Azure ML Guide

Part 2 – Automated ML

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Architecture

Modeling and management

Azure ML services

Designer

Automated ML

Big data development

Azure Databricks

Feature engineering

Spark

Data

Azure Data Lake Gen 2

Getting started

Azure provisioning

This workshop will assume services are organized within a resource group, so go ahead and create a new RG along with these services:

- Azure Data Lake Gen 2
  - Hierarchical namespace enabled
- Azure Databricks
  - Premium tier
- Azure Machine Learning
  - Enterprise edition

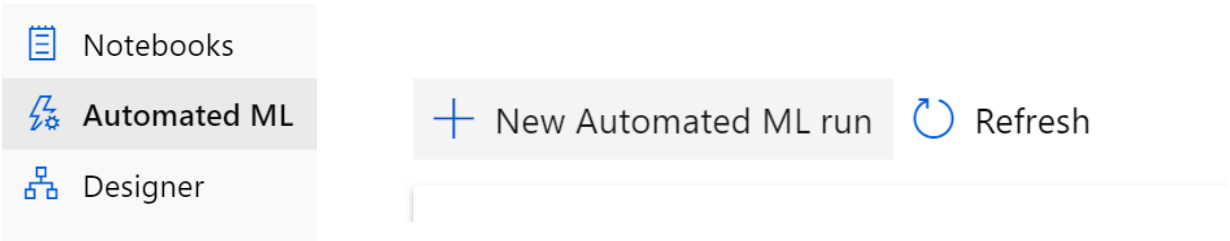
1. AutoML

Azure Machine Learning

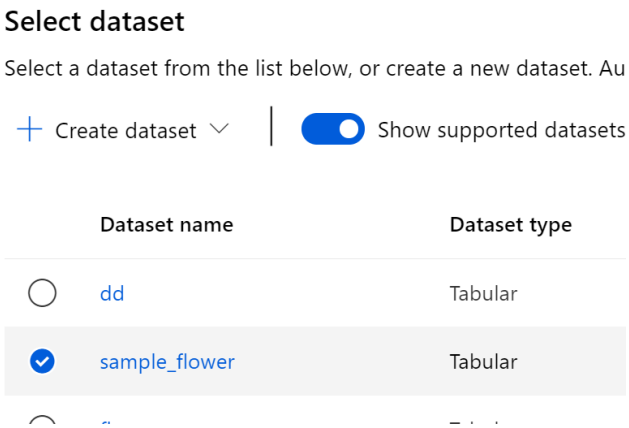
Please refer to Part 1 of the Guide series on how to create dataset and compute cluster in Azure ML

- Go to Azure ML studio UI (ml.azure.com)

Automated ML → Computer clusters → Create / New



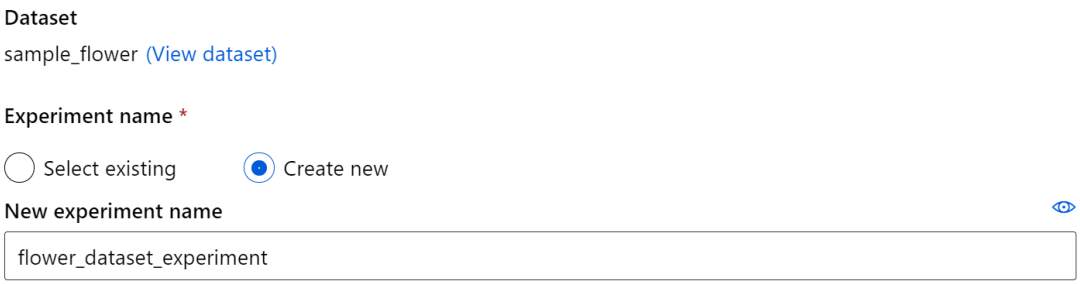
- You can select a dataset (or even create a new one – Part 1 of the Guide series has the details)



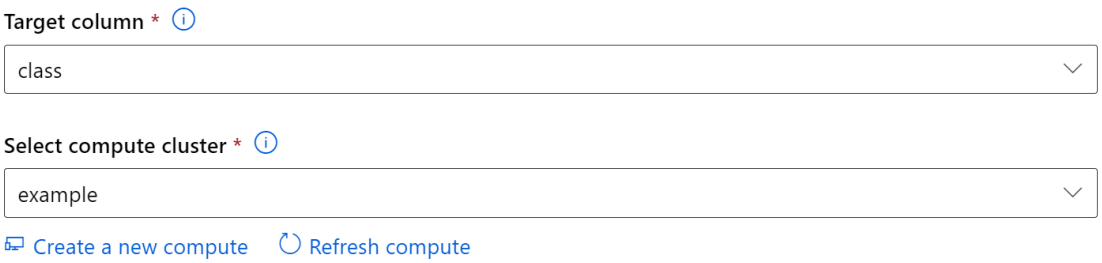
1. AutoML

Azure Machine Learning

- Click on create new experiment and give it a name



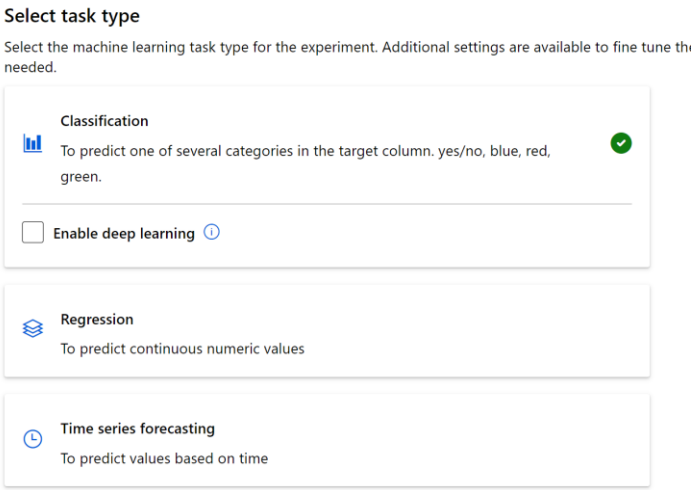
- Select the column of the label and the compute cluster (creating one is detailed in Part 1 of the Guide series)



