



Dynamics 365 Manufacturing Accelerator

# Installation Guide

**Published:** May 2020

**Accelerator Release Version:** May 2020

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## Introduction

The purpose of this document is to provide a guide on installing and configuring Dynamics 365 Manufacturing Accelerators solutions.

## Prerequisite Files

Make sure the CDS default solution (which comes preexisting in the environment) is present which included entities like Contact and Accounts.

## Main Solutions

For a list of all entities and attributes, find the Manufacturing Reference Guide amongst the included documentation. To import, follow steps in the “Manually deploy Main Solutions” section below. Solutions must be installed in the following order:

1. Dynamics 365 Manufacturing Accelerator
  - a. Name: Dynamics365ManufacturingAccelerator
  - b. Description: This solution contains the entities, forms, and views used across the accelerator.
  - c. Dependencies:
    - i. None
2. Dynamics 365 Manufacturing Accelerator Model Driven App
  - a. Name: Dynamics365ManufacturingAcceleratorModelDrivenApp
  - b. Description: This app contains, Dynamics Customizations solution, Dashboard and Model Driven App.
  - c. Dependencies:
    - i. Dynamics365ManufacturingAccelerator
3. Dynamics365ManufacturingAcceleratorPortal
  - a. Name: Dynamics365ManufacturingAcceleratorPortal
  - b. Description: This solution contains Supplier Portal customization, which includes supplier on-boarding and electronic communication configuration. It also includes workflow, processes and power automate to support business scenarios which needs to be trigger.
  - c. Dependencies:
    - i. Dynamics365ManufacturingAccelerator
    - ii. Dynamics365ManufacturingAcceleratorModelDrivenApp

## Additional Solutions

These solutions contain Sample Data for the Manufacturing Solution, Supplier Portal and Model Driven Admin App Solution. To import, follow steps in the “Import Additional Solutions with Configuration Migration Tool” section below.

1. Dynamics 365 Manufacturing Accelerator Sample Data

- a. Name: Dynamics365ManufacturingAcceleratorSampleData.zip
  - b. Description: The data package contains data related to Question entities.
  - c. Dependencies:
    - i. Make sure all the solutions mentioned above under “**Main Solutions**” are imported.
2. Dynamics 365 Manufacturing Accelerator Portal Data
    - a. Name: Dynamics365ManufacturingAcceleratorPortalData.zip
    - b. Description: The data package contains data related to portal configurations.
    - c. Dependencies:
      - i. Make sure the Common data service for starter portal is installed.
      - iii. Ensure that the all the solutions mentioned above under “**Main Solutions**” are imported.

## Installation Steps

### Manually Import Main Solutions

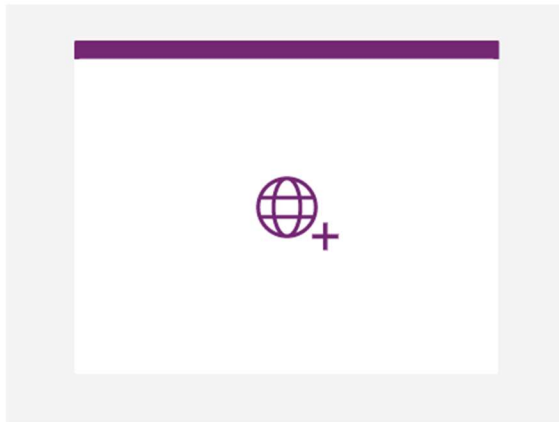
To manually import a main solution:

1. Navigate to <https://make.powerapps.com/home> > Select your Environment > Click Solutions in left-hand Navigation.
2. Click Import button in ribbon.
3. Click Choose File button and select managed solution zip file under main solution heading one by one.
4. Click Open button.
5. Click Next through all steps and then Import.

### Provision the Portal


1. Sign in to Power Apps.
2. Under **Make your own app**, select **Portal from blank**.
3. If the selected environment does not contain portal pre-requisites, a message is displayed in the **Portal from blank** window suggesting you select another environment or create a new one.

