**

Role  
Select a role

Assign access to  
Azure AD user, group, or service principal

Select  
Search by name or email address

Selected members:  
No members selected. Search for and add one or more members you want to assign to the role for this resource.  
[Learn more about RBAC](#)

Give the details as shown below and save the record.




**Add role assignment**

Role <sup>ⓘ</sup>  
Contributor

Assign access to <sup>ⓘ</sup>  
Azure AD user, group, or service principal

Select <sup>ⓘ</sup>  
Search by name or email address

Selected members:

 CreateAzureApps [Remove](#)

[Save](#) [Discard](#)

Now the azure app registration will be added to role assignments with contributor role.



[Check access](#) [Role assignments](#) [Deny assignments](#) [Classic administrators](#) [Roles](#)

Manage access to Azure resources for users, groups, service principals and managed identities at this scope by creating role assignments. [Learn more](#) <sup>ⓘ</sup>

Name <sup>ⓘ</sup>  Type <sup>ⓘ</sup>  Role <sup>ⓘ</sup>  Scope <sup>ⓘ</sup>

Group by <sup>ⓘ</sup>

2 items (2 Service Principals)

<input type="checkbox"/>	Name	Type	Role	Scope
<b>Contributor</b>				
<input type="checkbox"/>	 CreateAzureApps	App	<a href="#">Contributor</a> <sup>ⓘ</sup>	This resource
<input type="checkbox"/>	 Testconnection	App	<a href="#">Contributor</a> <sup>ⓘ</sup>	This resource

Navigate to Resource Providers in the subscription record as shown below. Check if the below resource providers are registered. If they are not registered, select that provider and click on register button.

- 1) Microsoft.Storage
- 2) Microsoft.KeyVault
- 3) Microsoft.Web
- 4) microsoft.insights

Home > Subscriptions > Free Trial - Resource providers

### Free Trial - Resource providers

Subscription

Search (Ctrl+F)

Register Unregister Refresh

Filter by name...

Provider	Status
Microsoft.Storage	Registered
Microsoft.KeyVault	Registered
Microsoft.Web	Registered
microsoft.insights	Registered
Microsoft.ManagedIdentity	Registered
Microsoft.Security	Registered
Microsoft.DomainRegistration	Registered
Microsoft.Network	Registered

Settings

- Programmatic deployment
- Resource groups
- Resources
- Usage + quotas
- Policies
- Management certificates
- My permissions
- Resource providers
- Deployments

After all these configurations are done, you can run the exe to create azure applications. Open CreateAzureApplications in the IMS-master folder downloaded from GitHub.

Local Disk (D:) > IMS-master > IMS-master

Name	Date modified	Type	Size
CreateAzureApplications	05-11-2019 18:39	File folder	
DocumentTemplates	09-10-2019 12:43	File folder	
Forms	09-10-2019 12:43	File folder	
IMSAppDataEXE	22-10-2019 16:39	File folder	
IMSAppExe	09-10-2019 12:43	File folder	
IMSForms components	09-10-2019 12:43	File folder	
Mappings	09-10-2019 12:43	File folder	
PowerShellScripts	09-10-2019 12:43	File folder	
TableForms	09-10-2019 12:43	File folder	
WebApplications	01-11-2019 15:00	File folder	
WebJobs	09-10-2019 12:43	File folder	
PreInformationData	01-10-2019 07:04	CONFIG File	1 KB

Run the **CreateAzureResources** exe in the CreateAzureResources folder.

Local Disk (D:) > IMS-master > IMS-master > CreateAzureApplications > CreateAzureResources

Name	Date modified	Type	Size
CreateAzureResources	05-11-2019 18:27	Application	30 KB
CreateAzureResources.exe	05-11-2019 16:03	CONFIG File	2 KB
CreateAzureResources.pdb	05-11-2019 18:27	Program Debug D...	44 KB
errorlog	05-11-2019 18:35	File	1 KB
Microsoft.Azure.KeyVault.Core.dll	29-07-2015 12:56	Application exten...	14 KB
Microsoft.Azure.KeyVault.Core	29-07-2015 12:56	XML File	7 KB
Microsoft.Azure.KeyVault.dll	27-10-2018 00:58	Application exten...	472 KB
Microsoft.Azure.KeyVault.WebKey.dll	27-10-2018 00:58	Application exten...	56 KB
Microsoft.Azure.KeyVault.WebKey	27-10-2018 00:52	XML File	42 KB
Microsoft.Azure.KeyVault	27-10-2018 00:53	XML File	653 KB
Microsoft.Azure.Management.AppServic...	23-09-2019 02:10	Application exten...	4,616 KB
Microsoft.Azure.Management.AppServic...	23-09-2019 02:10	XML File	4,775 KB
Microsoft.Azure.Management.Graph.RB...	23-09-2019 02:09	Application exten...	581 KB
Microsoft.Azure.Management.Graph.RB...	23-09-2019 02:09	XML File	595 KB
Microsoft.Azure.Management.KeyVault.F...	23-09-2019 02:09	Application exten...	252 KB
Microsoft.Azure.Management.KeyVault.F...	23-09-2019 02:09	XML File	317 KB
Microsoft.Azure.Management.Msi.Fluent...	23-09-2019 02:09	Application exten...	87 KB
Microsoft.Azure.Management.Msi.Fluent	23-09-2019 02:09	XML File	88 KB
Microsoft.Azure.Managaement.Resource...	30-08-2018 23:06	Application exten...	663 KB

On successful completion of the console application, below resources will be created in the azure.

**Note: If any of the below resources is not created, follow trouble shooting steps to create those resources.**

Home > All resources

**All resources**  
Default Directory

+ Add Edit columns Refresh Export to CSV Assign tags Delete Feedback

1a4b6 Subscription == all Resource group == all Type == all Location == all Add filter No grouping

Showing 1 to 8 of 8 records. Show hidden types

Name	Type	Resource group	Location	Subscription
IMSAppBinder1a4b6	App Service	IMSAppResourceGroup	Central US	Free Trial
IMSAppFormst1a4b6	App Service	IMSAppResourceGroup	Central US	Free Trial
ImsAppKeyVaultst1a4b6	Key vault	IMSAppResourceGroup	Central US	Free Trial
IMSAppPrintAll1a4b6	App Service	IMSAppResourceGroup	Central US	Free Trial
imsappstrget1a4b6	Storage account	IMSAppResourceGroup	Central US	Free Trial
IMSAppWebJobst1a4b6	App Service	IMSAppResourceGroup	Central US	Free Trial
imsformstrget1a4b6	Storage account	IMSAppResourceGroup	Central US	Free Trial
IMSStngeAppInsight1a4b6	Application Insights	IMSAppResourceGroup	West US	Free Trial

In Imsformstrge<xxxxx> storage account, two containers and three tables will also be created.

The screenshot displays the Azure portal interface for the storage account 'imsformstrgeh5499'. The top section, 'Containers', shows a sidebar with navigation options like 'Export template', 'Blob service', 'Containers' (selected), 'Custom domain', 'Data protection', 'Azure CDN', 'Add Azure Search', and 'File service'. The main area lists containers: 'forms' and 'mappings'. The bottom section, 'Tables', shows a sidebar with 'File service', 'File shares', 'Table service', 'Tables' (selected), 'Queue service', 'Queues', 'Monitoring', and 'Insights (preview)'. The main area lists tables: 'forms', 'formVersionHistory', and 'formVersions', each with a corresponding URL.

Table	Url
forms	https://imsformstrgeh5499.table.core.windows.net/forms
formVersionHistory	https://imsformstrgeh5499.table.core.windows.net/formVersionHistory
formVersions	https://imsformstrgeh5499.table.core.windows.net/formVersions

## 4.2 Azure Resources List

Below applications will be created in azure. Check if all the below resources are created properly.

**Note:** If your organization name is "org123456789" then <xxxxx> will <12345>

### App Service plan

- 1) IMSAppServicePlan

This is the Appservice Plan for all the azure components.

### Web Applications:

- 2) "IMSAppPrintAll<xxxxx>"

This is used to download multiple extension document files and convert them to single pdf.

- 3) "IMSAppBinder<xxxxx>"

This is used to download selected files and convert them into single pdf in user defined sequence.

- 4) "IMSAppForms<xxxxx>"

This is used to Populate data into forms from CRM and portal.

- 5) "IMSAppWebJob<xxxxx>"

This app is placeholder for all the web jobs required to update data back in CRM.

## Storage Accounts

### 6) “imsformstrg<xxxxx>”

This holds all the forms and mappings on the blobs and maintain forms, form versions and form version history under tables.

Home > **imsformstrge1a4b6 - Containers** > forms

**forms**  
Container

Search (Ctrl+F)

Overview  
Access Control (IAM)  
Settings  
Access policy  
Properties  
Metadata

Authentication method: Access key (Switch to Azure AD User Account)  
Location: forms

Search blobs by prefix (case-sensitive) ☐ Show deleted blobs

Name	Modified	Access tier	Blob type	Size	Lease state
<input type="checkbox"/> 023c906c-600d-4a3a-80d9-260a3660f5ec.pdf	11/5/2019, 3:19:43 PM		Block blob	874.75 KiB	Available ***
<input type="checkbox"/> 0252360b-7a8c-45c3-a224-4fdef598a534.pdf	11/5/2019, 3:19:45 PM		Block blob	410.54 KiB	Available ***
<input type="checkbox"/> 03fec6e6-d0cb-4036-99f6-b3d15f96f087.pdf	11/5/2019, 3:19:46 PM		Block blob	321.15 KiB	Available ***
<input type="checkbox"/> 05dbbc31-2db9-43d4-96b7-8f6d76e48653.pdf	11/5/2019, 3:19:47 PM		Block blob	202.48 KiB	Available ***
<input type="checkbox"/> 06da2ee9-4653-4bf7-91fc-3d03466a4b8b.pdf	11/5/2019, 3:19:48 PM		Block blob	569.03 KiB	Available ***
<input type="checkbox"/> 0da4119b-f539-4c61-b63e-812ba8e96390.pdf	11/5/2019, 3:19:49 PM		Block blob	298.04 KiB	Available ***
<input type="checkbox"/> 0e3cb9ab-42cc-4631-87fe-80455b2004b5.pdf	11/5/2019, 3:19:51 PM		Block blob	362.95 KiB	Available ***
<input type="checkbox"/> 16589e55-4a5e-45d1-96f7-29f4f958fa7a.pdf	11/5/2019, 3:19:55 PM		Block blob	1.06 MiB	Available ***
<input type="checkbox"/> 1a251db4-c0cb-4a0b-9a47-8ff1a118008d.pdf	11/5/2019, 3:19:57 PM		Block blob	321.14 KiB	Available ***

Home > **imsformstrge1a4b6 - Containers** > mappings

**mappings**  
Container

Search (Ctrl+F)

Overview  
Access Control (IAM)  
Settings  
Access policy  
Properties  
Metadata

Authentication method: Access key (Switch to Azure AD User Account)  
Location: mappings

Search blobs by prefix (case-sensitive) ☐ Show deleted blobs

Name	Modified	Access tier	Blob type	Size	Lease state
<input type="checkbox"/> 023c906c-600d-4a3a-80d9-260a3660f5ec.txt	11/5/2019, 3:21:22 PM		Block blob	84.49 KiB	Available ***
<input type="checkbox"/> 0252360b-7a8c-45c3-a224-4fdef598a534.txt	11/5/2019, 3:21:22 PM		Block blob	23.12 KiB	Available ***
<input type="checkbox"/> 03fec6e6-d0cb-4036-99f6-b3d15f96f087.txt	11/5/2019, 3:21:23 PM		Block blob	10.56 KiB	Available ***
<input type="checkbox"/> 05dbbc31-2db9-43d4-96b7-8f6d76e48653.txt	11/5/2019, 3:21:24 PM		Block blob	22.88 KiB	Available ***
<input type="checkbox"/> 06da2ee9-4653-4bf7-91fc-3d03466a4b8b.txt	11/5/2019, 3:21:24 PM		Block blob	47.85 KiB	Available ***
<input type="checkbox"/> 0da4119b-f539-4c61-b63e-812ba8e96390.txt	11/5/2019, 3:21:25 PM		Block blob	8.83 KiB	Available ***
<input type="checkbox"/> 0e3cb9ab-42cc-4631-87fe-80455b2004b5.txt	11/5/2019, 3:21:25 PM		Block blob	19.25 KiB	Available ***
<input type="checkbox"/> 16589e55-4a5e-45d1-96f7-29f4f958fa7a.txt	11/5/2019, 3:21:26 PM		Block blob	29.85 KiB	Available ***
<input type="checkbox"/> 1a251db4-c0cb-4a0b-9a47-8ff1a118008d.txt	11/5/2019, 3:21:26 PM		Block blob	10.56 KiB	Available ***
<input type="checkbox"/> 1d8ccc97-dafe-493d-ae32-1daf6e5f3bf.txt	11/5/2019, 3:21:27 PM		Block blob	84.05 KiB	Available ***
<input type="checkbox"/> 23027ca6-ec6c-477e-8650-84634c91df3.txt	11/5/2019, 3:21:28 PM		Block blob	23.12 KiB	Available ***

### 7) “imsappstorageacc<xxxxx>”

All the attachments saved in CRM documents are stored here.

## KeyVault

### 8) “ImsAppKeyVaults<xxxxx>”

All the username passwords and sensitive information related to the organization will be stored here.

## App Insight

9) "ImsAppInsight<xxxxx>"

It will maintain all the logs related to AppService storage account.

**Note:** Follow troubleshooting steps in case of any of the above applications failed during deployment.

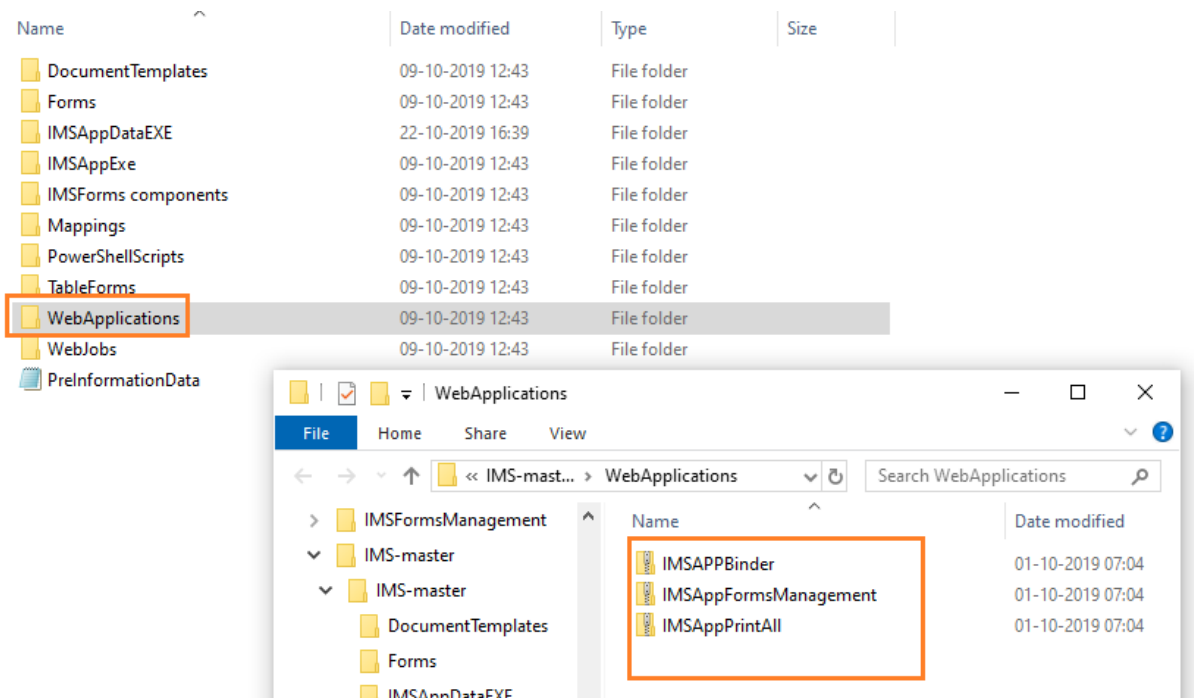
## 4.3 Publish Azure Resources

We have to Publish our code into the azure resources created through the exe. We need to publish three web applications and six web jobs.

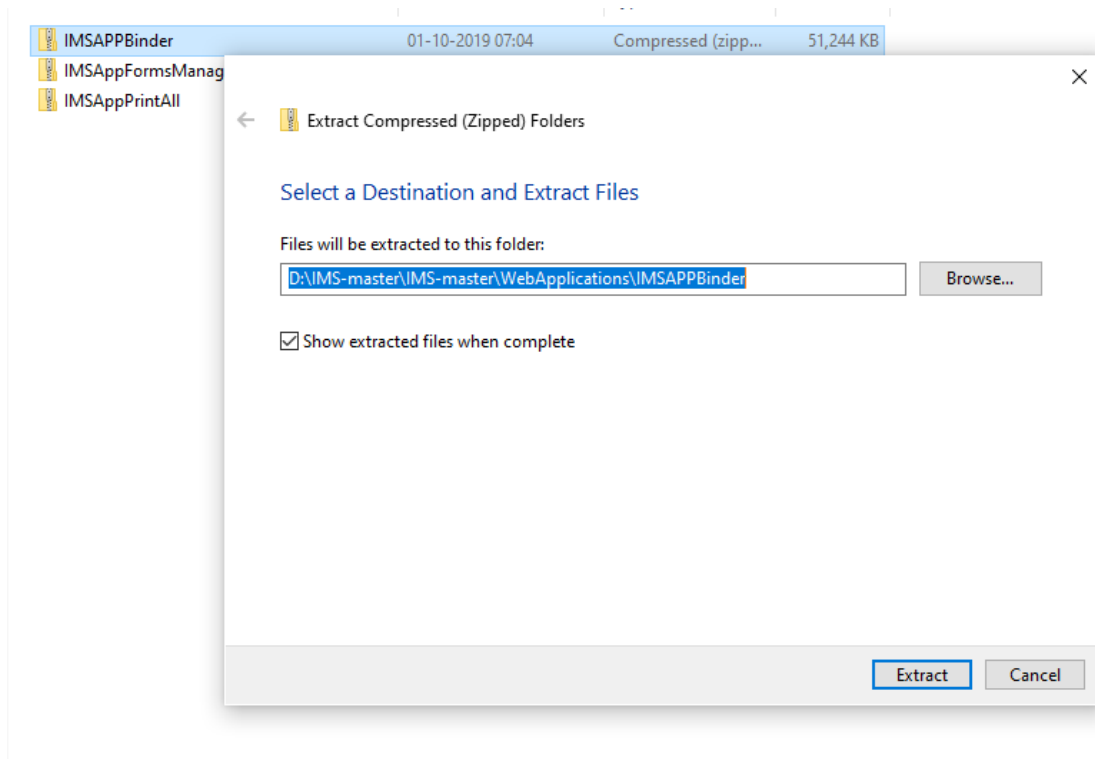
### 4.3.1 Web Applications

We are using FTP deployment method to Publish azure web applications:

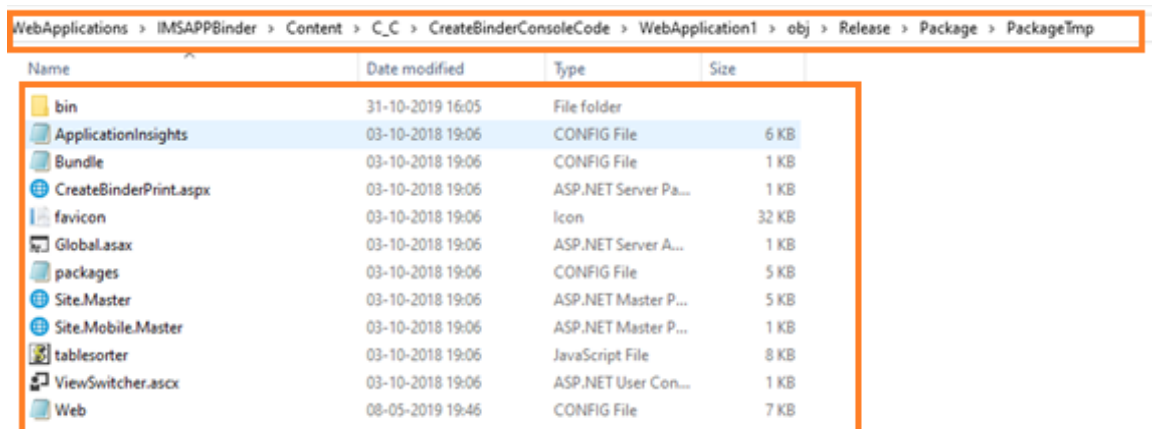
1. Navigate to web applications folder in the IMS master folder downloaded from Github. It has three folders in it which are the web applications that need to be published.



