Data Migration Toolkit

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# Purpose

This data migration toolkit is built to demonstrate how you can use Azure Data factory (ADF) to migrate data into Project Operations.   
It should be considered as a tutorial instrument and not a production ready toolkit. There are only a limited number of entities and each of these entities has only the mandatory fields.

# Components

For data migration the following requirements must be available:

* Ability to run iteratively.
* Ability to validate the source data.
* Ability to correct data if the data cannot be fixed in the source system.
* Ability to transform source data into destination format.

Data from source system can be in different formats (e.g. csv, xml, Json …) if it is downloaded from an existing system, or it can be created manually.  
In this toolkit we have a directory with Excel files which will be used as the source input files. These files will be uploaded to an Azure Blob storage.

We will be using an Azure SQL database as a staging area where we will validate, correct, and generate the destination format within ADF pipelines and upload the data to project operations.

Excel

Azure SQL



Azure Blob

Storage

Project Operations

ADF  
pipeline

ADF

pipeline(s)

# Configuration

* Azure Storage Account  
  create container Data and upload all excel files from the toolkit.
* Azure SQL

create database PO-DataMigration and create tables with the SQL files in the toolkit.

* Azure Data Factory

create Data Factory PO-DataMigration

launch studio and use Manage > ARM Template > Import ARM Template

click on Build your own template in the editor

click load file and select the ARMTemplateForFactory.json file from the ADF directory in the toolkit

Make sure to update the settings for the linked services

* + ABS\_DataMigration : connection to Azure Blobstorage
  + DV\_ProjectOperations : connection to Dataverse Project Operations
  + SQL\_DataMigration : connection to Azure SQL Server  
    make sure to enable “Allow Azure services and resources to access this server”

# Execution

When connecting to a new Project Operations environment the pipeline 0-Download must be run first, which makes sure that we have the correct UID for the configuration and existing data in the environment.

Next step is to use pipeline 1 – Excel Upload which copies the data from the excel files into the Azure SQL tables with name CU\_<table>.

Following pipelines are in the toolkit:

* 2 – Upload Account
* 3 – Upload Project Contract
* 4 – Upload Journal
* 5 – Upload TimeEntry
* 6 – Upload Configuration

You can find more information about the usage of these pipelines in the TechTalk [Dynamics 365 Project Operations Data Migration | April 14, 2022](https://community.dynamics.com/blogs/post/?postid=ea1ec75f-8d0e-4001-bc04-b95eaf675125)