## Portal from blank



Create a website to share data with external and internal users. This template comes with sample pages to get you quickly started. [Learn more](#)



 We'd need to install certain prerequisites. If you'd like to quickly try portals, use an environment with portal package already installed or create a new one using this link. [Create new environment](#)

Name \*

Address \* 

Language

By clicking on Create, you agree to the [Terms and Conditions](#) and the [Terms of service](#).

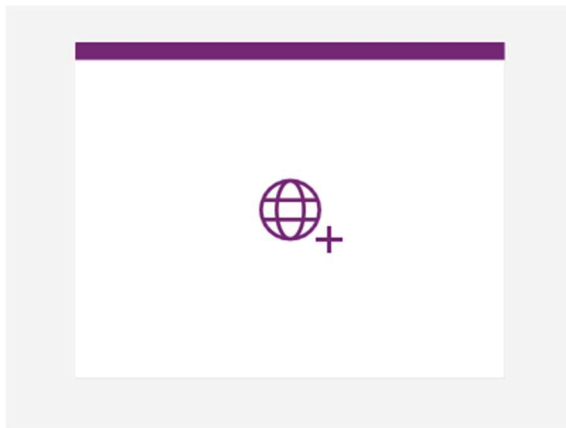
[Privacy Statement](#)

Create

Cancel

4. In the **Portal from blank** window, enter a name for the portal and address for the website, and select a language from the drop-down list. When you are done, select **Create**.

## Portal from blank



Create a website to share data with external and internal users. This template comes with sample pages to get you quickly started. [Learn more](#)



Name \*

Contoso Portal

Address \* ⓘ

contosocomm

.powerappsportals.com

✓ contosocomm.powerappsportals.com

Language

English

By clicking on Create, you agree to the [Terms and Conditions](#) and the [Terms of service](#).

[Privacy Statement](#)

Create

Cancel

After you select **Create**, the portal will begin provisioning and the provisioning status is displayed through notifications.

If you have created your portal in the environment that does not have portal pre-requisites installed, the provisioning status is also displayed in the grid:

Recent apps		Shared with me		
	Name	Modified	Owner	Type
	Contoso portal	6 h ago	SYSTEM	Portal
	Portal provisioning in progress	4 d ago	Bert Hair	Model-driven

After the portal is provisioned successfully, the status is updated, and the portal is displayed in the grid:

Recent apps		Shared with me		
	Name	Modified	Owner	Type
	Contoso portal	2 h ago	SYSTEM	Portal
	Portal Management	5 d ago	Bert Hair	Model-driven

5. Select More Commands (...) > Settings.



For more information on this, see [this guide](#).

### Import Additional Solutions with Configuration Migration Tool

To Import an additional solution using the Configuration Migration Tool:

1. Open "Configuration Migration Tool" folder (**Note:** Make sure folder is on Desktop so directory name is short). In order to download this tool, see heading "**Data Migration Utility (Configuration Migration)**" below in the document.
2. Open the new "Tools" folder, then "ConfigurationMigration", and run "DataMigrationUtility".
3. To Import:
  - a. Select "Import Data".
  - b. Connect to the org to import the data to.
  - c. Select the appropriate data zip file along with
  - d. Perform the import.


### Update Website Binding

1. In the Portal settings pane, select Administration.

## Portal settings ✕

Name \*

Address \*


 

Language


English ▼


---

### Advanced options


 **Administration**

See additional details and perform advanced portal actions e.g. Update website address or provide a custom domain name. [Learn more](#)

**Administration** 

 **Site settings**

Configure website settings. [Learn more](#)

**Site settings** 

2. In the Portal settings pane, select Administration.



PowerApps Portals admin center

Portal Details

Portal Actions

Set up SharePoint integration

Set up Power BI integration

Run Portal Checker

Manage portal authentication key

Set up IP address restriction

### Portal Details

#### General Settings

Name  
Contoso Community

Type  
Trial

(i) Your trial portal will expire in 27 day(s). Convert your portal to production to avoid its suspension. [Learn more](#)

**Convert**

Application ID  
8b117711-9204-4222-8222-8222822280d

Owner  
Bert Hair

#### Portal URL

Base Portal URL  
<https://contosocomm123.powerappsportals.com>

#### Portal Audience

Portal Audience  
Customer

#### Update Portal Binding

Select Website Record  
Starter Portal

**Select your newly created portal here**

#### Change Portal State

Portal State  
On

☐ Enable portal for early upgrade

If you are a Global Administrator, click [here](#) to provide consent to your Dynamics 365 portals.