2. Un-zip/extract the three folders one by one. Each folder has many subfolders in it. Navigate to the directory which contains the bin folder.

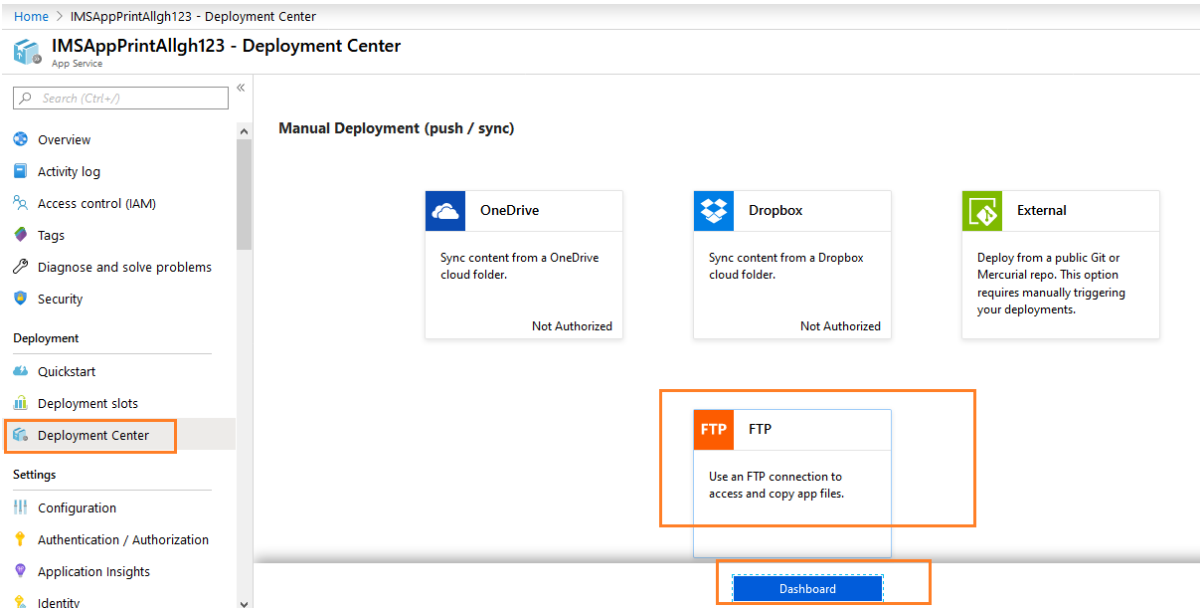


3. "PackageTmp" directory contains the bin folder as shown in below screenshot. All the files in the "PackageTmp" folder need to be copied in the "**wwwroot**" folder of the appservice. To access the "**wwwroot**" folder of the appservice, follow section 2.



## Create FTP deployment Credentials

1. In azure Portal, open the Printall application i.e. IMSAppPrintAll<xxxxx>. Navigate to deployment center as shown in below screenshot. Select FTP and click on "Dashboard".



2. It opens a popup containing app credentials and user credential. Go to User credentials and create a password and save the credentials.

FTP

FTP

×

App Service enables you to access your app content through FTP/S. [Learn more](#)

---

FTPS Endpoint `https://waws-prod-blu-091.ftp.azurewebsites.windows.net/site/wa` [Copy](#)

App Credentials

User Credentials

---

User Credentials are defined by you, the user, and can be used with all the apps to which you have access. These credentials can be used with FTP, Local Git and WebDeploy. If you are using User credentials to connect to your app, the username needs to be in the format "imsappprintallgh123\TestFTPuser678" when authenticating from the client. [Learn more](#)

---

Username

Password

Confirm Password

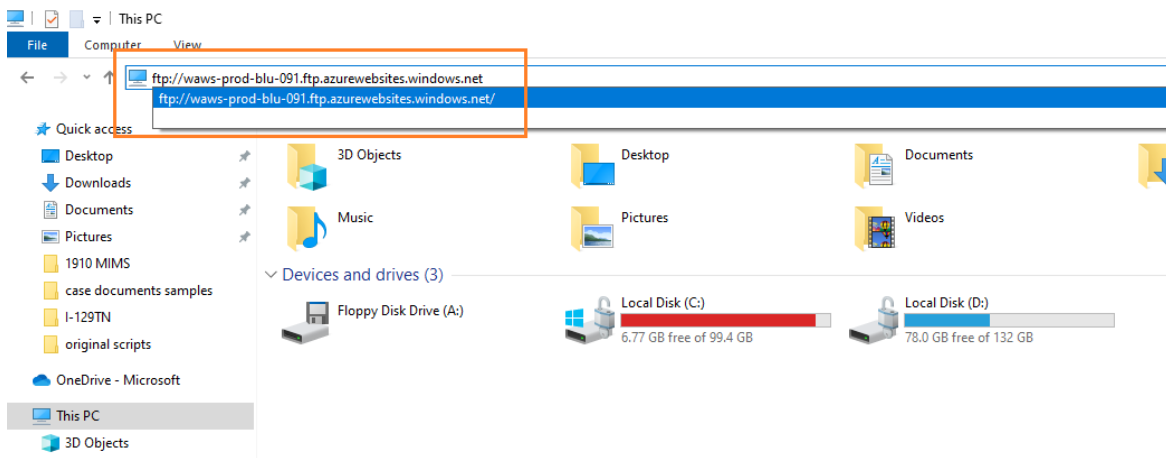
[Save Credentials](#)

3. Navigate to properties in the app service as shown below. Copy down the FTP deployment user and FTP host name.

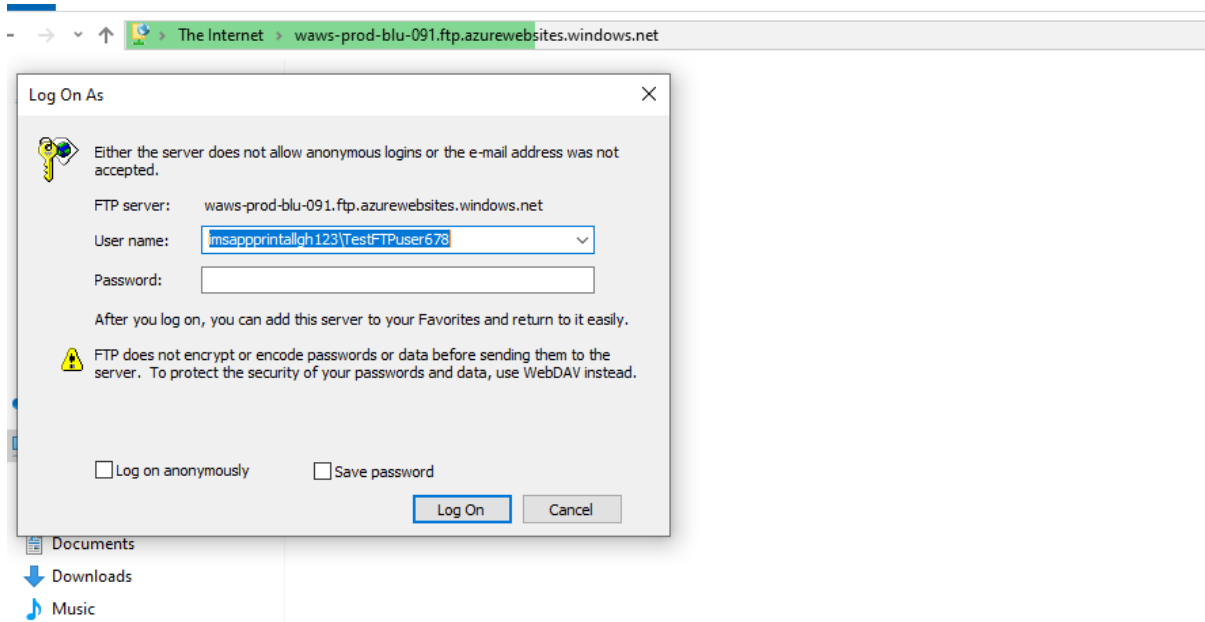




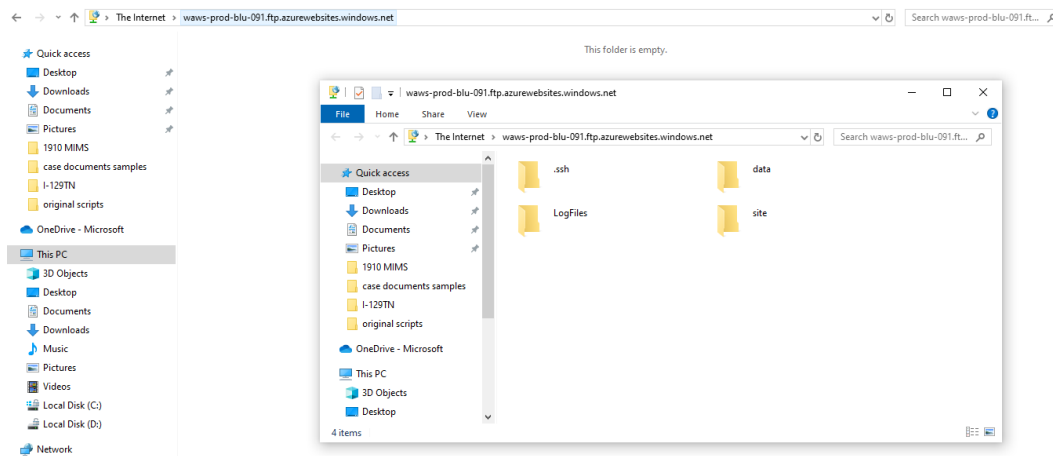
4. Open **File explorer** in your local machine and copy the FTP host name there.



5. Enter the FTP username and Password that you have created in deployment center.

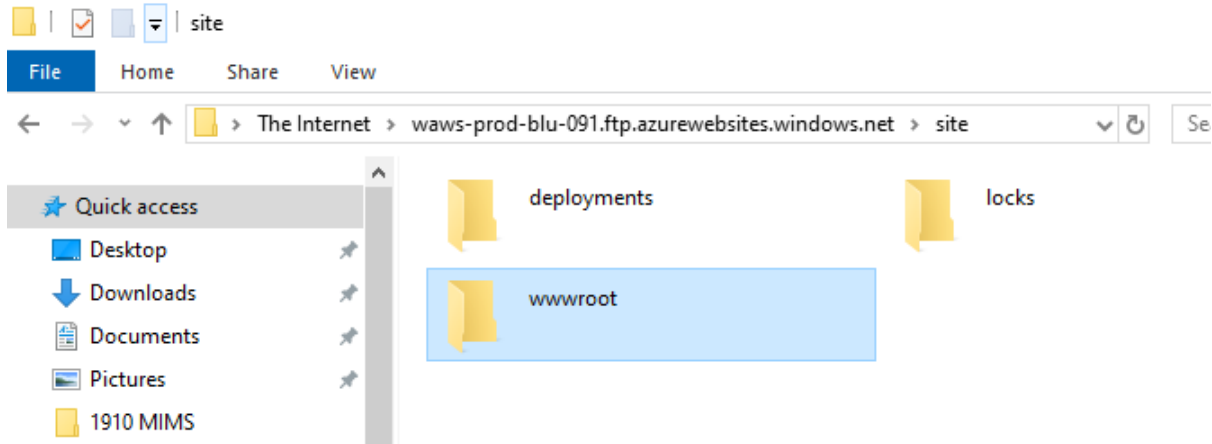


6. After clicking on Logon it will open up some folders as shown below. Navigate to Site folder:

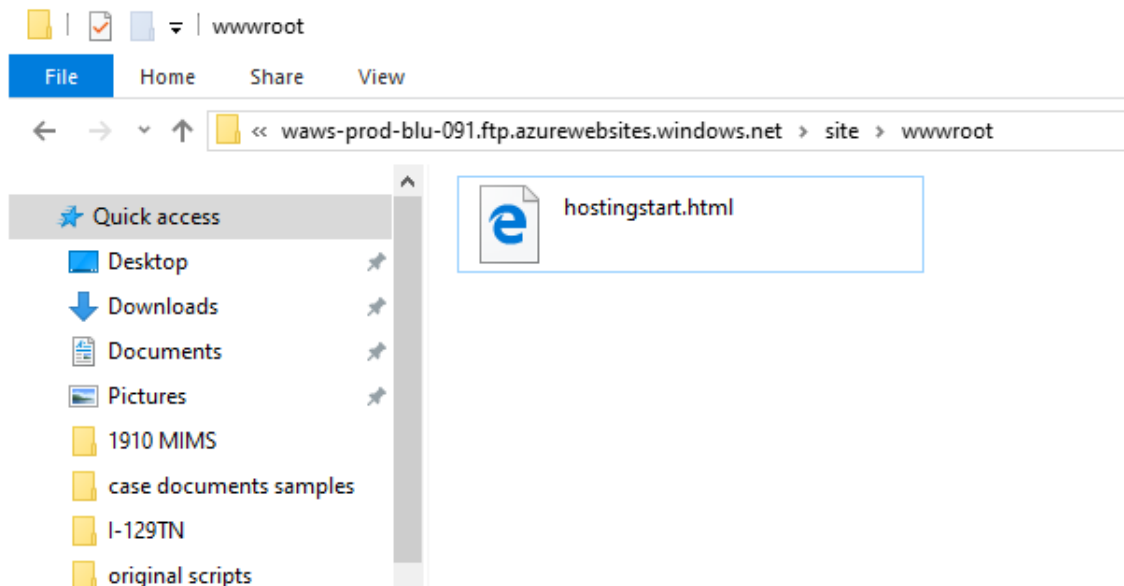


7. Navigation order:

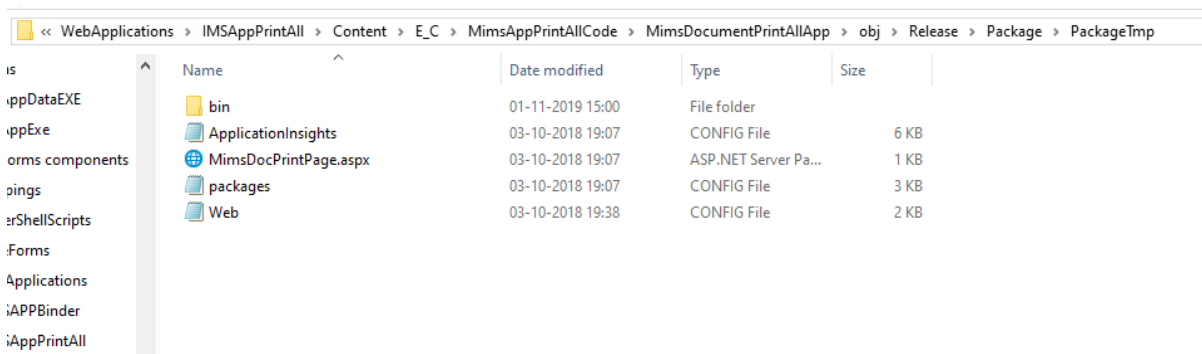
Site → wwwroot



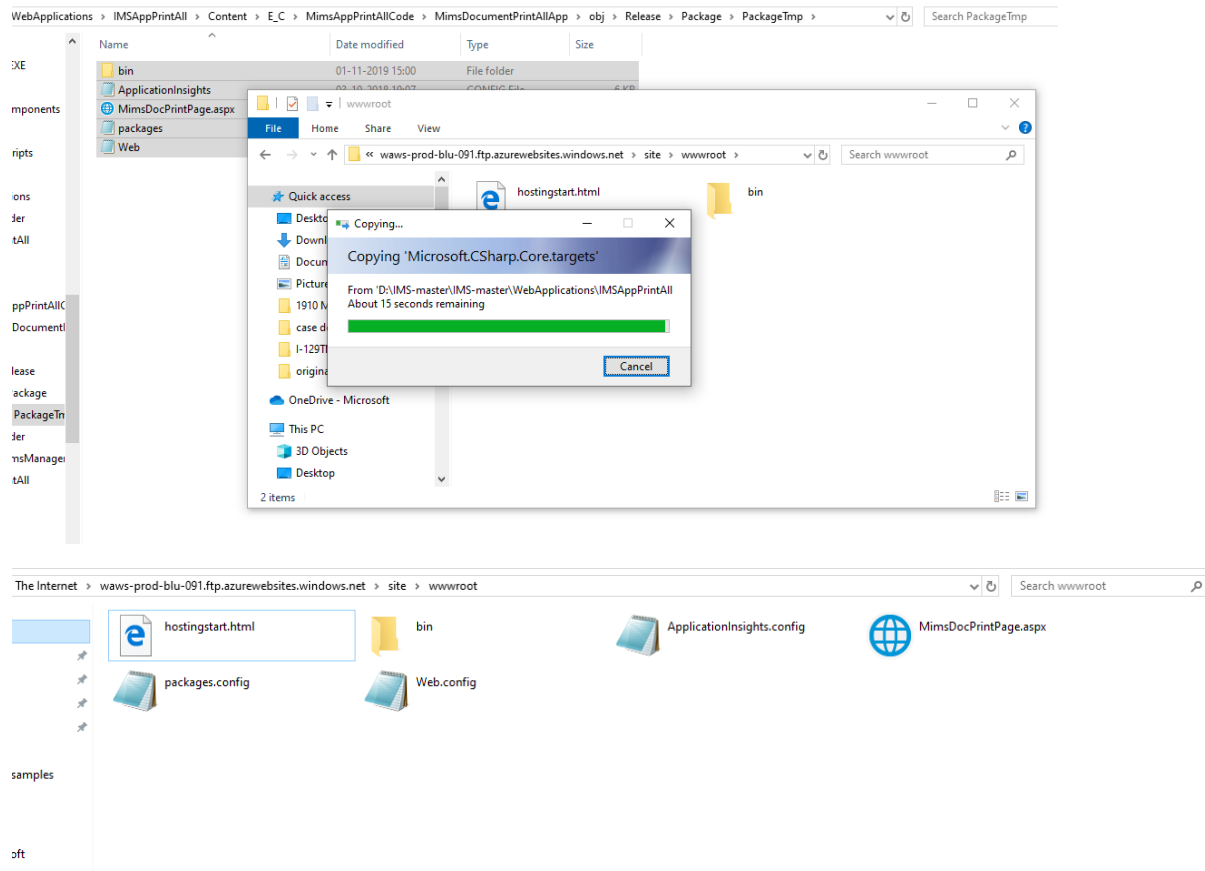
8. There will be a file called “hostingstart.html” in the wwwroot folder. Keep the file as it is.



