# Prerequisites

# Configuration file

## Purpose and Use

The purpose of the provided configuration template and the subsequent configuration file is to provide the user with the ability to supply the script with as much organization-specific information with minimal interaction with the script directly. This file will also be able to keep sensitive organizational information out of the script.

When editing the configuration template, make sure to use [Notepad++](https://notepad-plus-plus.org/) with the language set to INI. This can be set by opening the template document in Notepad++ and navigating to Language > I > INI file.

**Before making any edits to the template document, save the template as an .ini file in your preferred location. The file path to this INI configuration file will be used within the script to access all the associated information.** The inclusion of this file and how it will be completed will be covered in the Data Synchronization script section.

## Notes

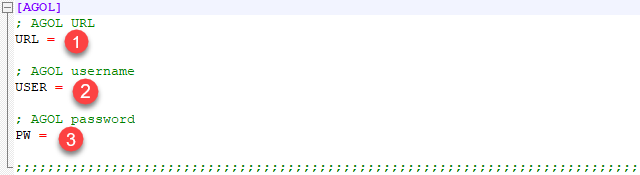
The [configparser](https://docs.python.org/3/library/configparser.html#module-configparser) library reads input for INI configuration files as strings, so the need for quotation marks or apostrophes are not necessary. For example, an AGOL password should be input as password and not 'password'.

For any file paths, use double-backslashes. For example, the file path for the compressed file location of the downloaded feature layer data, the path should be written as C:\\Folder\\data.zip.

There are also keys provided as references for associated SQL Server databases. For each key, a user can find and replace the key with the name of the SQL database associated with that key. For example, x1x refers to the temporary SQL table that will store the AGOL data exported from the feature layer.

For more information on these notes, please refer to the configuration template provided.

## AGOL section



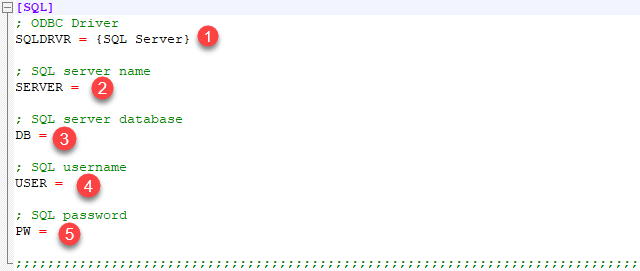
ArcGIS Online credentials are the main focus of this section. Below are descriptions of each input. These inputs play a role in accessing the participating ArcGIS Online Organizational/Portal account[[1]](#footnote-1).

1. **AGOL URL**: the ArcGIS Online URL where the login credentials will be passed through

The main ArcGIS website URL ([www.arcgis.com](http://www.arcgis.com)) is recommended, but any ArcGIS URL that accepts login credentials can be used.

1. **AGOL username**: The participating ArcGIS Online account's username
2. **AGOL password**: the participating ArcGIS Online account's password

## SQL section



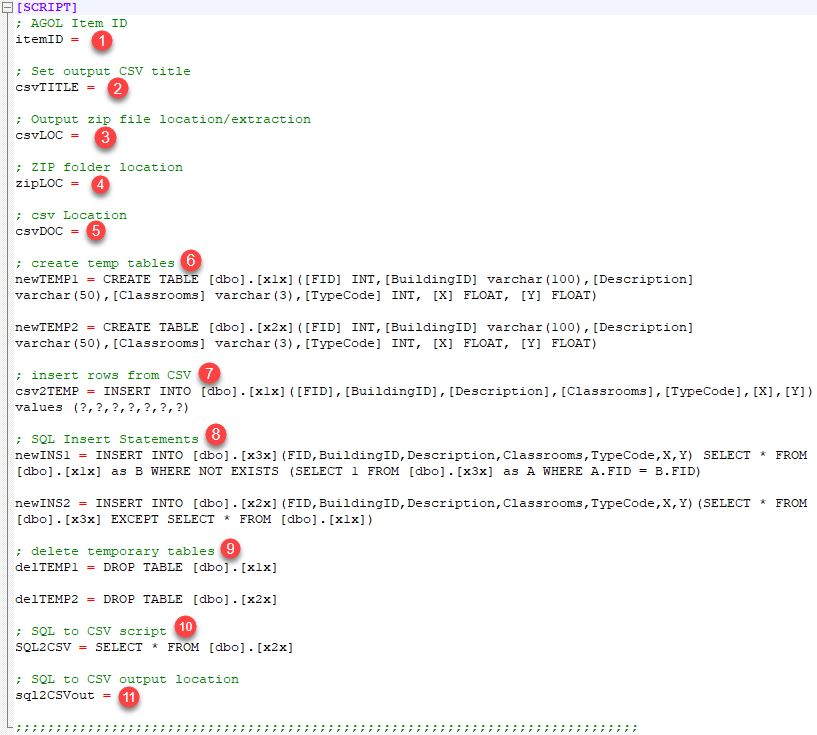
Microsoft (MS) SQL Server authentication credentials are the main focus of this section. Below are descriptions of each input. These inputs play a role in accessing the participating MS SQL Server database management system. This connection is possible using the open source Python module [*pyodbc*](https://github.com/mkleehammer/pyodbc). The methods used in this section of the configuration file/script are detailed in the *pyodbc* documentation[[2]](#footnote-2).

1. **ODBC Driver**: the reference to the distributed ODBC driver for SQL Server

It is preferred to have the latest ODBC driver (version 17 as of this document's creation), but the generic {SQL Server} is used as default. Refer to *pyodbc* documentation concerning syntax in updating this section. The curled brackets are required as shown in the *pyodbc* documentation.

1. **SQL server name**: the server name of the participating MS SQL Server
2. **SQL server database**: the database name of the participating MS SQL Server
3. **SQL username**: the participating MS SQL Server username
4. **SQL password**: the participating MS SQL Server password

## SCRIPT section



This section of the configuration file focuses on variables

# A close up of a map Description automatically generatedArcGIS Online/SQL Server Data Synchronization script

1. <https://developers.arcgis.com/python/guide/using-the-gis/> [↑](#footnote-ref-1)
2. <https://github.com/mkleehammer/pyodbc/wiki/Connecting-to-SQL-Server-from-Windows> [↑](#footnote-ref-2)