**Update**

## Portal Authentication Configuration

The Dynamics 365 Manufacturing Accelerator Portal ships with a template and sample Power Automate Flow for Azure Active Directory guest authentication into the Supplier Relationship Accelerator. This

feature allows organizations already using Azure Active Directory to provision guest users in their tenant allowing them Single Sign-On experiences. The sample application ships with a Power Automate Flow that supports the following scenario.

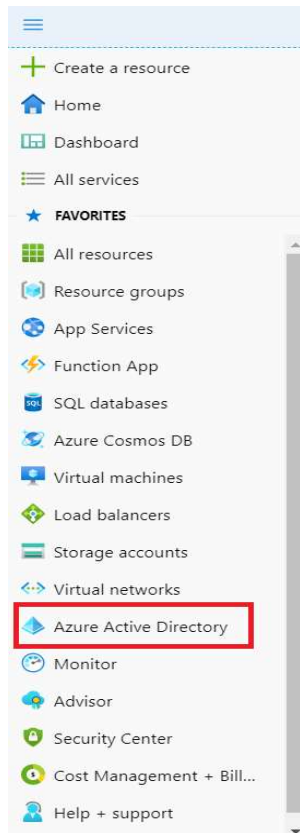
1. Initial Access
  - Anonymous user browses site and fills out an access request
  - Back office user approves access request in the model-driven application
  - On approval, a Power Automate Flow uses the Office Graph API to create a guest user in the tenants AAD. The CDS connector also creates the account, contact and questionnaire records.
  - User receives an email from Azure AD with a redirect URL prompting sign-in to the portal
2. Technical and SME onboarding
  - A point of contact for an account invites a SME through the “pre-approved” access request pages
  - Power Automate uses the Office Graph API to create a guest user in the tenants AAD.
  - User receives an email from Azure AD with a redirect URL prompting sign-in to the portal

### Prerequisites

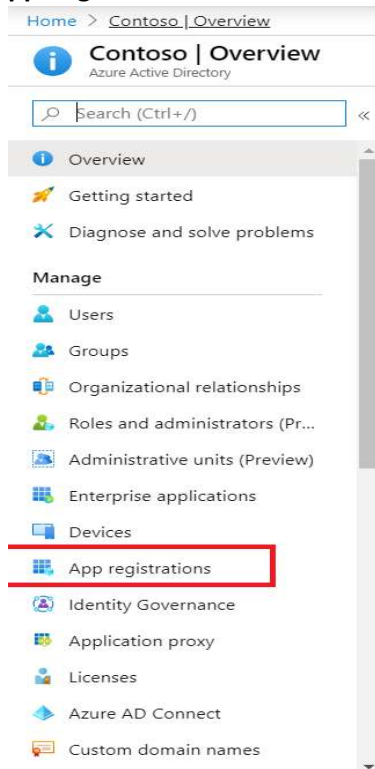
#### *Azure Active Directory Application Registration Setup*

A new App Registration needs to be created, which can serve as medium to authenticate and authorize the requests between Flow and Graph API.

1. Login to Azure portal (<https://portal.azure.com/>).
2. Navigate to **Azure Active Directory** by clicking the menu on top left of the page.



- 1.
3. Select **App Registration** and then click **New Registration**



- 1.
4. Enter value in **Name** field and click **Register** button.

Home > Contoso | App registrations > Register an application

### Register an application

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

Dynamics365ManufacturingAcceleratorPortalAppRegistration ✓

**Supported account types**  
Who can use this application or access this API?

☒ Accounts in this organizational directory only (Contoso 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 e.g. https://myapp.com/auth

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

**Register**

- 1.
5. Set permission for Graph API
  1. Click on **API permission** and then to **Add a permission**.
  2. Select **Microsoft Graph** and then **Application Permission**.
  3. Search **user.invite**, check it and click **Add Permission** button.