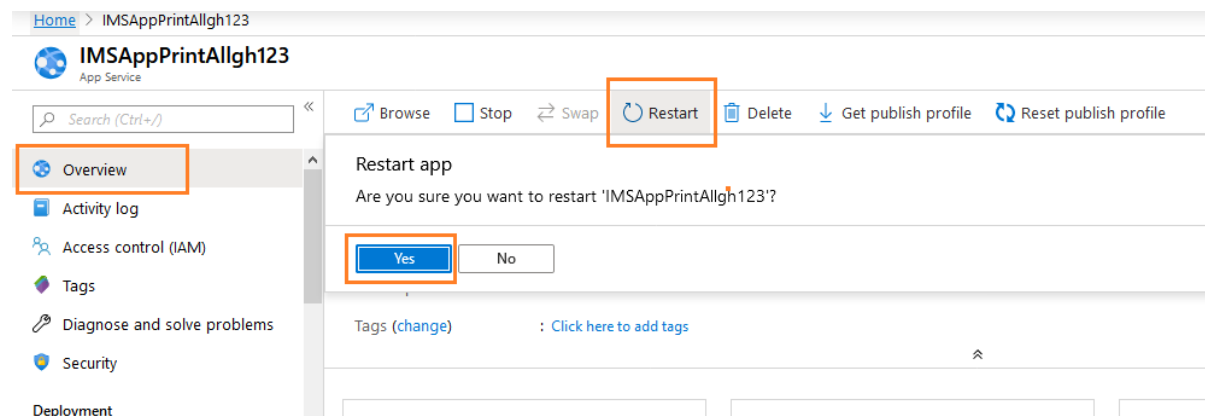
9. Open another file explorer and navigate to the extracted **IMSAppPrintAll web application** files. Navigate to the directory containing bin folder and copy all the files including the bin folder.



10. Paste all these files in the “**wwwroot**” folder in the FTP as shown below.



11. Now go to the app service in the azure portal and click on overview. Click restart button as shown in below screenshot.

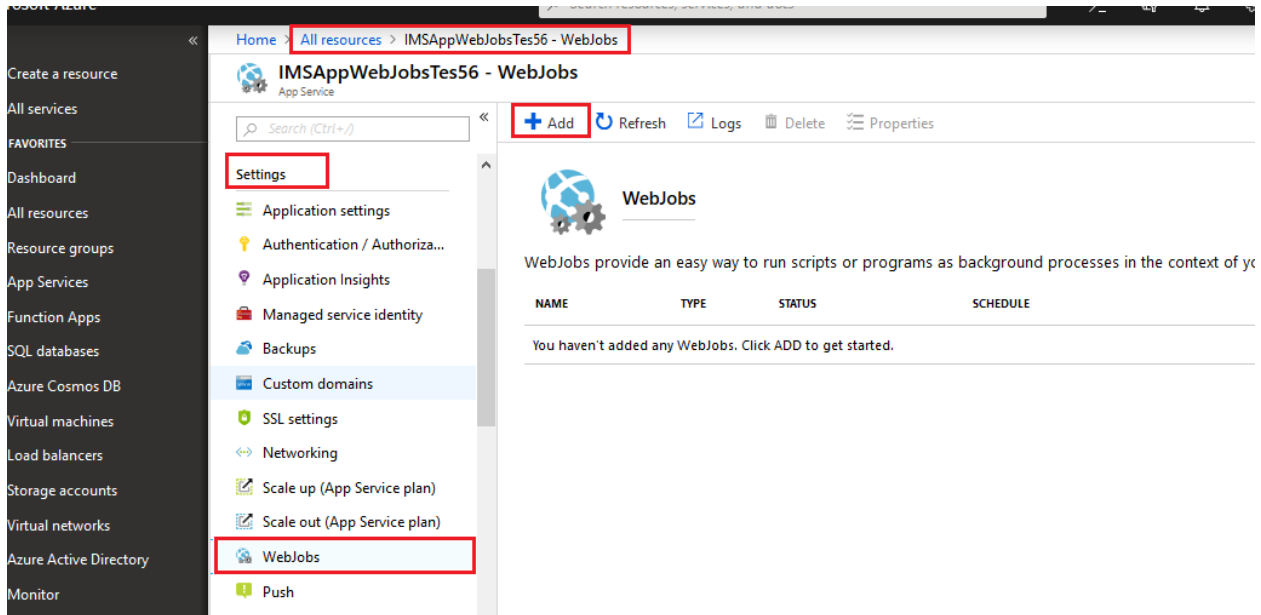


12. Now IMSAppPrintall application has been successfully published.

**Note:** Follow the above FTP deployment procedure for IMSAppBinder and IMSAppForms.

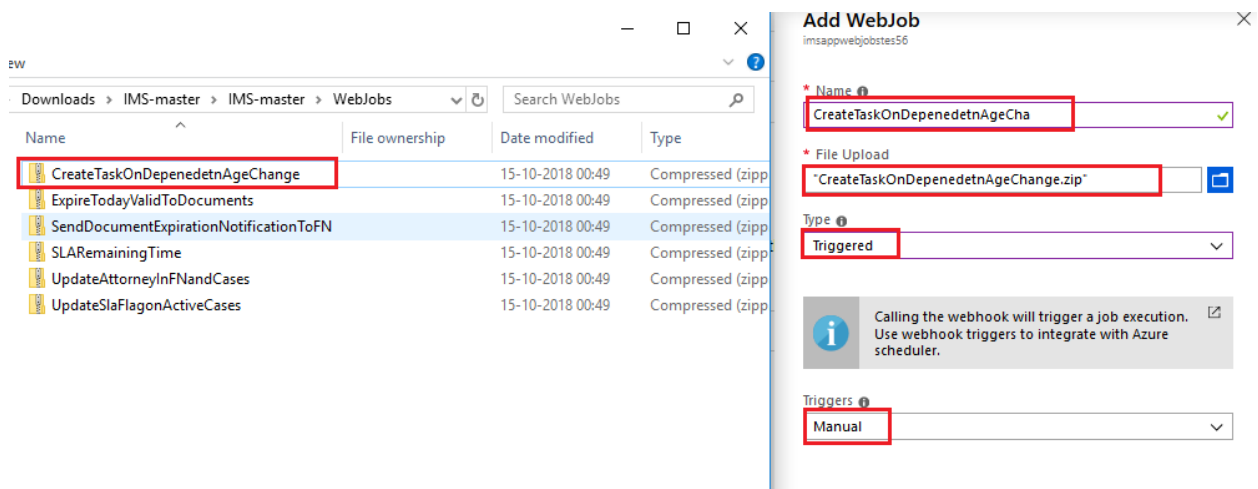
### 4.3.2 Web Jobs

- Navigate to “IMSAppWebJobs<xxxx>” -> Webjobs as shown below:



- Create the below web jobs and upload the folders as shown below.
- All the web jobs exist in “WebJobs” Folder from GitHub (<https://github.com/microsoftappsourc/IMS/tree/master/WebJobs> ). They need to be uploaded while creating web jobs.

#### 1. CreateTaskOnDepenedentAgeChang



- ON File Upload -> upload the webjob file..
- Created the webjob as shown below.

Home > All resources > IMSAppWebJobsTes56 - WebJobs

### IMSAppWebJobsTes56 - WebJobs

App Service

Search (Ctrl+/)

Settings

- Application settings
- Authentication / Authoriza...
- Application Insights
- Managed service identity
- Backups
- Custom domains
- SSL settings
- Networking
- Scale up (App Service plan)
- Scale out (App Service plan)

+ Add Refresh Logs Delete Properties

Continuous and scheduled CRON webjobs require 'Always on' to be enabled for your app. →

**WebJobs**

WebJobs provide an easy way to run scripts or programs as background processes in the context of your app.

NAME	TYPE	STATUS	SCHEDULE
CreateTaskOnDepenedetnAgeCha	Triggered	Ready	0 0 */1 ***

- Select the WebJob and Click on Run Button to execute the WebJob.

Home > All resources > IMSAppWebJobsTes56 - WebJobs

### IMSAppWebJobsTes56 - WebJobs

App Service

Search (Ctrl+/)

Settings

- Application settings
- Authentication / Authoriza...
- Application Insights
- Managed service identity
- Backups
- Custom domains
- SSL settings
- Networking
- Scale up (App Service plan)
- Scale out (App Service plan)

+ Add Refresh Logs Delete **Run** Properties

Continuous and scheduled CRON webjobs require 'Always on' to be enabled for your app. →

**WebJobs**

WebJobs provide an easy way to run scripts or programs as background processes in the context of your app.

NAME	TYPE	STATUS	SCHEDULE
CreateTaskOnDepenedetnAgeCha	Triggered	Ready	0 0 */1 ***

Repeat the steps for all the below webjobs in the "WebJobs" Folder

2. ExpireTodayValidToDocuments
3. SendDocExpirationNotification
4. SLARemainingTime
5. UpdateAttorneyInFNandCases
6. UpdateSlaFlagonActiveCases

ew

Downloads > IMS-master > IMS-master > WebJobs

Search WebJobs

Name	File ownership	Date modified
CreateTaskOnDepenedetnAgeChange		15-10-2018 00:49
ExpireTodayValidToDocuments		15-10-2018 00:49
SendDocumentExpirationNotificationToFN		15-10-2018 00:49
SLARemainingTime		15-10-2018 00:49
UpdateAttorneyInFNandCases		15-10-2018 00:49
UpdateSlaFlagonActiveCases		15-10-2018 00:49

## 5.Post Deployment Configuration

Below Plugin steps **“Run in user’s context”** should change to **Admins User** (Person who is having system admin role) using plugin registration tool

<div> <div> <div></div> <div>(Assembly) MicrosoftLabs.EmailAlert</div> </div> <div> <div> <div></div> <div>(Plugin) MicrosoftLabs.EmailAlert.EmailCountPlugin</div> </div> <div> <div></div> <div>(Step) MicrosoftLabs.EmailAlert.EmailCountPlugin: Create of email</div> </div> <div> <div></div> <div>(Step) MicrosoftLabs.EmailAlert.EmailCountPlugin: Update of email</div> </div> </div> <div> <div> <div></div> <div>(Plugin) MicrosoftLabs.EmailAlert.PostCreateCase</div> </div> <div> <div></div> <div>(Step) MicrosoftLabs.EmailAlert.PostCreateCase: Create of incident</div> </div> </div> <div> <div> <div></div> <div>(Plugin) MicrosoftLabs.EmailAlert.PreUpdateCase</div> </div> <div> <div></div> <div>(Step) MicrosoftLabs.EmailAlert.PreUpdateCase: Update of incident</div> </div> </div> </div>
--

### 5.1 CRM Configurations

Adding portal URL in content snippet entity in Questionnaire record as shown below

- Navigate to CRM -> Portals -> Content Snippets
- Open “Questionnaire” record and update the value field as shown below

**Dynamics 365** | **Portals** | **Content Snippets** > **Questionnaire**

CONTENT SNIPPET : INFORMATION

**Questionnaire**

**General**

Name \* Questionnaire

Website \* Custom Portal

Display Name

Type Text

Content Snippet Language English

Is FAQ

Value \* <https://testportal.microsoftcrmportals.com/Questionnaire?id=>

- Change the URL with your organization configured CRM portal as given below
  - “CRM Portal URL”/Questionnaire?id=
  - Example: <https://<your portal>.microsoftcrmportals.com/Questionnaire?id=>

### Update “Integration Config”

- Navigate to CRM -> Settings -> IntegrationsConfig
- Open “OrgUrl” record and update the Config Value field with organization URL as shown below

**Dynamics 365** | **Settings** | **Integrations Config**

Don't Lose Access to Dynamics 365. Convert to a paid subscription [Buy Now](#)

NEW DELETE EMAIL A LINK FLOW RUN REPORT EXCEL TEMPLATES EXPORT TO EXCEL

Active Integrations Config

Config Name	Config Value	Integration Application
Forms Service API URL		Forms management
I-94 - Principal Master Record		
Matter Source		T360
Member Role		T360
OrgUrl	<a href="https://testorg.crm8.dynamics.com">https://testorg.crm8.dynamics.com</a>	
PrintAllApplicationURL		Azure
PrintAllApplicationURL		Azure

### Queue and MailBox Configuration

- Configure below queue and mailbox for all the communication through IMS CRM instance , update the Incoming mail with your organization email .

**QUEUE**

**IMS US Immigration**

**SUMMARY**

Name \* IMS US Immigration

Type \* Public

Is it a team queue? No

Is Outside Counsel No

Incoming Email [abc@xyz.com](mailto:abc@xyz.com)

**QUEUE ITEMS**

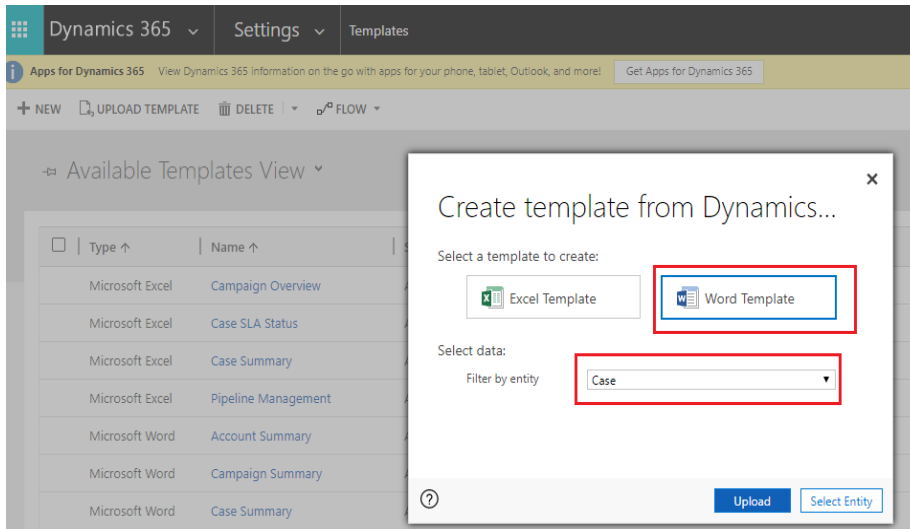
Search for records

Title	Entered Queue	Worked By
No records are available in this view.		



## QR Code Update for Binder

- Create Word Template in CRM as shown below
- Navigate to CRM -> Settings -> Templates -> Document Templates

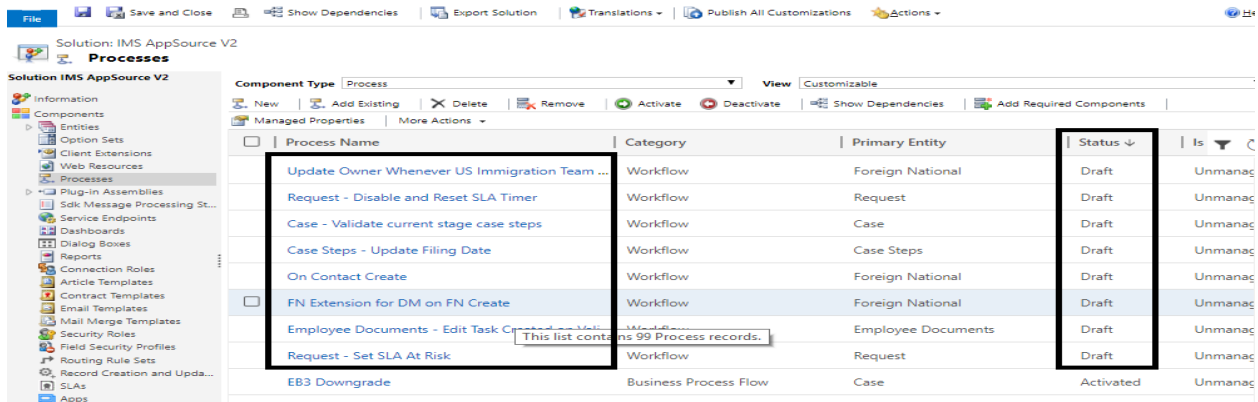


- Download the QR CODE Document from the GITHUB (<https://github.com/microsoftappsource/IMS/tree/master/DocumentTemplates>) and Upload the document.

## Workflow Activation:

Go to CRM settings → solutions → open “IMSAppSourceV2” → select “processes” under components as shown in below screen.

Note all draft processes and now go to settings → processes and activate them.

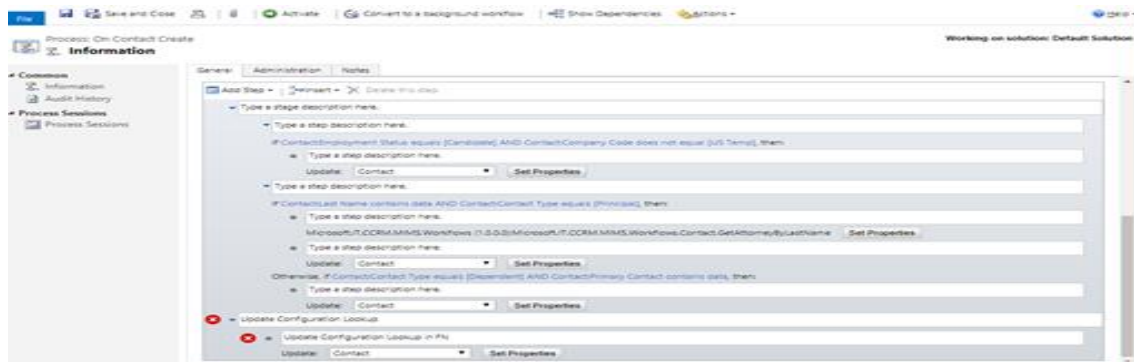


## Activation of Workflows:

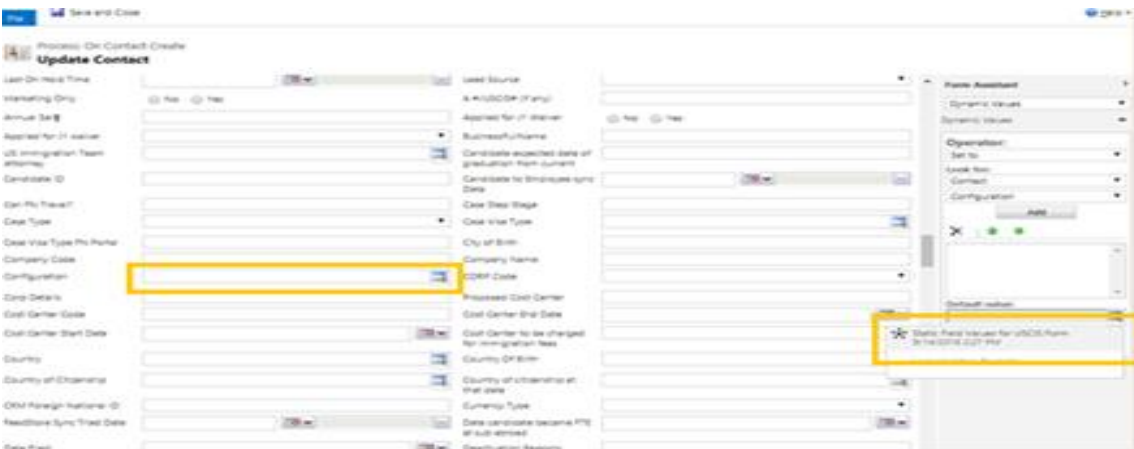
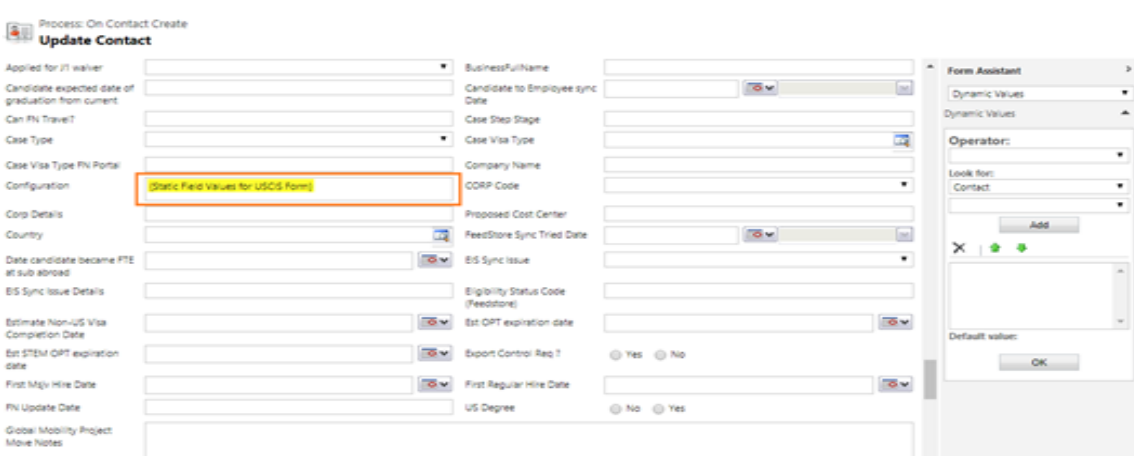
Please follow the below steps to activate the draft workflows.

### 1. On Contact Create:

1a. Click set Properties in the step which is showing error.



1b. Remove the value in the configuration field and add the value again.



1c. Save and close the window after adding the value into configuration field.

1d. Activate the workflow.

## 2. Case - Update Case Type on Template name Update

2a. Click set Properties in the step which is showing error.

2b. Remove the value in the configuration field and add the value again.

Process: Case - Update Case Type on Template name Update

### Update Case

Assigned To		source caseid	
Binder Ready date		BPP	
BPP Stage		Business Hours End (HH:MM)	
Business Hours Start (HH:MM)		Case Stage Completed	
Case Template		old_Case Type	
old_Category		Category	
Closed On		Configuration	Static Field Values for USCIS Form
Consular Processing Country/Region		Contains Questionnaire Template	No Yes
Cost Center Code		Cost Center to be charged for immigration fees	
Current Case Step		Current Queue Name	
Exec Org/Manager		Date Filed	
Date Initiated		Date LCA Requested	
Date LCA Requested from DOL		Date of first advertisement identified in question	
Date TRU/Permit Filed?		Denied Date	
2 Denied Reasons			

Form Assistant

Dynamic Values

Operator:

Look for:

Case

Add

Default value:

OK

2c. Save and close the window after adding the value into configuration field.

Process: Case - Update Case Type on Template name Update

### Update Case

Assigned To		source caseid	
Binder Ready date		BPP	
BPP Stage		Business Hours End (HH:MM)	
Business Hours Start (HH:MM)		Case Stage Completed	
Case Template		old_Case Type	
old_Category		Category	
Closed On		Configuration	Static Field Values for USCIS FormConfiguration
Consular Processing Country/Region		Contains Questionnaire Template	No Yes
Cost Center Code		Cost Center to be charged for immigration fees	
Current Case Step		Current Queue Name	
Exec Org/Manager		Date Filed	
Date Initiated		Date LCA Requested	
Date LCA Requested from DOL		Date of first advertisement identified in question	
Date TRU/Permit Filed?		Denied Date	
2 Denied Reasons			

Form Assistant

Dynamic Values

Operator:

Set to

Look for:

Case

Configuration

Add

Default value:

Static Field Values for USCIS Form

OK

2d. Activate the workflow.

## 1. Employee Documents - Assign Pending Status Documents To Integreon :

3a. Click set Properties in the step which is showing error.

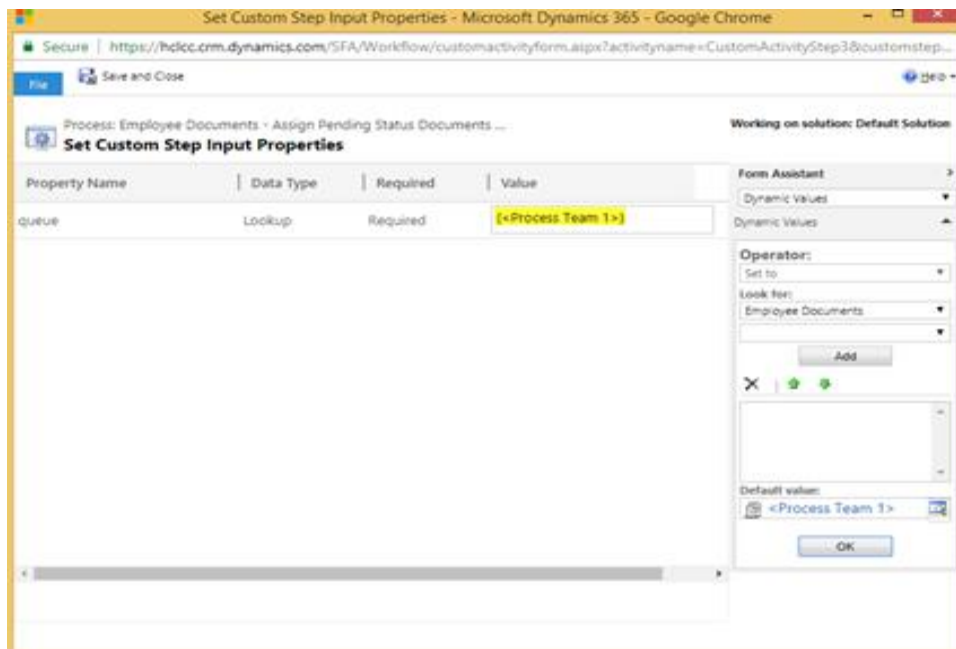
The screenshot shows the 'Set Properties' dialog for a workflow step named 'Employee Documents - Assign Pending'. The 'General' tab is active. The 'Process Name' is 'Employee Documents - Assign Pending'. The 'Entity' is 'Employee Documents' and the 'Category' is 'Workflow'. The 'Scope' is 'Organization'. The 'Start when' options are 'Record is created', 'Record status changes', 'Record is assigned', 'Record fields change', and 'Record is deleted'. The 'Workflow Job Retention' is set to 'Automatically delete completed workflow jobs (to save disk space)'. The 'Available to Run' options are 'Run this workflow in the background (recommended)', 'As an on-demand process', and 'As a child process'. The 'Add Step' button is visible at the bottom.

3b. Set the Value of the queue field to Process Team 1.

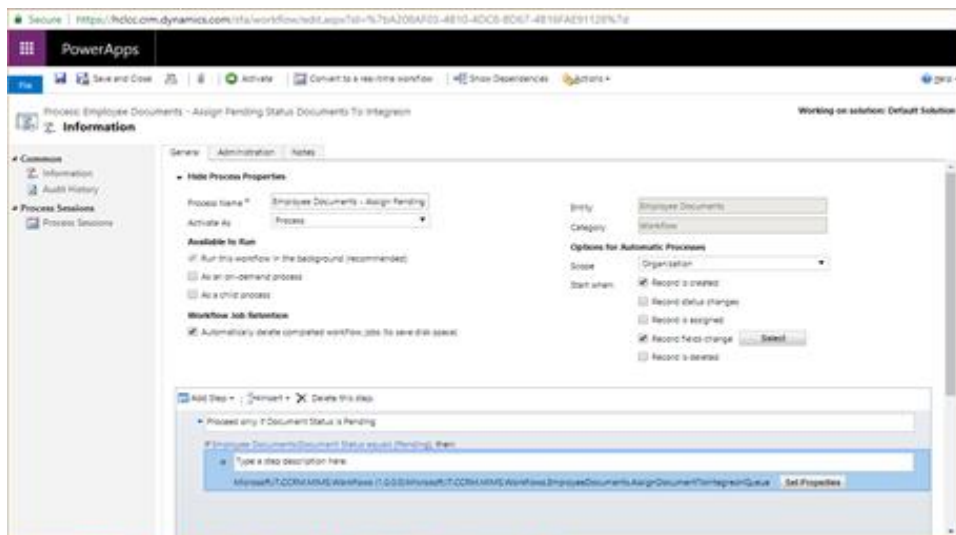
The screenshot shows the 'Set Custom Step Input Properties' dialog. The 'queue' property is selected, with a 'Data Type' of 'Lookup' and a 'Required' status. The 'Value' field is empty. The 'Form Assistant' is open, showing a list of 'Dynamic Values' for the 'queue' property. The list includes '<Attorney>', '<Business Admins>', '<Business Application Platform Servic...>', '<Canada>', '<Delegated Admin>', '<Demo User>', '<Demo User>', '<Demo User>', '<Demo User>', and '<Demo User>'. The 'Look Up More Records' button is at the bottom.

The screenshot shows the 'Lookup Record' dialog. The 'Look for' field is 'Queue' and the 'Look in' field is 'Queues Lookup View'. The 'Search' button is visible. The list of records shows '<Process Team 1>' selected. The 'Show Only My Records' checkbox is checked. The 'Add' button is visible at the bottom.

3c. Save and close the window, now the step should not show any error.

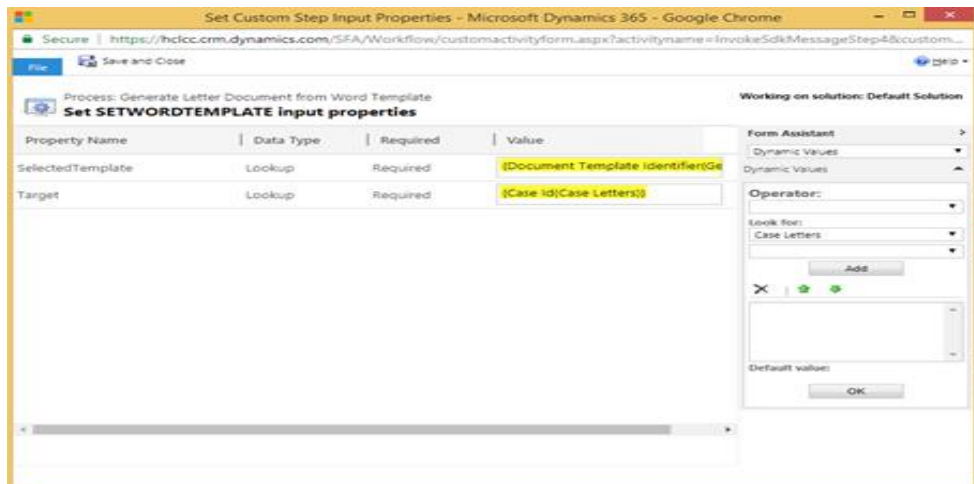


3d. Activate the workflow.

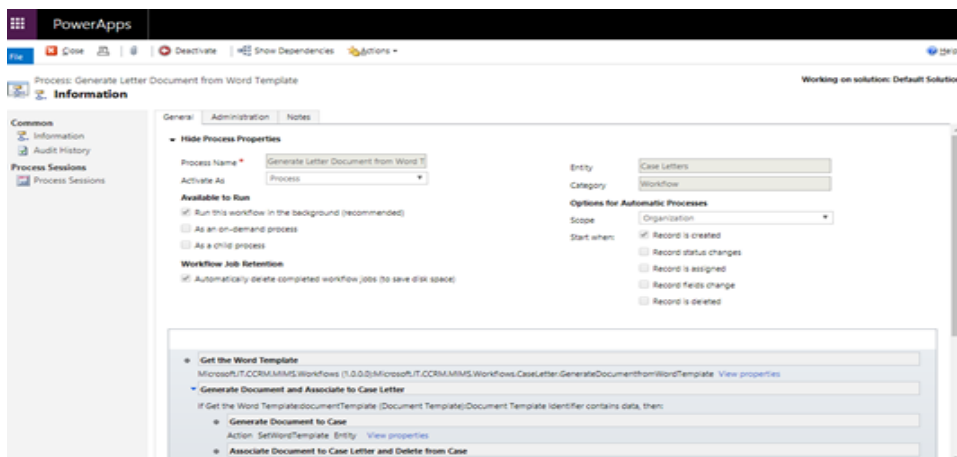


## 2. Generate Letter Document from Word Template

4a. Click set Properties in the step which is showing error. Save and close the window.

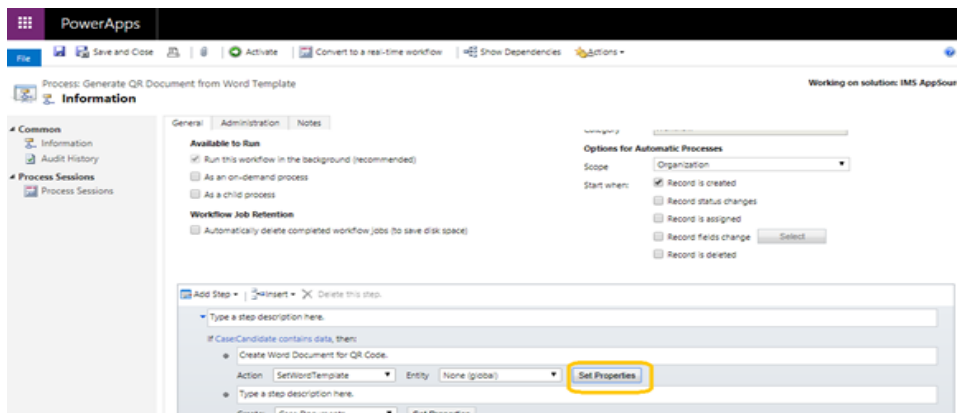


#### 4b. Activate the Workflow



### 3. Generate QR Document from Word Template

5a. Click set Properties in the step which is showing error.



5b. Check if the selected template is QR CODE, If it is not filled fill it with QR code.

File Save and Close Help

Process: Generate QR Document from Word Template  
**Set SETWORDTEMPLATE input properties**

Working on solution: Default Solution

Property Name	Data Type	Required	Value
SelectedTemplate	Lookup	Required	QRCODE
Target	Lookup	Required	{Case(Case)}

**Form Assistant**

Dynamic Values

Operator:

Set to:

Look for:

Case

Add

Default value:

OK

5c. Save and close the window.

5d. Activate the workflow

PowerApps

File Code Deactivate Show Dependencies Actions

Process: Generate QR Document from Word Template  
**Information**

Working on solution: Default Solution

General Administration Notes

**Hide Process Properties**

Process Name: Generate QR Document from Word Template

Entity: Case

Category: Workflow

Activate As: Process

**Available to Run**

☒ Run this workflow in the background (recommended)

☐ As an on-demand process

☐ As a child process

**Workflow Job Retention**

☐ Automatically delete completed workflow jobs to save disk space

**Options for Automatic Processes**

Scope: Organization

Start when:

☒ Record is created

☐ Record status changes

☐ Record is assigned

☐ Record fields change

☐ Record is deleted

**Step description: None provided.**

If CaseCandidate contains data, then:

- Create Word Document for QR Code.  
 Action: SetWordTemplate Entity: View properties
- Create Case Documents. View properties
- Microsoft.CRM.MMS.Workflows (1.0.0.0) Microsoft.CRM.MMS.Workflows.CaseLetter.AssociateDocumentToCaseLetter. View properties

## 6) Send Invitation

6a. Open "Set properties" of Update FN Portal role step.



Process: Send Invitation

Information

Common

Information

Audit History

Process Sessions

Process Sessions

General Administration Notes

Workflow Job Retention

☒ Automatically delete completed workflow jobs (to save disk space)

☐ Record is assigned

☐ Record fields change

☐ Record is deleted

Select

Add Step + Insert X Delete this step

Type a step description here.

Update: Invitation Set Properties

Encode invitation Code

PortalsEncode Invitation Code Set Properties

Create an email to act as an email template

Create: Email Set Properties

Send emails to all invitees

PortalsSend Invitation Set Properties

Update invitation to Sent

Change record status to: Invitation Sent

Update FN Portal Role

PortalsAssign Web Role Set Properties

6b. Check if the web role field is filled. If not, set the field to “IMS Portal Admin”. Save and close the form.

Set Custom Step Input Properties - Microsoft Dynamics 365 - Google Chrome

https://hcliff.crm.dynamics.com/SFA/Workflow/customactivityform.aspx?activityname=CustomActivityStep6&customstepcatego...

File Save and Close

Process: Send Invitation

Set Custom Step Input Properties

Working on solution: Default Solution

Property Name	Data Type	Required	Value
Account	Lookup	Optional	
Contact	Lookup	Optional	[Invite Contact(Invitation)]
Invitation	Lookup	Optional	
User	Lookup	Optional	
Web Role	Lookup	Required	[IMS Portal Admin]

Form Assistant

Dynamic Values

Operator:

Set to

Look for:

Invitation

Add

Default value:

IMS Portal Admin

OK

6c. Activate the workflow.

File Save and Close

Activate Convert to a real-time workflow Show Dependencies Actions

Process: Send Invitation

Information

Common

Information

Audit History

Process Sessions

Process Sessions

General Administration Notes

Workflow Job Retention

☒ Automatically delete completed workflow jobs (to save disk space)

☐ Record is assigned

☐ Record fields change

☐ Record is deleted

Select

Add Step + Insert X Delete this step

Type a step description here.

Update: Invitation Set Properties

Encode invitation Code

PortalsEncode Invitation Code Set Properties

Create an email to act as an email template

Create: Email Set Properties

Send emails to all invitees

PortalsSend Invitation Set Properties

Update invitation to Sent

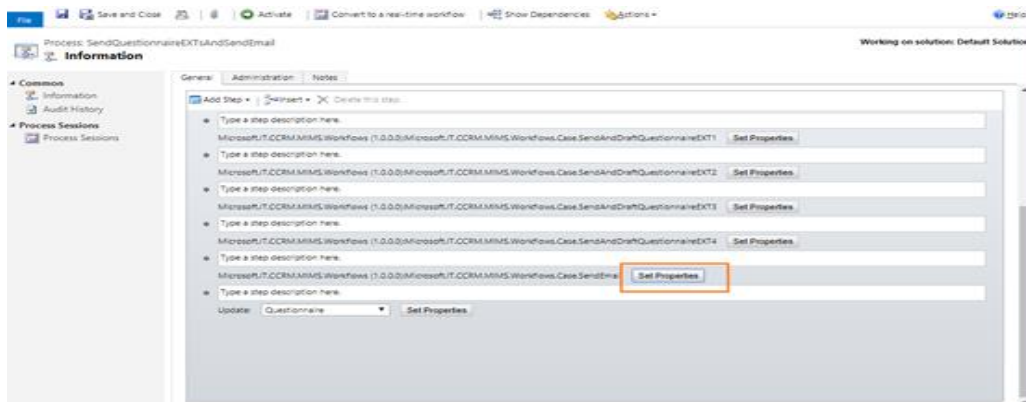
Change record status to: Invitation Sent

Update FN Portal Role

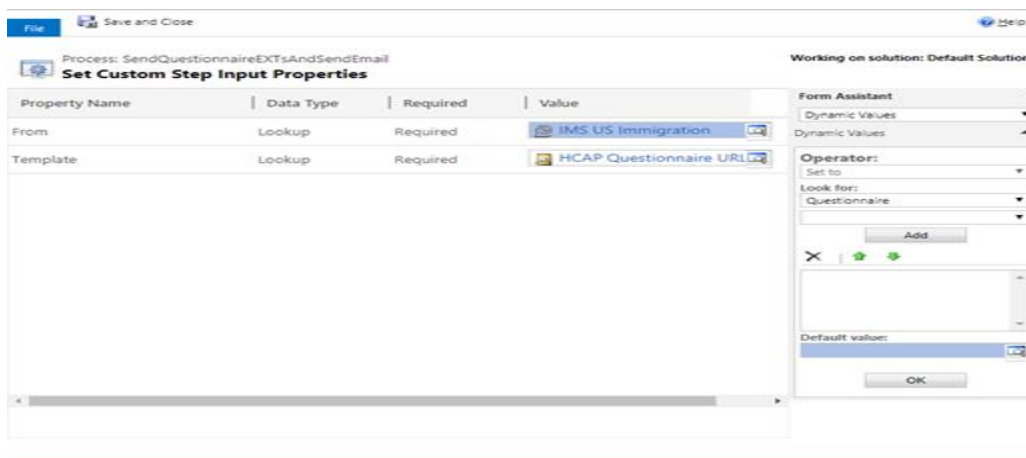
PortalsAssign Web Role Set Properties

## 7. SendQuestionnaireEXTsAndSendEmail

7a. Open Set Properties of send email step.