Home > Contoso | App registrations > Dynamics365ManufacturingAcceleratorPortalAppRegistration | API permissions

Dynamics365ManufacturingAcceleratorPortalAppRegistration | API permissions

Search (Ctrl+F) Refresh

Overview  
Quickstart  
Manage  
Branding  
Authentication  
Certificates & secrets  
Token configuration  
**API permissions**  
Expose an API  
Owners  
Roles and administrators (Previous version)  
Manifest  
Support + Troubleshooting  
Troubleshooting  
New support request

**Configured permissions**  
Applications are authorized to call APIs when they are granted permission. [Learn more about permissions](#)

**+ Add a permission** Grant admin consent for Contoso

API / Permissions name	Type	Description
Microsoft Graph (1)		
User.Read	Delegated	Sign in and...

**Request API permissions**

Microsoft Graph  
https://graph.microsoft.com/ Docs

What type of permissions does your application require?

Delegated permissions  
Your application needs to access the API as the signed-in user.

Application permissions  
Your application runs as a background service or daemon without a signed-in user.

Select permissions expand all

user.invite ✓

Permission Admin consent required

> User

☐ User.Invite.All  
Invite guest users to the organization. Yes

- 4.
5. Then click **Grant admin consent** button. Note: This step must be completed by Azure Admin.
6. Get Application Id and Secret Key to be used in Flow.
  1. Go to **Overview** section and copy the value of **Application ID** and save in notepad

Home > Contoso | App registrations > Dynamics365ManufacturingAcceleratorPortalAppRegistration

### Dynamics365ManufacturingAcceleratorPortalAppRegistration

Search (Ctrl+/) <<

- Overview
- Quickstart

Manage

- Branding
- Authentication
- Certificates & secrets
- Token configuration
- API permissions
- Expose an API
- Owners
- Roles and administrators (Previ...
- Manifest

Support + Troubleshooting

- Troubleshooting
- New support request

Delete Endpoints

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

Display name : Dynamics365ManufacturingAcceleratorPortalAppRegistration

Application (client) ID : 1ee44aa8-1746-49b1-976f-73b06c1b6665

Directory (tenant) ID : 89906bff-f7e5-4f67-8c4c-5d9858346eca

Object ID : 683f845b-3bf2-48eb-93d3-b7efe4535cba

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

### Call APIs

Build more powerful apps with rich user and business data from Microsoft services and your own company's data sources.

View API permissions

- 1.
2. Go to **Certificates & secrets**
  1. Click **New client secret** under **Client Secret**
  2. Enter value in **Description** field.
  3. Select **Never** and click **Add** button.

Home > Contoso | App registrations > Dynamics365ManufacturingAcceleratorPortalAppRegistration | Certificates & secrets

### Dynamics365ManufacturingAcceleratorPortalAppRegistration | Certificates & secrets

Search (Ctrl+/) <<

- Overview
- Quickstart

Manage

- Branding
- Authentication
- Certificates & secrets
- Token configuration
- API permissions
- Expose an API
- Owners
- Roles and administrators (Previ...

Add a client secret

Description: PortalUserAuthentication

Expires

☐ In 1 year

☐ In 2 years

☒ Never

Add Cancel

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

- 4.
5. Click Copy button to Copy the Value and save in notepad.

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
PortalUserAuthentication	12/31/2299	

6.

Copy to clipboard

### Configure Flow

1. Open and Edit the flow name **Access Request: Add User to AAD as guest and Create Vendor** found in **Dynamics365ManufacturingAcceleratorPortal** solution.
2. Update the following values
  1. SupplierURL: Update portal URL.
  2. Client: Enter Application ID noted in notepad from above.
  3. Secret: Enter secret key noted in notepad from above.
  4. Tenant: Enter Azure Active Directory Tenant
  5. DevURL: Enter portal URL
  6. SMEURL: Enter portal URL
  7. Identity provider: Enter tenant Id

Note: The above authentication approach is a sample, customers should assess all supported authentication mechanisms for their organization and make the right selection based on security, administration needs and price. To learn more about the authentication methods supported by Power Portals please see the link below.