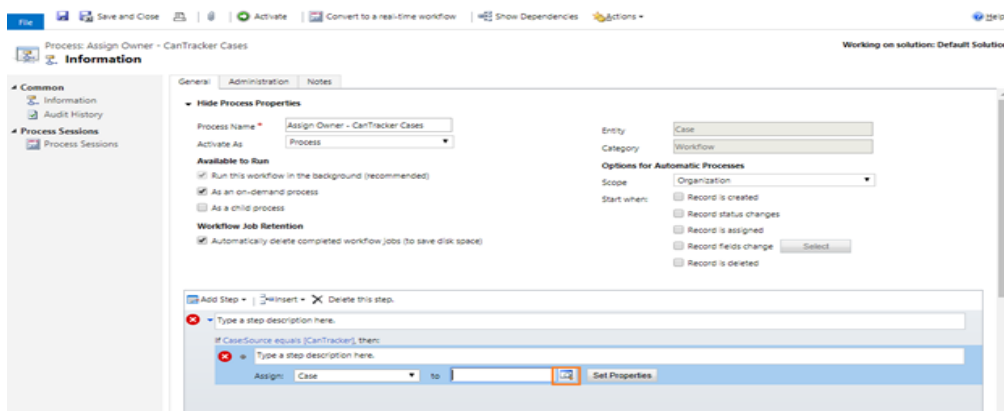


7b. Check if the From field is filled. If not, fill the field with “IMS US Immigration”. Save and close the form.

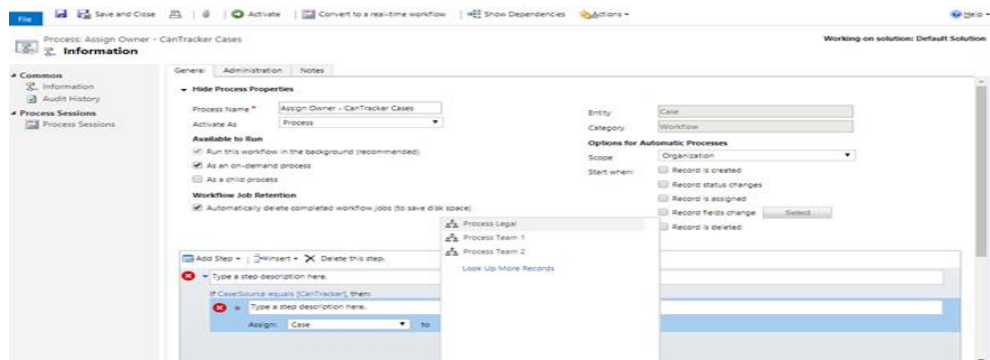


## 8. Assign Owner - CanTracker Cases

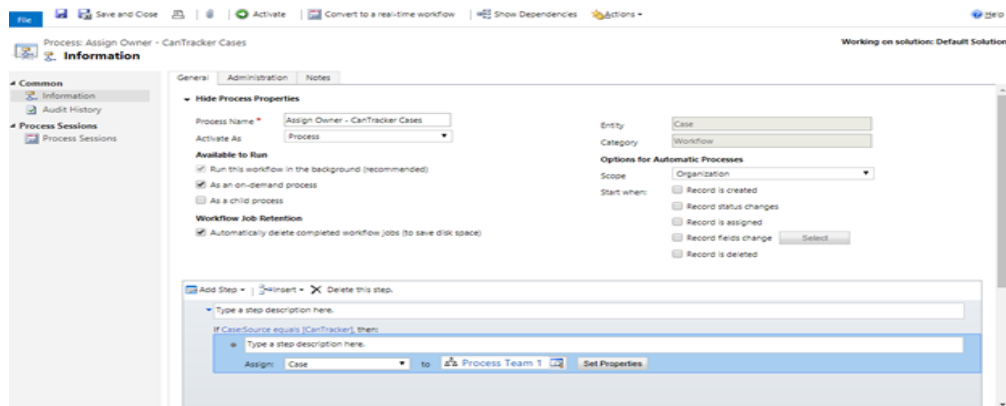
8a. Click on the lookup button as shown in the below screenshot.



8b. Fill the field with “Process Team1”.



8c. Activate the workflow.



## Documents Storage:

- Navigate to CRM -> Settings -> Extensions -> Integration Config
- Update the below config name values

**NOTE :** Azure component names appear on document are same but on azure portal component names will end with your CRM Organization Unique Name (for ex:your CRM org name:org12345678 , on the Azure portal component names end with ComponentName12345 like : IMSAppPrintAll12345)

## 1. App Insights Instrumentation Key

- Navigate to Azure
- Open the Resource "IMSAppStorageAppInsight<xxxxx>" as shown below

Home > Application Insights > IMSStrgeAppInsight1a4b6

IMSSTrgeAppInsight1a4b6  
Application Insights

Search (Ctrl+J)

Application Dashboard Getting started Search Logs (Analytics) Monitor resource group Feedback Favorites Rename Delete

Search and Logs (Analytics) will be removed from the top commands bar. They can be accessed from the left menu bar.

Resource group (change) : IMSAppResourceGroup  
Location : West US  
Subscription (change) : Free Trial  
Subscription ID :   
Tags (change) : [Click here to add tags](#)

Instrumentation Key : 67f2efa1-4588-4ae1-bd03-01b40c3709c2  
Connection String : InstrumentationKey=67f2efa1-4588-4ae1-bd03-01b40c3709c2

Show data for last: 30 minutes 1 hour 6 hours 12 hours 1 day 3 days 7 days 30 days

Failed requests

Server response time

- Copy the Instrumentation Key and update the Config Value in [App Insights Instrumentation Key](#) as shown below.

SAVE + NEW DEACTIVATE DELETE SHARE SECURED FIELDS EMAIL A LINK RUN WORKFLOW START DIALOG FLOW ...

INTEGRATIONS CONFIG : INFORMATION

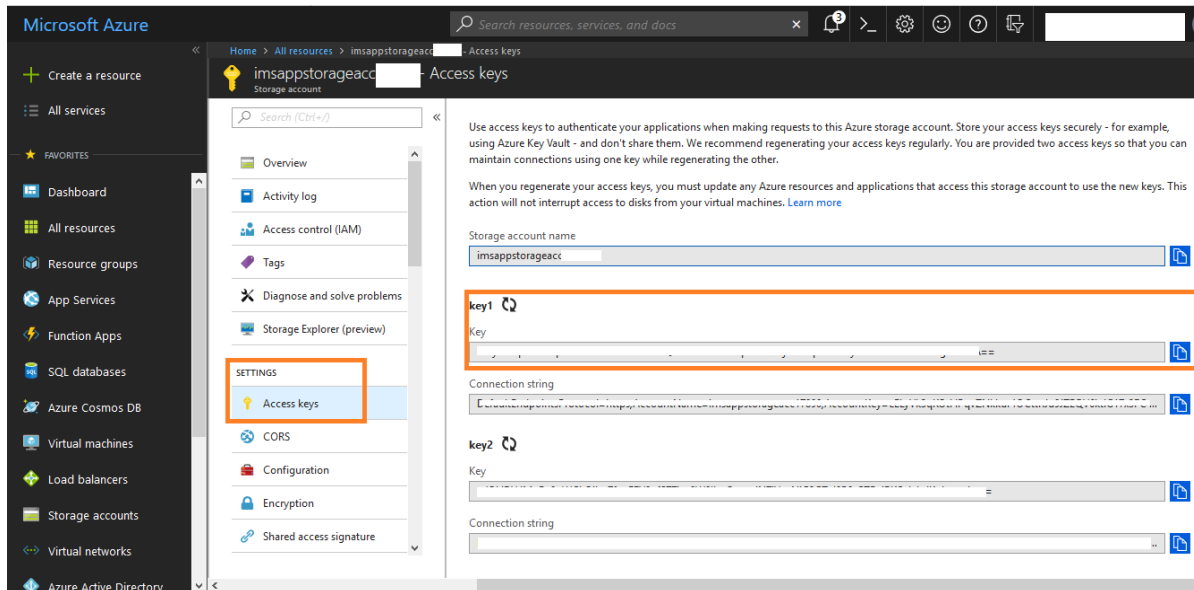
App Insights Instrumentation Key

General

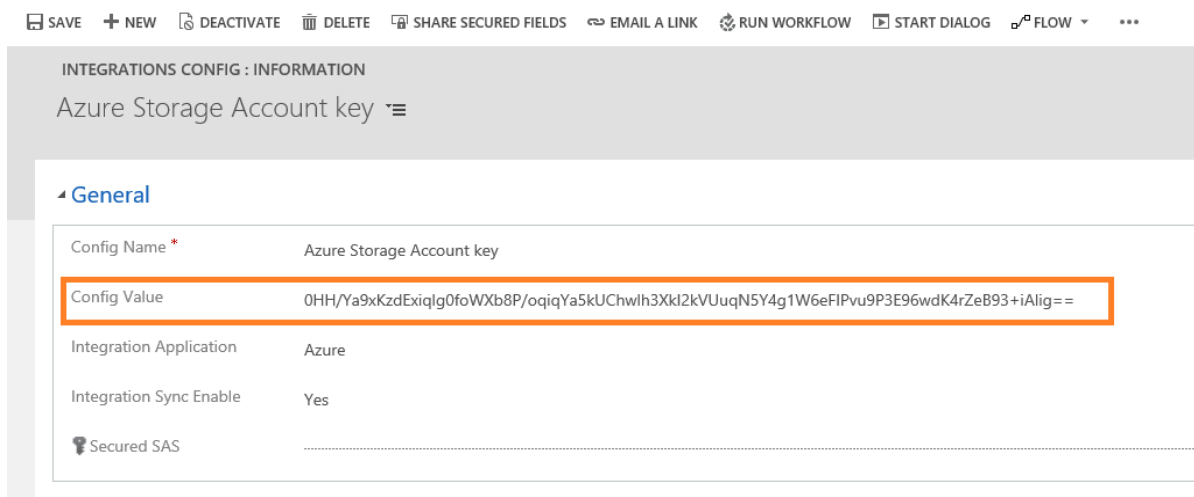
Config Name *	App Insights Instrumentation Key
Config Value	67f2efa1-4588-4ae1-bd03-01b40c3709c2
Integration Application	Forms Management
Integration Sync Enable	Yes
Secured SAS	

## 2. Azure Storage Account key

- Navigate to Azure.
- Open the Resource “imsappstorageacc<xxxxx>” as shown below.
- Go to Access Keys under Settings, Copy **key1 val**

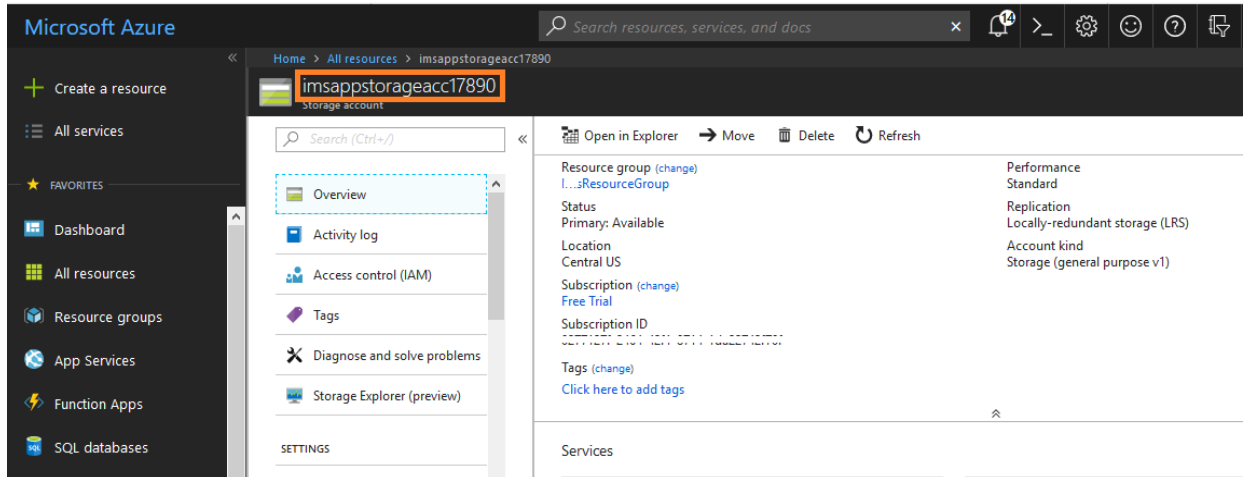


- Navigate to Settings -> Integrations Config Entity and Update the Key Value in **Azure Storage Account** key Record “**config value**” field as shown below.

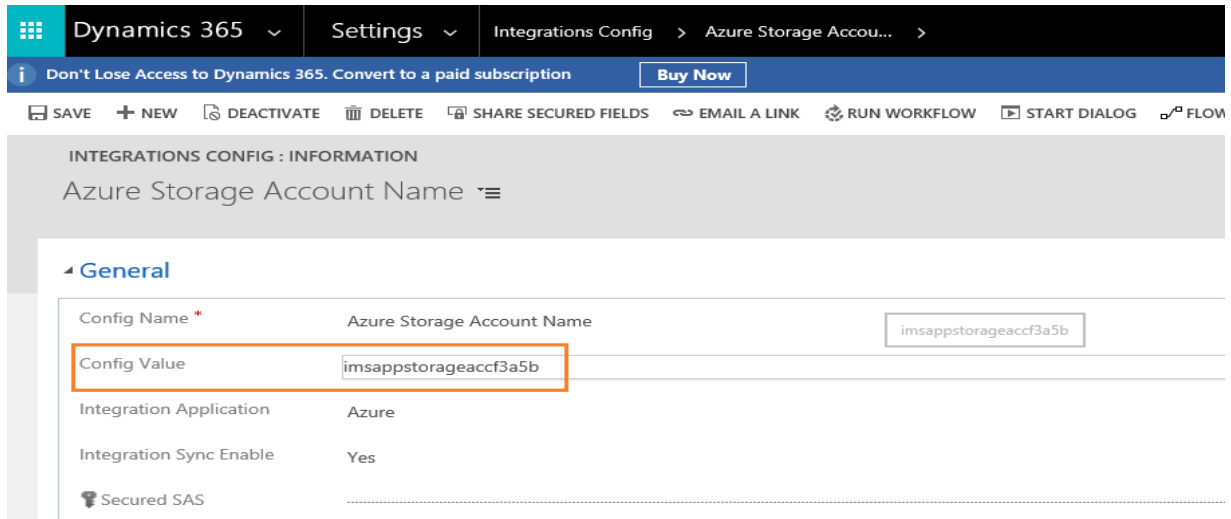


### 3. Azure Storage Account Name

- Navigate to Azure
- Open the Resource “imsappstorageacc<xxxx>” as shown below
- Copy the storage account name as shown in below screenshot

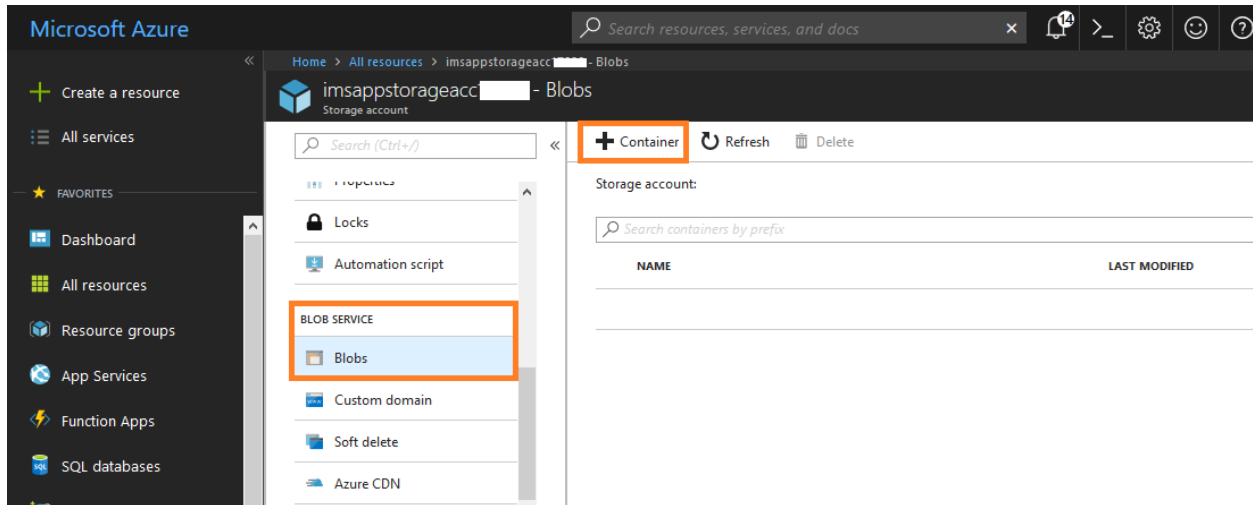


- Navigate to Settings -> Integrations Config Entity and Update the Account Name Value in Azure Storage Account Name Record “config value” field as shown below



#### 4. Azure Storage Container

- Navigate to Azure
- Open the Resource “imsappstorageacc<xxxxx>” as shown below
- Go To Blobs in **Blob Service** and create the container as below



Provide name[user defined] and click on ok. name [user define] update on azure storage container “**config value**” on CRM

New container

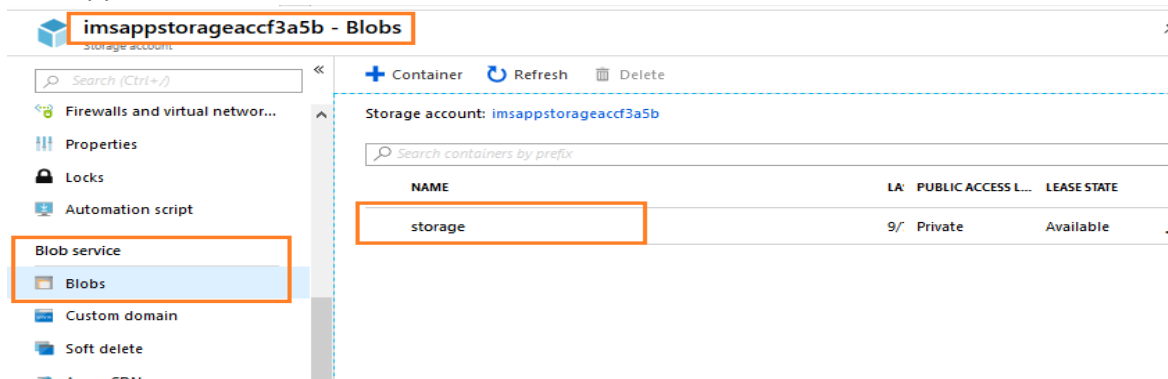
\* Name

Public access level ⓘ

Private (no anonymous access) ▼

OK Cancel

- Copy the Container Name



- Navigate to CRM -> settings -> Integrations Entity
- Update **Azure Storage Container** Record “**config value**” field as shown below

**Dynamics 365** ▾ **Settings** ▾ **Integrations Config** > **Azure Storage Conta...** >

Don't Lose Access to Dynamics 365. Convert to a paid subscription [Buy Now](#)

SAVE + NEW DEACTIVATE DELETE SHARE SECURED FIELDS EMAIL A LINK RUN WORKFLOW START DIALOG FLOW ▾

**INTEGRATIONS CONFIG : INFORMATION**

**Azure Storage Container** ▾

**General**

Config Name *	Azure Storage Container
Config Value	storage
Integration Application	Azure
Integration Sync Enable	Yes
Secured SAS	

## 5. Forms Service API URL:

- Navigate to Azure
- Open the Resource “imsappforms<xxxx>” as shown below
- On overview select the URL as shown in below screenshot, paste it on Forms Service API URL records “**config value**” field
- After URL, add **/api/v1/forms/** for Config Value

ex: <https://imsappforms82f09.azurewebsites.net/api/v1/forms/>

Home > All resources > IMSAppForms17890

**IMSAppForms17890**  
App Service

Search (Ctrl+/) <<

Overview (selected) Activity log Access control (IAM) Tags Diagnose and solve problems

Resource group (change) [ImsResourceGroup](#)

Status Running

Location Central US

Subscription (change) [Free Trial](#)

Subscription ID 0277127f-2464-42f1-8714-1da22742f70f

Tags (change) [Click here to add tags](#)

URL <https://imsappforms17890.azurewebsites.net/>

App Service plan/pricing tier [IMSAppServicePlan \(Free: 0 Small\)](#)

FTP/deployment username No FTP/deployment user set

FTP hostname ftp://waws-prod-dm1-093.ftp.azurewebsi...

FTPS hostname ftps://waws-prod-dm1-093.ftp.azurewebsi...

## 6) Secured SAS Token

Navigate to **imsappstorage<xxxx>** resource and go to shared access signature under settings tab.

Please ensure that start date and end date fields are filled with valid dates and end date is greater than the current date.



Home > imsapstorageacc > Shared access signature

imsappstorageacc - Shared access signature

A shared access signature (SAS) is a URI that grants restricted access rights to Azure Storage resources. You can provide a shared access signature to clients who should not be trusted with your storage account key but whom you wish to delegate access to certain storage account resources. By distributing a shared access signature URI to these clients, you grant them access to a resource for a specified period of time.

An account-level SAS can delegate access to multiple storage services (i.e. blob, file, queue, table). Note that stored access policies are currently not supported for an account-level SAS.

[Learn more](#)

**Allowed services**

☒ Blob ☐ File ☐ Queue ☐ Table

**Allowed resource types**

☐ Service ☐ Container ☒ Object

**Allowed permissions**

☒ Read ☐ Write ☐ Delete ☐ List ☐ Add ☐ Create ☐ Update ☐ Process

**Start and expiry date/time**

Start: 2018-09-17 12:29:35 PM

End: 2019-09-10 8:29:35 PM (UTC+05:30) --- Current Time Zone ---

**Allowed IP addresses**

For example: 190.1.3.0/24 or 190.1.3.0-190.1.3.255

**Allowed protocols**

☒ HTTPS only ☐ HTTPS and HTTP

Click on Generate SAS and connection string.

Select the SAS token value as shown in below screenshots, paste it on “**Secured SAS**” field of SAS record in Integrations config in CRM.

If the SAS Key is expired , then Re Generate SAS key in azure and update the above record in crm .

Search (Ctrl+F)

Tags

Diagnose and solve problems

Storage Explorer (preview)

**Settings**

Access keys

CORS

Configuration

Encryption

**Shared access signature**

Firewalls and virtual networks

Advanced Threat Protection (p...

Properties

Locks

Automation script

**Signing key**

key1

**Generate SAS and connection string**

**Connection string**

BlobEndpoint=https://imsappstorageaccf3a5b.blob.core.windows.net/;QueueEndpoint=https://imsappstorageaccf3a5b.queue.core.windows.net/

**SAS token**

sv=2017-11-09&ss=bfqt&st=sco&sp=rwdlacup&se=2019-01-07T14:39:14Z&st=2018-09-11T06:39:14Z&sig=vUHTbBhg26RTNC6...

**Blob service SAS URL**

https://imsappstorageaccf3a5b.blob.core.windows.net/?sv=2017-11-09&ss=bfqt&st=sco&sp=rwdlacup&se=2019-01-07T14:39:14Z&st=2018-09-11T06:39:14Z&sig=vUHTbBhg26RTNC6...

**File service SAS URL**

https://imsappstorageaccf3a5b.file.core.windows.net/?sv=2017-11-09&ss=bfqt&st=sco&sp=rwdlacup&se=2019-01-07T14:39:14Z&st=2018-09-11T06:39:14Z&sig=vUHTbBhg26RTNC6...

**Queue service SAS URL**

https://imsappstorageaccf3a5b.queue.core.windows.net/?sv=2017-11-09&ss=bfqt&st=sco&sp=rwdlacup&se=2019-01-07T14:39:14Z&st=2018-09-11T06:39:14Z&sig=vUHTbBhg26RTNC6...

**Table service SAS URL**

https://imsappstorageaccf3a5b.table.core.windows.net/?sv=2017-11-09&ss=bfqt&st=sco&sp=rwdlacup&se=2019-01-07T14:39:14Z&st=2018-09-11T06:39:14Z&sig=vUHTbBhg26RTNC6...

Dynamics 365 Settings Integrations Config > SAS

Don't Lose Access to Dynamics 365. Convert to a paid subscription [Buy Now](#)

SAVE + NEW DEACTIVATE DELETE SHARE SECURED FIELDS EMAIL A LINK RUN WORKFLOW START DIALOG FLOW ...

INTEGRATIONS CONFIG : INFORMATION

SAS

**General**

Config Name \* SAS

Config Value

Integration Application Azure

Integration Sync Enable Yes

**Secured SAS**

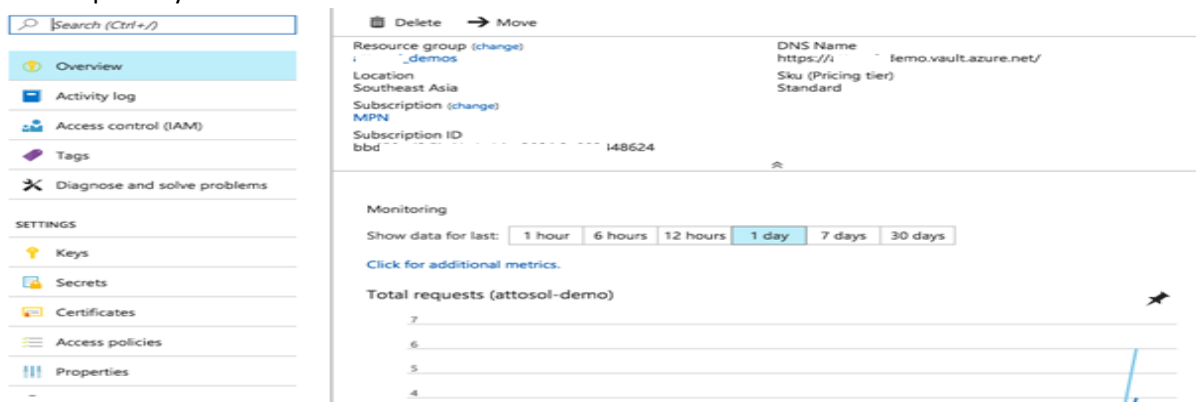
sv=2017-11-09&ss=bfqt&st=sco&sp=rwdlacup&se=2019-01-07T14:39:14Z&st=2018-09-11T06:39:14Z&sig=vUHTbBhg26RTNC6...

## 5.2 Azure Configurations

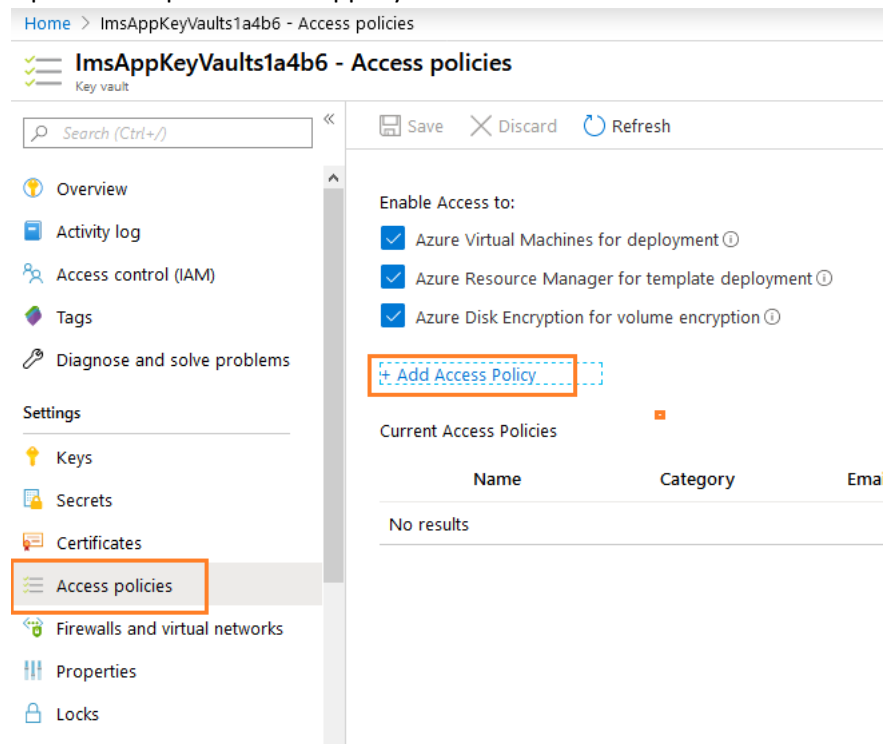
**NOTE :** Azure component names appear on document are same but on azure portal component names will end with your CRM Organization Unique Name (for ex:your CRM org name:org12345678 , on the Azure portal component names end with ComponentName12345 like : IMSAppPrintAll12345)

First step on azure configuration is creating key vaults. Post deployment, on azure portal you can find components named as **ImsAppKeyVaults** following with Unique org id on given azure portal under user provided resource group.

### ■ ImsAppKeyVaults: Open keyvault



Open access policies in ImsAppKeyVaults<xxxxx> and click on “Add Access Policy”.



Select all permission except PURGE in key permissions, secret permissions and certificate permissions. In principal select the **logged in azure user**. Add the access policy to key vault.

The image shows two screenshots from the Azure portal. The top screenshot is the 'Add access policy' page for a key vault named 'ImsAppKeyVaults1a4b6'. It shows three dropdown menus for permissions: 'Key permissions' (15 selected), 'Secret permissions' (7 selected), and 'Certificate permissions' (15 selected). An orange bracket groups these three dropdowns with the text 'Select All Permission except "PURGE"'. The 'Select principal' dropdown is set to 'None selected'. The 'Authorized application' dropdown is also empty. The right sidebar shows the 'Principal' selection pane with 'imsappnov' selected. The bottom screenshot shows the 'Access policies' page for the same key vault. The 'Save' button is highlighted with an orange box. Below the 'Enable Access to' section, the 'Add Access Policy' link is highlighted with a dashed orange box. The 'Current Access Policies' table shows one policy named 'USER' with the email 'imsappnov235\_outlo...'. The policy has 15 selected key permissions, 7 selected secret permissions, and 15 selected certificate permissions. The 'Delete' button is visible in the 'Action' column.

Home > ImsAppKeyVaults1a4b6 - Access policies > Add access policy

**Add access policy**  
Add access policy

Configure from template (optional)

Key permissions  
15 selected

Secret permissions  
7 selected

Certificate permissions  
15 selected

Select principal  
None selected

Authorized application

Principal  
Select a principal  
imsappnov

Select member:  
imsappnov235@outlook.com

Home > ImsAppKeyVaults1a4b6 - Access policies

**ImsAppKeyVaults1a4b6 - Access policies**  
Key vault

Search (Ctrl+*/*)

Save Discard Refresh

Please the click 'Save' button to commit your changes.

Enable Access to:

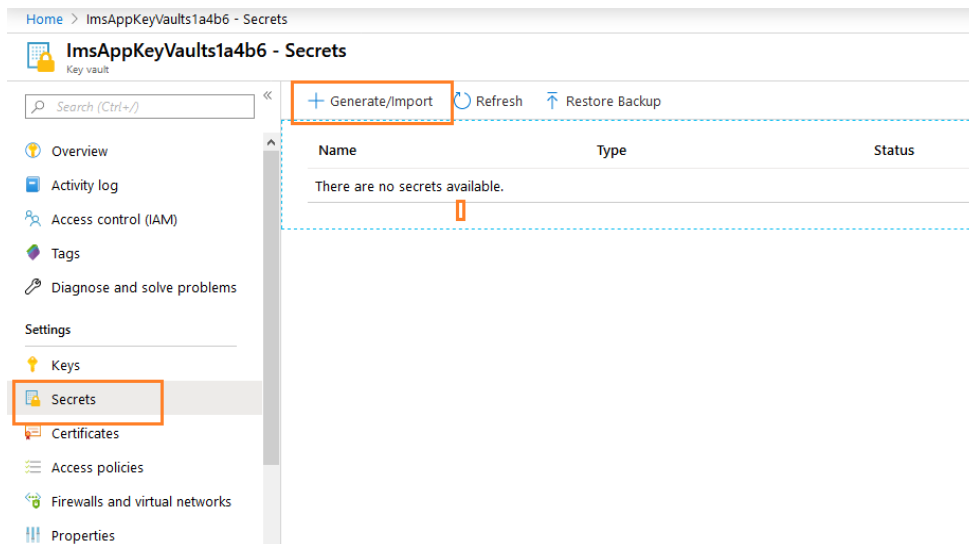
- ☒ Azure Virtual Machines for deployment
- ☒ Azure Resource Manager for template deployment
- ☒ Azure Disk Encryption for volume encryption

[Add Access Policy](#)

Current Access Policies

Name	Category	Email	Key Permissions	Secret Permissions	Certificate Permissi...	Action
USER		imsappnov235_outlo...	15 selected	7 selected	15 selected	Delete

In the Azure Key Vault settings that you just created you will see a screen similar to the following. Click Secrets in the blade, followed by Generate/Import button on the top right.



Type in your secret details:

Home > ImsAppKeyVaults1a4b6 - Secrets > Create a secret

### Create a secret

Upload options  
Manual

Name \* ⓘ  
BinderAdminUser ✓

Value \*  
Enter the secret.

Content type (optional)

Set activation date? ⓘ ☐

Set expiration date? ⓘ ☐

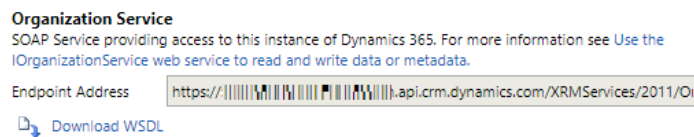
Enabled? ☒ Yes ☐ No

Create

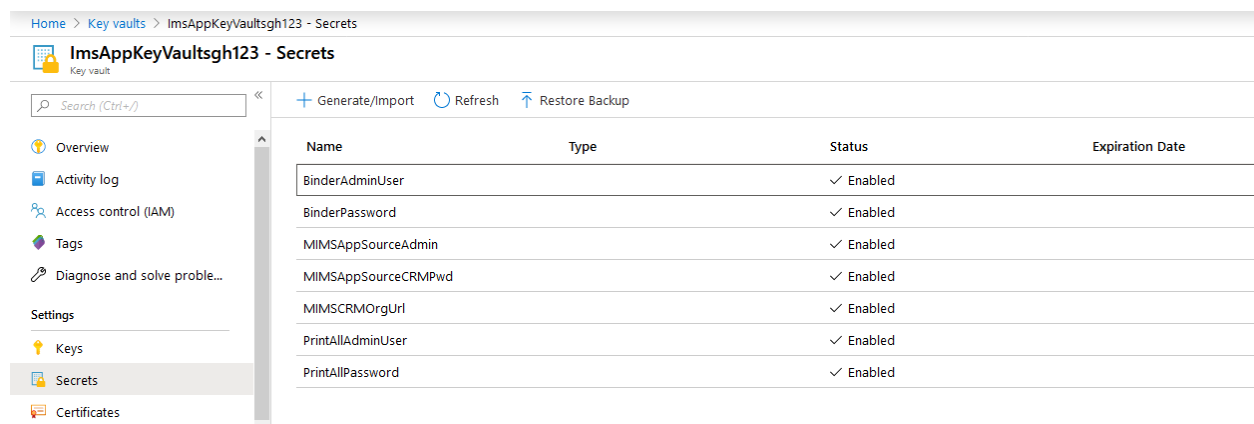
Secret details name should be as follows(yellow highlighted)

1. Name : **BinderAdminUser** Value :[provide binder application **Run as** username] ex:abc@ee.com
2. Name : **BinderPassword** Value :[provide binder application password]

- Name : **MIMSCRMOrgUrl** Value :[Target CRM instance organization url]  
On CRM : Settings → Customization → Developer Resource →



- Name : **PrintAllAdminUser** Value :[provide printall application **Run as** username] ex:abc@ee.com
- Name : **PrintAllPassword** Value :[provide printall application password]
- Name : **MIMSAppSourceAdmin** Value :[provide web job applications **Run as** username]
- Name : **MIMSAppSourceCRMPwd** Value :[provide web job applications password]



On part on Azure Configuration now we are going to configure for **IMSAppPrintAll** following with Unique org id (web app) and **IMSAppBinder** following with Unique org id (web app) . Below steps to create/modify.

- **Identity**

Goto Settings and select **Identity**.

If is **ON** , don't change anything. If it is **Off**, change it to **On** and save. (After clicking on save it will take some time, wait till it save.)

Home > IMSAppPrintAllgh123 - Identity

## IMSAppPrintAllgh123 - Identity

App Service

Search (Ctrl+/)

**Deployment**

- Quickstart
- Deployment slots
- Deployment Center

**Settings**

- Configuration
- Authentication / Authorization
- Application Insights
- Identity**
- Backups
- Custom domains
- TLS/SSL settings
- Networking

**System assigned** **User assigned**

A system assigned managed identity enables Azure resources to authenticate to cloud services. Necessary permissions can be granted via Azure role-based-access-control. The lifecycle of a system assigned resource (e.g. Virtual Machine) can only have one system assigned managed identity. [Learn more](#)

Save Discard Refresh Got feedback?

**Status** ⓘ

Off On

**Object ID** ⓘ

f653db43-527a-441a-8562-399ed1cb2f0c

**i** This resource is registered with Azure Active Directory. You can control its access to services.

### Application Settings

Navigate to **Configuration** and create application settings. For application settings we need to create below parameters:

- 1) KeyVaultAppClientId
- 2) keyvaultclientId
- 3) keyvaultclientsecretId

**Azure Portal > Azure Active Directory > App Registrations > New Application Registration**

## Register an application

### \* Name

The user-facing display name for this application (this can be changed later).

PrintAllApp ✓

### Supported account types

Who can use this application or access this API?

- ☒ Accounts in this organizational directory only (Default Directory only - Single tenant)
- ☐ Accounts in any organizational directory (Any Azure AD directory - Multitenant)
- ☐ Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)

[Help me choose...](#)

### Redirect URI (optional)

We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios.