<https://docs.microsoft.com/en-us/powerapps/maker/portals/configure/configure-portal-authentication>

### Power BI Integration

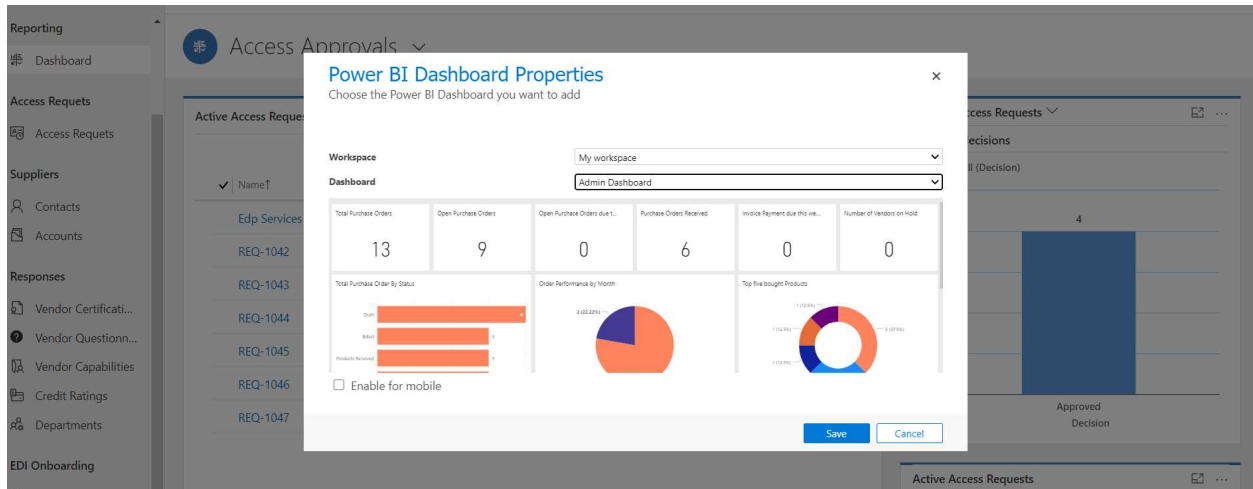
The Dynamics 365 Manufacturing Accelerator is shipped with two Power BI reports namely **Admin** and **Manager Dashboards**. The user can customize these reports as per there needs and add to either Model driven app or portal.

#### Prerequisites

In order for Power BI reports to show in Model driven app and Portal, follow this [link](#).

#### Model Driven App

In order to view Power BI Dashboards, open the Model driven app. Go to **Reporting** and click **Power BI dashboard** under **New** button. And select **workspace** and **dashboard** to add here.



## Portal

After the Power BI integration settings are enable, we can use liquid tags to show Power BI reports embedded in a web page. For reference see this [link](#).

## Reference







### Data Migration Utility (Configuration Migration)

The document explains how to import data to Microsoft Dynamics 365 CRM using the “Data Migration Utility”, which should be downloaded before starting the import process.

To download the tool please refer to the following link:

<https://www.nuget.org/packages/Microsoft.CrmSdk.XrmTooling.ConfigurationMigration.Wpf>

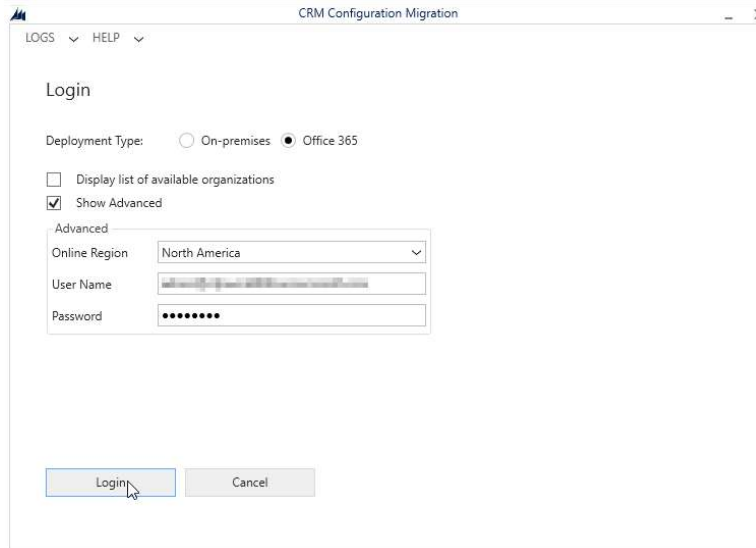
To run the tool, once downloaded, extract the files and double click on the application named “DataMigrationUtility.exe”.