Web  ✓

By proceeding, you agree to the [Microsoft Platform Policies](#)

Register

Note down your details. Remember, your client id is same as Application ID.

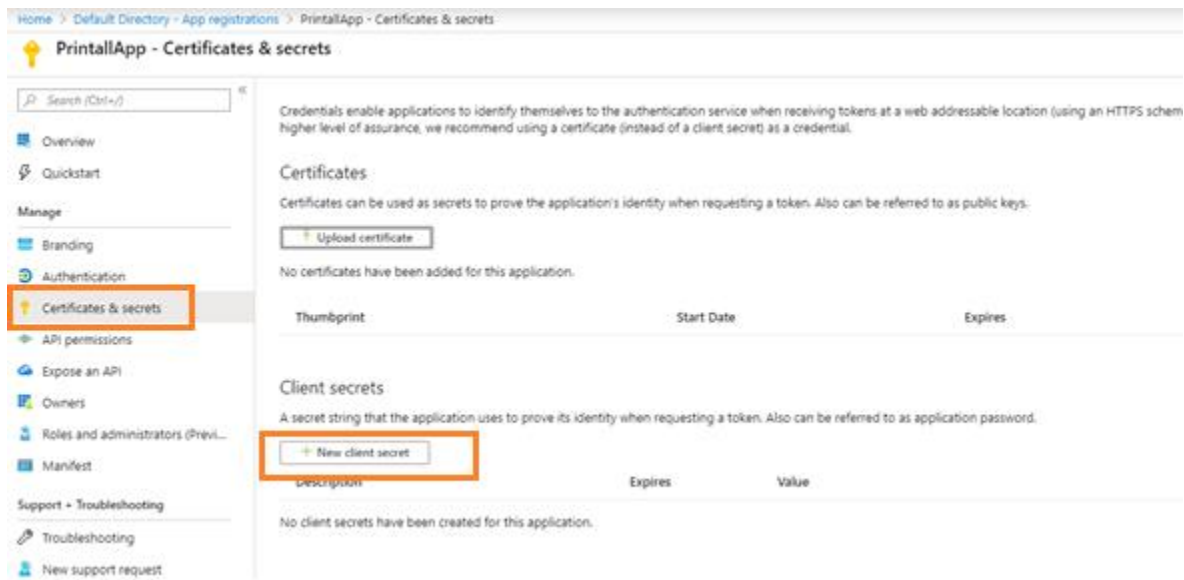
The screenshot shows the Azure Portal interface for an application registration named 'PrintallApp'. The breadcrumb navigation at the top reads 'Home > Default Directory - App registrations > PrintallApp'. On the left, a sidebar contains navigation links: Overview, Quickstart, Manage, Branding, Authentication, Certificates & secrets, API permissions, Expose an API, Owners, and Roles and administrators (Preview). The main content area displays the application's details:

- Display name: PrintallApp
- Application (client) ID: 58186e5e-74ee-4213-bb3c-ebc4a9cbd8c5 (highlighted with an orange box)
- Directory (tenant) ID: a3528edd-2358-48cf-afe0-229e3b9f08c3
- Object ID: d6d44be9-eea3-409e-acdf-819a8943b1e7
- Supported account types: My organization only
- Redirect URIs: Add a Redirect URI
- Application ID URI: Add an Application ID URI
- Managed application in...: PrintallApp

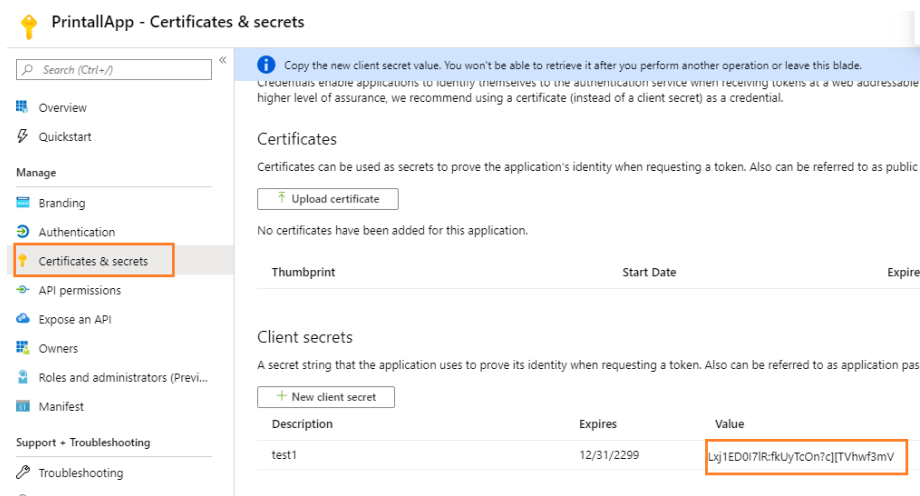
Below the details, there is a blue banner with an information icon and the text: 'Welcome to the new and improved App registrations. Looking to learn how it's changed from App registrations (Legacy)? [Learn more](#)'. At the bottom, there are sections for 'Call APIs' (with icons for various services) and 'Documentation' (with links to Microsoft identity platform, Authentication scenarios, Authentication libraries, Code samples, Microsoft Graph, and Glossary).

Click on **Certificates & secrets** in the below image and navigate to **Client secrets** section as shown below

While Generating the key for any app registration Provide some user defined name in the description and select **"Never expires"** as the duration and save the record. A key will be generated. Take this key as the `keyvaultclientsecretId`.



Create a new client secret, give some name in description and select the Expires field as “Never”.



#### 4) keyvaulturl

Azure portal > ImsAppKeyVaults following with Unique org id > Overview > Take DNS Name

DNS Name

https://imsappkeyvaultsf7.vault.azure.net/

#### 5) SecretUrlUserId

Azure portal > ImsAppKeyVaults following with Unique org id > Overview > Take DNS Name

Remove last character (/) from url

The above setting configurations are as shown below , after enter the required application settings and save it.



Home > IMSAppPrintAllgh123 - Configuration

## IMSAppPrintAllgh123 - Configuration

App Service

Search (Ctrl+/)

Deployment

- Quickstart
- Deployment slots
- Deployment Center

Settings

- Configuration**
- Authentication / Authorization
- Application Insights
- Identity
- Backups
- Custom domains
- TLS/SSL settings
- Networking

Refresh Save Discard

Click here to upgrade to a higher SKU and enable additional features.

Application settings are encrypted at rest and transmitted over an encrypted channel. You can choose to display them in plain text in your controls below. Application Settings are exposed as environment variables for access by your application at runtime. [Learn more](#)

+ New application setting Show values Advanced edit Filter

Name	Value	Source	Deployment slot sett
KeyVaultAppClientId	Hidden value. Click show values button ;	App Config	
keyvaultclientId	Hidden value. Click show values button ;	App Config	
keyvaultclientsecretId	Hidden value. Click show values button ;	App Config	
keyvaulturl	Hidden value. Click show values button ;	App Config	
SecretUrlUserId	Hidden value. Click show values button ;	App Config	
WEBSITE_NODE_DEFAULT_VERSION	Hidden value. Click show values button ;	App Config	

Now Go to Keyvault [ **ImsAppKeyVaults<xxxxxx>** ]--> access policies --> click on add access policy and provide the application on select principal field

Select the application and provide all **the permissions except purge** and click on **Add**.  
Now save the access policies.

Home > Key vaults > ImsAppKeyVaultsgh123 - Access policies > Add access policy

### Add access policy

Add access policy

Configure from template (optional)

Key permissions

15 selected

Secret permissions

7 selected

Certificate permissions

15 selected

Select principal

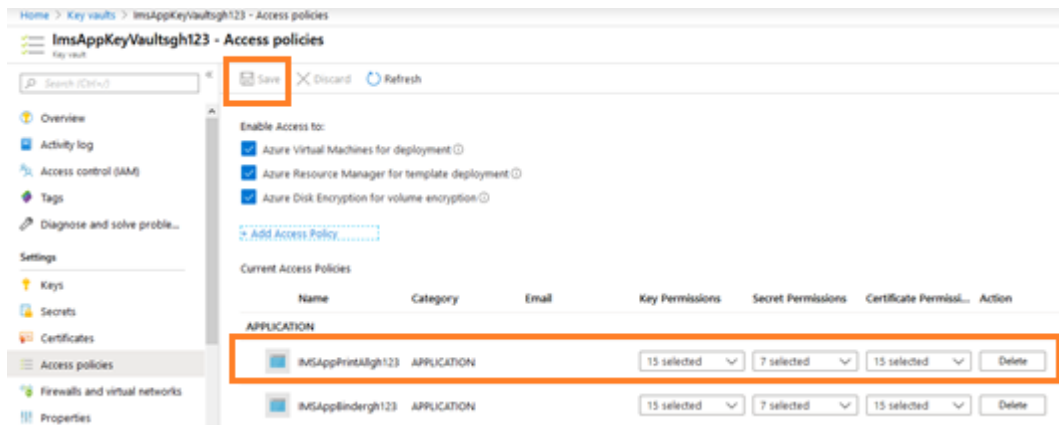
\* IMSAppPrintAllgh123

Authorized application

None selected

Add

Finally, you will see the access policy like below



For **ImsappBinder<xxxxx>** and **IMSAppWebJobs<xxxxx>** AppServices also we need to follow the same procedure

- 1) On and save Identity
- 2) Azure active directory application registration binder/webjob
- 3) application settings – adding keyvalut url, application and secret ids.
- 3) Adding application to access policy of keyvault..

CRM Configuration for Printall :

Navigate to Settings → integration Configuration → search for “PrintAllApplicationURL”

For Config Value : Azure portal > IMSAppPrintAll following with Unique org id > Overview > URL

CRM Configuration for Binder :

Settings → integration Configuration → search for “PrintBinderURL”

For Config Value : Azure portal > IMSAppBinder following with Unique org id > Overview > URL + /CreateBinderPrint.aspx?ID=

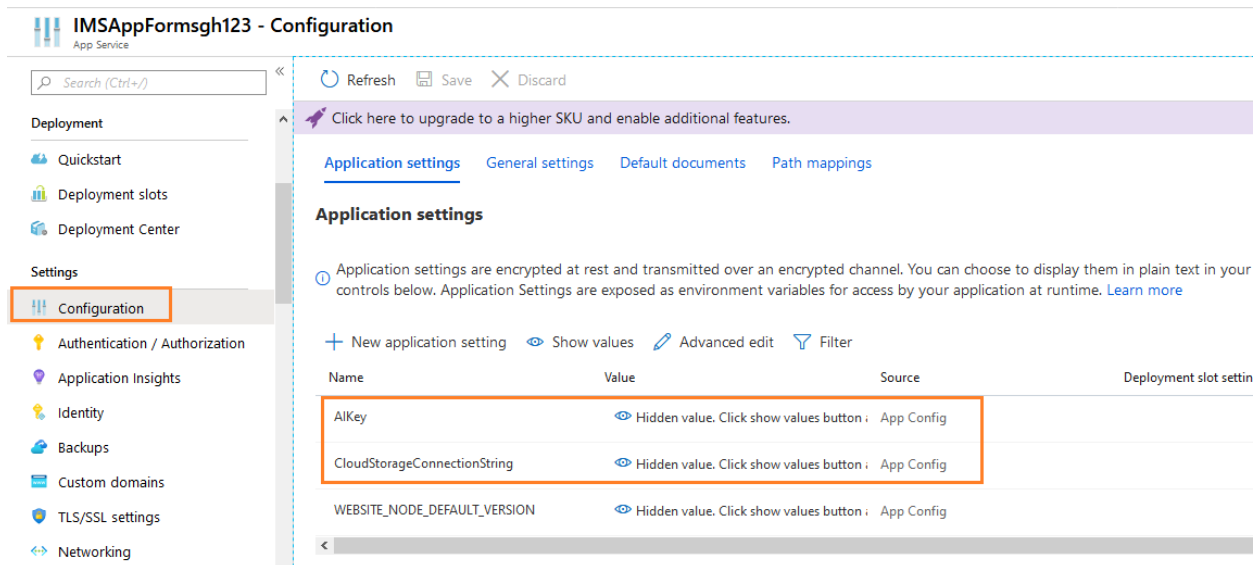
Ex: <https://imsappbinder820f9.azurewebsites.net/CreateBinderPrint.aspx?ID=>

## Form Configurations:

- 1) For Forms App (**IMSAppForms**) service need to add below items on app settings:
  - a. **AIKey** : (navigation : IMSAppStorageAppInsight<xxxxx>-- overview – Instrumentation key)
  - b. **CloudStorageConnectionString**: (navigation : imsformstrge<xxxxx> – Access keys – Connectionstring)

Save the Settings.

**Note:** Remove text “;EndpointSuffix=core.windows.net” form the CloudStorageConnectionString



IMSAppFormsgh123 - Configuration

Search (Ctrl+/)

Deployment

- Quickstart
- Deployment slots
- Deployment Center

Settings

- Configuration**
- Authentication / Authorization
- Application Insights
- Identity
- Backups
- Custom domains
- TLS/SSL settings
- Networking

Refresh Save Discard

Click here to upgrade to a higher SKU and enable additional features.

Application settings General settings Default documents Path mappings

**Application settings**

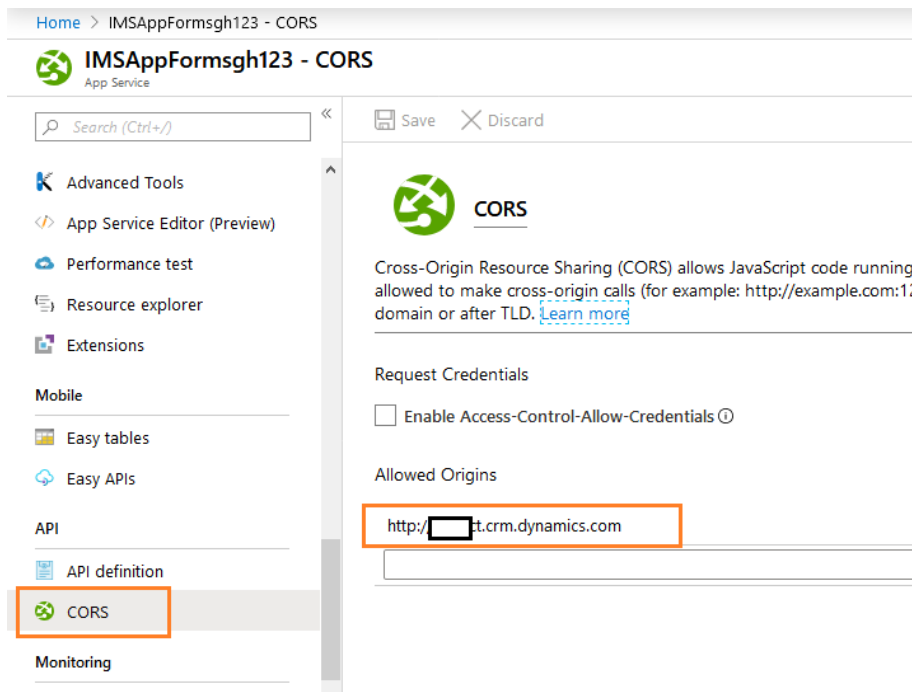
Application settings are encrypted at rest and transmitted over an encrypted channel. You can choose to display them in plain text in your controls below. Application Settings are exposed as environment variables for access by your application at runtime. [Learn more](#)

+ New application setting Show values Advanced edit Filter

Name	Value	Source	Deployment slot setting
AIKey	Hidden value. Click show values button	App Config	
CloudStorageConnectionString	Hidden value. Click show values button	App Config	
WEBSITE_NODE_DEFAULT_VERSION	Hidden value. Click show values button	App Config	

Adding Application Settings on App service.

**IMP Note:** Target CRM instance URL must declare under Forms App (IMSAppForms) →ss CORS



Home > IMSAppFormsgh123 - CORS

IMSAppFormsgh123 - CORS

App Service

Search (Ctrl+/)

Save Discard

**CORS**

Cross-Origin Resource Sharing (CORS) allows JavaScript code running allowed to make cross-origin calls (for example: [http://example.com:1234](#) domain or after TLD. [Learn more](#))

Request Credentials

☐ Enable Access-Control-Allow-Credentials ⓘ

Allowed Origins

[http://\[redacted\].crm.dynamics.com](#)

CRM side Form Management related configuration :

Settings → integration Configuration → search for “App Insights Instrumentation Key “

For the “App Insights Instrumentation Key” record we should provide “Config Value”

For Config Value :

Azure portal > IMSAppStorageAppInsight following with Unique org id > Overview > Instrumentation Key

Settings → integration Configuration → search for “Forms Service API URL“

For the “Forms Service API URL” record we should provide “Config Value”

For Config Value :

Azure portal > IMSAppForms following with Unique org id > overview > URL

After url add **/api/v1/forms/** for Confiig Value

ex: <https://imsappforms82f09.azurewebsites.net/api/v1/forms/>

Update Master Forms Records :

Get all the Master Forms with “FormType” value Equals to “MasterForm” as shown below

The screenshot shows the Microsoft Dynamics 365 Advanced Find interface. The top navigation bar includes 'FILE', 'ADVANCED FIND', and 'LIST TOOLS'. Below this is a toolbar with icons for Query, Saved Views, Results, New, Save, Edit Columns, Edit Properties, Clear, Group AND, Group OR, Details, Download Fetch XML, and Debug. The main search area has a 'Look for:' dropdown set to 'Master Forms' and a 'Use Saved View:' dropdown set to '[new]'. Below these, there is a filter section with a dropdown menu showing 'Form Type' selected, and a filter value 'Master Form' entered in the adjacent field.

To change the URL, follow below steps

1) Take new Master Form and fill all the fields as it is except URL field

2) Save the form (Do Not Click “Save and Close” Button)

Follow the step 1 and 2 for all the Master Forms

Now able to see the URL with forms azure application name as below

Example : “G-28” Master Form

MASTER FORMS : INFORMATION		Owner*
G-28		
<b>General</b>		
Name *	G-28	Form Logical Name * mims_g28
Form Type	Master Form	
USCIS Published On *	5/23/2018	
USCIS Expires On *	5/31/2021	
Usage Type *	Mostly	
URL	<a href="https://imsappformse098b.azurewebsites.net/versions/2021-05-31/create">https://imsappformse098b.azurewebsites.net/versions/2021-05-31/create</a>	
CRM Form Id	EC103FE5-5D85-4C59-AADF-87E1139DD55B	
Description		

## 6.TroubleShooting Details

Follow below steps if any of the required components were not installed appropriately during deployment. Failures may occur if any of the pre-requisites are not provided, network disconnections, Azure components take more time than anticipated to deploy on cloud or any other unexpected failures. Follow the below steps to resolve them manually if not completed automatically while installation.