Name	Date modified	Type	Size
CrmUll.svclog	3/19/2019 4:50 PM	WCF Trace File	0 KB
 DataMigrationUtility.exe	2/14/2019 1:39 AM	Application	739 KB
 DataMigrationUtility.exe.config	7/10/2019 5:20 PM	XML Configuratio...	10 KB
 DataMigrationUtility.tokens.dat	7/10/2019 5:20 PM	DAT File	115 KB
 LicenseTerms.docx	2/22/2019 9:48 AM	Microsoft Word D...	39 KB
 Microsoft.Crm.Sdk.Proxy.dll	2/14/2019 1:41 AM	Application extens...	275 KB
 Microsoft.IdentityModel.Clients.ActiveDirectory.dll	4/27/2018 11:14 AM	Application extens...	187 KB



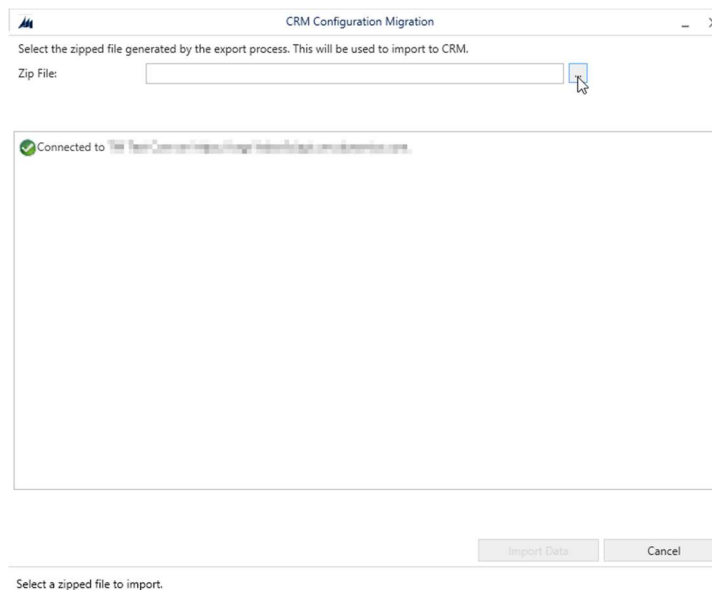
Provide the user and password for the environment that you want to import the data and press “Login”. Note that you may need to change the “Deployment Type” and “Online Region” based on the environment that you are using.






The screenshot shows the 'CRM Configuration Migration' application window. At the top, there are tabs for 'LOGS' and 'HELP'. The main section is titled 'Login'. Under 'Deployment Type', the 'Office 365' radio button is selected. There are two checkboxes: 'Display list of available organizations' (unchecked) and 'Show Advanced' (checked). Below these, an 'Advanced' section contains a dropdown for 'Online Region' set to 'North America', and input fields for 'User Name' and 'Password'. At the bottom, there are 'Login' and 'Cancel' buttons. A mouse cursor is pointing at the 'Login' button.

Once authenticated, click on the search button to search for the sample data package.




The screenshot shows the 'CRM Configuration Migration' application window after authentication. It displays a message: 'Select the zipped file generated by the export process. This will be used to import to CRM.' Below this is a 'Zip File:' label and an empty text box with a search icon button to its right. A mouse cursor is clicking the search icon. Below the text box is a large area with a green checkmark and the text 'Connected to' followed by a URL. At the bottom, there are 'Import Data' and 'Cancel' buttons. Below the buttons, it says 'Select a zipped file to import.'

A search window will appear. Locate and select the previously downloaded data package and press "Import Data" to begin the import process.



CRM Configuration Migration
—
×

Select the zipped file generated by the export process. This will be used to import to CRM.

Zip File:  ...



Connected to ...



The import file was found. Ready to import 40 entities.

Import Data
Cancel

The import file was found. To begin, click Import.