### 6.1 Azure Applications

#### 6.1.1 Web Service Plan

If IMSAppServicePlan application is not created in azure as shown below



Create the AppService Plan with name of ‘IMSAppServicePlan’ as shown below

Home > New App Service Plan

## New App Service Plan

Create a plan for the web app

\* App Service plan  
IMSAppServicePlan ✓

\* Subscription  
Free Trial ▼

\* Resource Group ⓘ  
☐ Create new ☒ Use existing  
TestMimsResourceGroup ▼

\* Operating System  
Windows ▼

\* Location  
Central US ▼

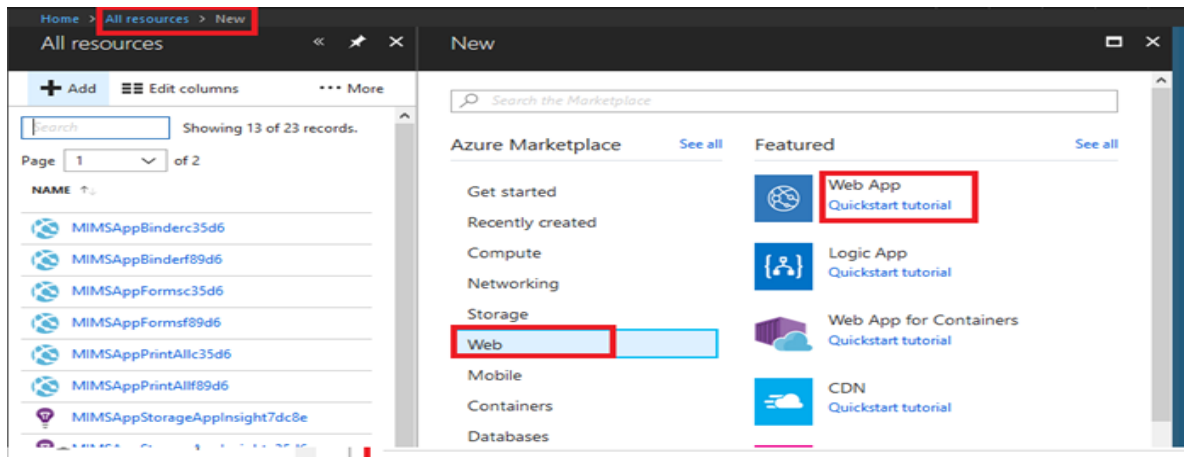
\* Pricing tier  
S1 Standard >

Create Automation options

### 6.1.2 Web Applications

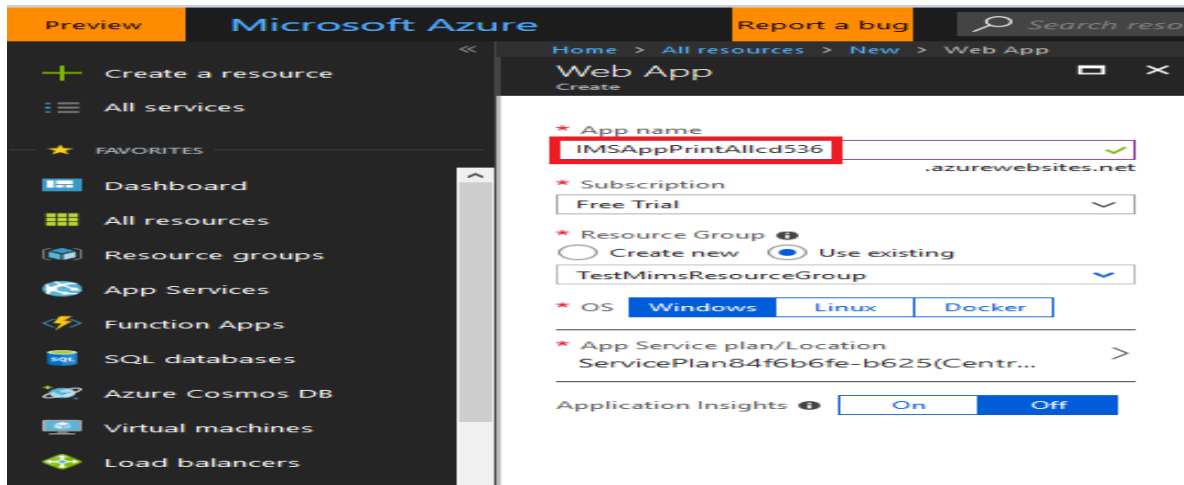
#### IMSAppPrintAll Application

- If IMSAppPrintAll followed by organization unique name application is not created in azure
- Create Webapp in azure as shown below



- Create "IMSAppPrintAll" followed by five characters of an organization unique name as shown below

**Example:** "IMSAppPrintAlldc536"



- Run the below PowerShell command as shown below

```
$subscriptionId = " #Azure Subscription ID
```

```
$resourceGroupName = " #Azure Resource Group Name
```

```
$IMSAppSourcePrintAll_Path = " # Print All Application Path from WebApplications folder downloaded from the GitHub  
(https://github.com/microsoftapps/IMS ) as shown below image
```

```
$IMSAppPrintAll = " # Print All Application name, Example: 'IMSAppPrintAlldc536'
```

```
Add-AzureAccount
```

```
Select-AzureSubscription -SubscriptionId $subscriptionId
```

```
Publish-AzureWebsiteProject -name $IMSAppPrintAll -package $IMSAppSourcePrintAll_Path
```

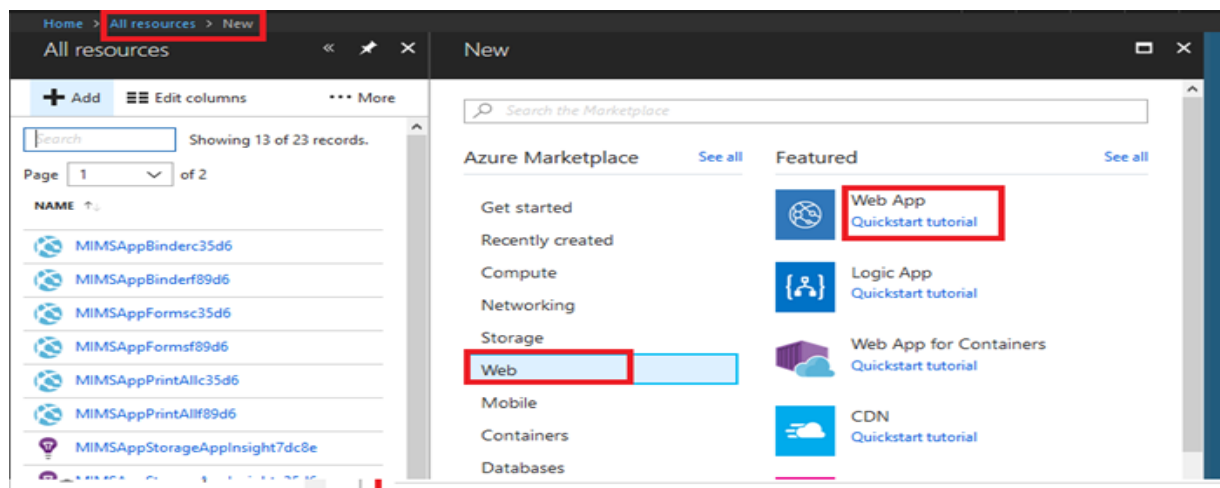
w

Downloads > IMS-master > IMS-master > WebApplications					
Name	File ownership	Date modified	Type	Size	
IMSAPPBinder		15-10-2018 00:49	Compressed (zipp...	51,135 KB	
IMSAppFormsManagement		15-10-2018 00:49	Compressed (zipp...	22,581 KB	
IMSAppPrintAll		15-10-2018 00:49	Compressed (zipp...	45,693 KB	

- Script has to be executed without getting error in PowerShell

### IMSAppBinder Application

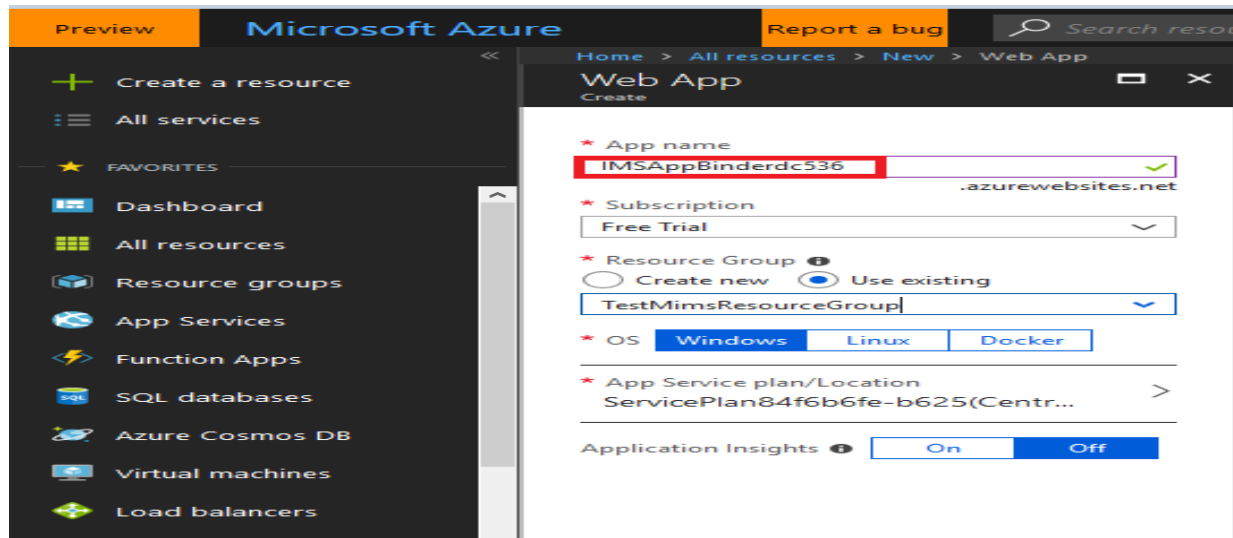
- If IMSAppBinder followed by organization unique name application is not created in azure
- Create Webapp in azure as shown below



- Create “IMSAppBinder” followed by five characters of an organization unique name as shown below

**Example:** “IMSAppBinderdc536”





Run the below PowerShell command as shown below

```
$subscriptionId = " #Azure Subscription ID
```

```
$resourceGroupName = " #Azure Resource Group Name
```

```
$IMSAppSourceBinder_Path = " # Binder Application Path from WebApplications folder downloaded from the GitHub  
(https://github.com/microsoftappsourc/IMS ) as shown below imag
```

```
$IMSAppBinder = " # Binder Application name, Example: 'IMSAppBinderdc536'
```

Add-AzureAccount

```
Select-AzureSubscription -SubscriptionId $subscriptionId
```

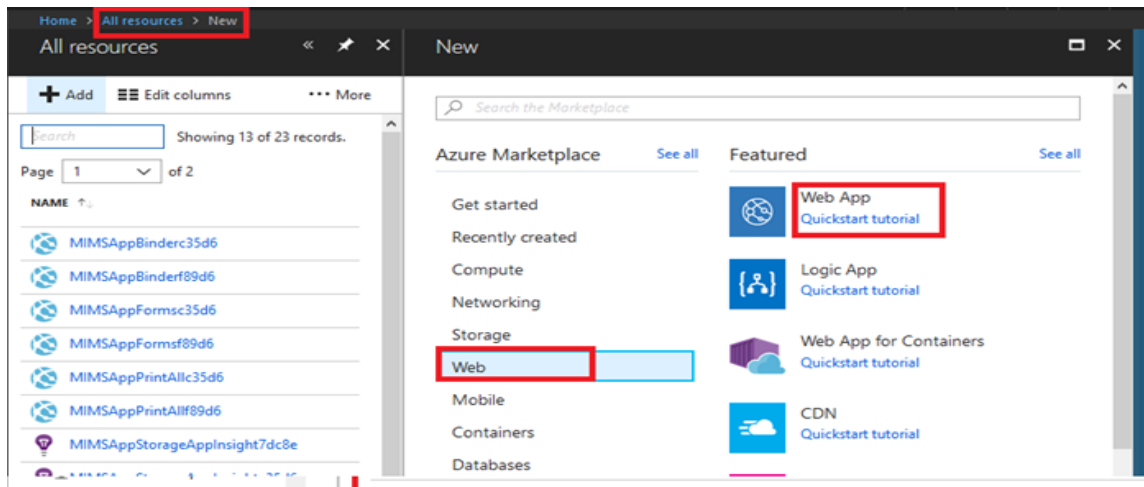
```
Publish-AzureWebsiteProject -name $IMSAppBinder -package $IMSAppSourceBinder_Path
```

Downloads > IMS-master > IMS-master > WebApplications				
Name	File ownership	Date modified	Type	Size
IMSAPPBinder		15-10-2018 00:49	Compressed (zipp...	51,135 KB
IMSAppFormsManagement		15-10-2018 00:49	Compressed (zipp...	22,581 KB
IMSAppPrintAll		15-10-2018 00:49	Compressed (zipp...	45,693 KB

- Script has to be executed without getting error in PowerShell

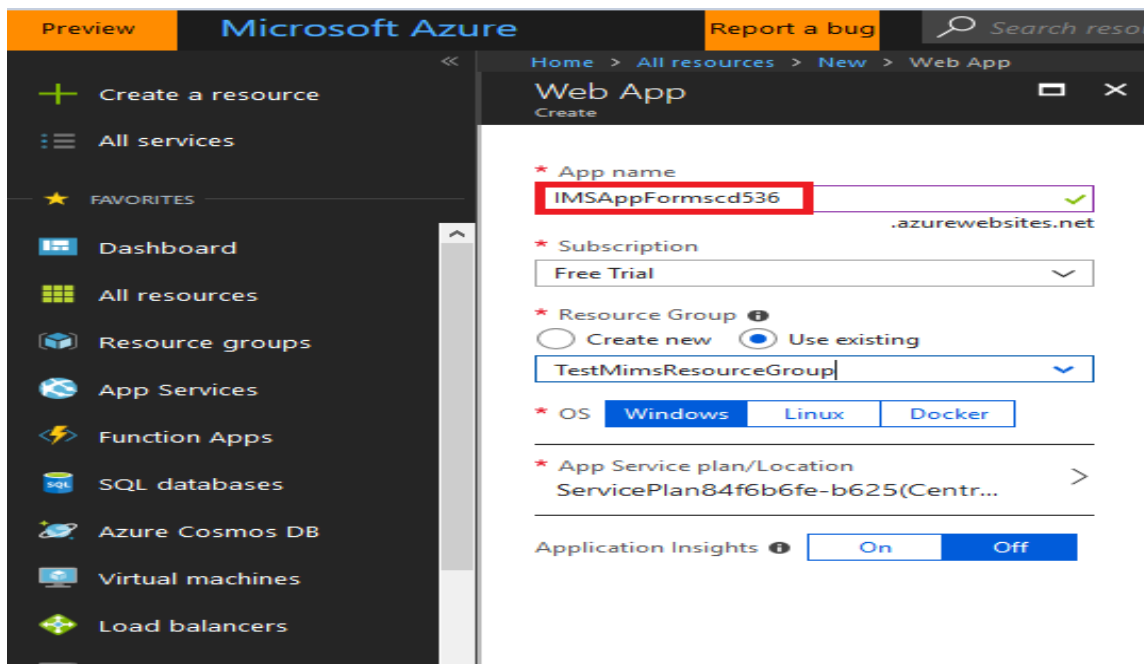
**IMSAppForms Application**

- If IMSAppForms followed by organization unique name application is not created in azure
- Create Webapp in azure as shown below



- Create “IMSAppForms” followed by five characters of an organization unique name as shown below

**Example:** “IMSAppFormscd536”



Run the below PowerShell command as shown below

```
$subscriptionId = " #Azure Subscription ID
```

```
$resourceGroupName = " #Azure Resource Group Name
```

```
$IMSAppSourceForms_Path = " #Forms Application Path from WebApplications folder downloaded from the GitHub  
(https://github.com/microsoftappsource/IMS ) as shown below image
```

\$IMSAppForms =" #Forms Application name, Example: 'IMSAppFormsdc536'

Add-AzureAccount

Select-AzureSubscription -SubscriptionId \$subscriptionId

Publish-AzureWebsiteProject -name \$IMSAppForms -package \$IMSAppSourceForms\_Path

Downloads > IMS-master > IMS-master > WebApplications					
Name	File ownership	Date modified	Type	Size	
IMSAPPBinder		15-10-2018 00:49	Compressed (zipp...	51,135 KB	
IMSAppFormsManagement		15-10-2018 00:49	Compressed (zipp...	22,581 KB	
IMSAppPrintAll		15-10-2018 00:49	Compressed (zipp...	45,693 KB	

or

## 6.2 FN Portal

1. Not able to see the Foreign National Cases as shown below

The screenshot shows the 'Your Cases' page in the FN Portal. The page has a navigation bar with 'Cases', 'Documents', 'FAQs', and 'Family'. A user greeting 'Hello Bharat Mani Kumar' is visible. The main content area has a heading 'Your Cases' and a subheading 'This is where you can manage your immigration cases.' Below this, there is a paragraph: 'View the progress of an active case and see what you should do next. You can fill out, save and submit required questionnaires and see which documents you need to upload.' At the bottom, there is a table with columns: Case Type, Case Number, USCIS Number, Date Filed, and Decision. The table is empty, and a message 'No data available in table.' is displayed below the table header.

### Resolution:

- Navigate to CRM -> Portals -> Web Roles -> Administrators -> Foreign Nationals

- Add the Foreign National to the administrator role
- Navigate to CRM -> Portals -> Web Roles -> Administrators -> Entity Permissions
- Add the "FN - Cases" Entity Permission to the administrator role
- Repeat all the above steps for the Documents, FAQ, Family and Tasks when you are not able to see the related entity records

## 6.3 Questionnaire Portal

1. Not able to create record through portal and getting the permissions issues as shown below

### HCap Questionnaire

The screenshot shows a web form titled "Passport Information" with a progress bar at 15%. The form includes a dropdown for "Do you hold a valid passport?" with "Yes" selected. Below this is a section for "Please enter details of all current, unexpired valid passport(s)." with a dropdown for "Have you been issued passports from more than one country?". A table with columns "Passport Number", "Date Passport Issued", "Date Passport Expires", and "Issue Country/State/City" is shown. A red box highlights a message in the table area: "You don't have permissions to view these records." At the bottom are "PREVIOUS" and "NEXT" buttons.

Resolution:

- Navigate to CRM -> Portals -> Entity Permissions
- Open "Birth & Passport Information" Entity Permission record
- Add the Administrator Web Role to the "Birth & Passport Information" Entity Permission record

## 7.Uninstalling Immigration AppSource System

- Navigate to CRM -> Settings -> Solutions
- Select the "MicrosoftLabs.IMSFormssolutions" solution and delete the solution
- After deleting the above solution, select the "IMSAppSource" solution and delete the solution

The Solution related entities data will be deleted by the solution.

**Note:** Portal related records should be deleted by the user manually.

## 8. Aspose License SetUp

- Aspose license adding to application process:
- Once license purchased we need to add "Aspose.Total.lic" file to the "IMSAppPrintAll" & "IMSAppBinder" application Publish the application.

### To download the file:

1) Go to My Orders and Quotes.

This page lists your order history with Aspose. In the end of column of the grid next to each order is a Review link.

2) Click Review for the order you want to download a license for.

The details for that order are displayed.

3) At the bottom of the page will be a link titled Download License.

4) Click Download License at the bottom of the page.

A dialogue appears to allow you to select where to save the license.

<https://purchase.aspose.com/policies/download-license>

Once file downloaded unzip "IMSAppPrintAll" & "IMSAppBinder" applications and place the file as shown in below path location.

Name	File ownership	Date modified	Type	Size
bin		9/18/2018 7:24 PM	File folder	
ApplicationInsights		11/25/2017 6:02 PM	XML Configuratio...	6 KB
Aspose.Total.lic		9/18/2018 7:24 PM	VisualStudio.lic.d3...	1 KB
Global.asax		9/9/2017 3:16 PM	ASP.NET Server Pa...	1 KB
packages		4/17/2018 1:22 PM	XML Configuratio...	3 KB
PrecompiledApp		9/18/2018 3:30 PM	XML Configuratio...	1 KB
Web		9/18/2018 3:30 PM	XML Configuratio...	2 KB

Product: Aspose. Total for .NET

License file name : Aspose.Total.lic

End of Document