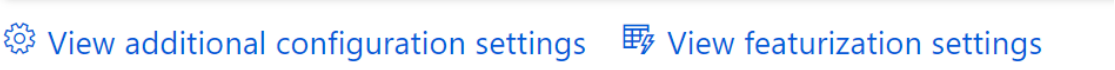
1. AutoML

Azure Machine Learning

- You can pick the type of machine learning, between Classification, Regression, and Time series forecasting. Select Classification for now



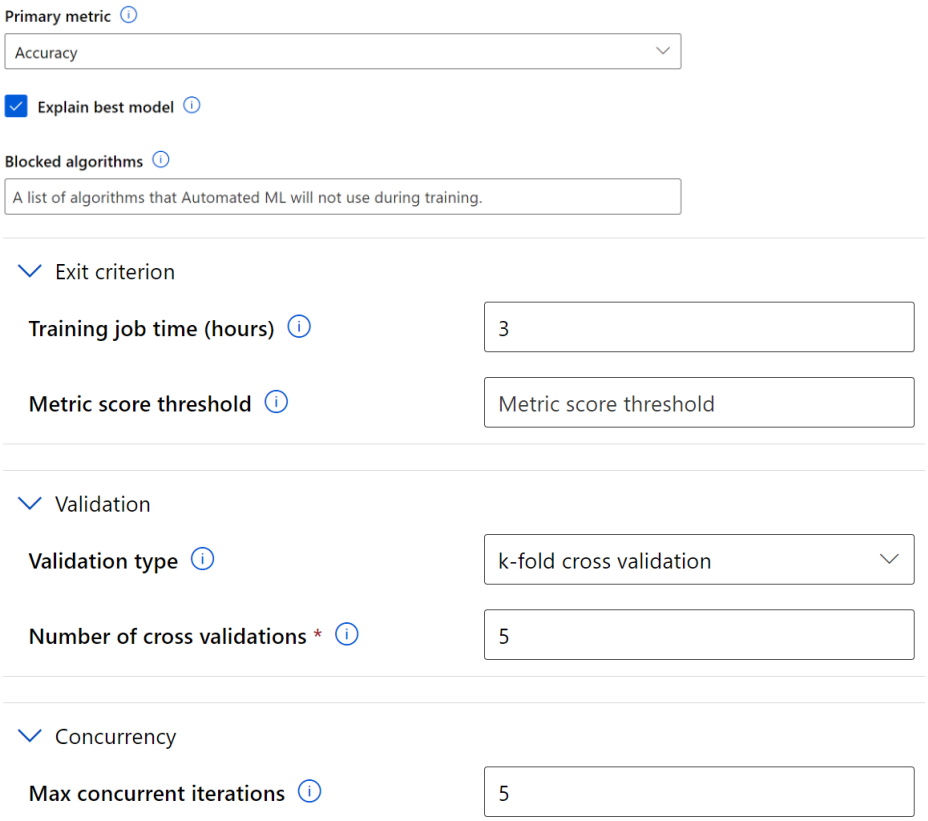
- Remember to consider additional configurations and featurization settings



1. AutoML

Azure Machine Learning

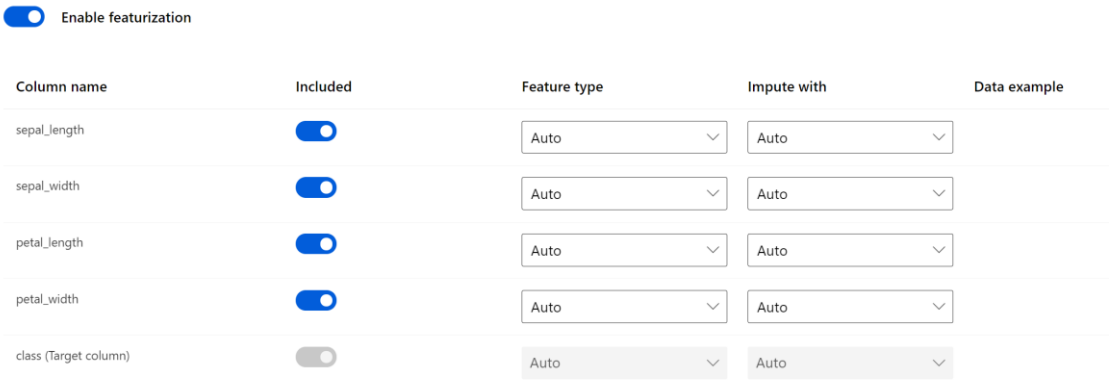
- For configurations, you can set
  - the primary metric,
  - block any algorithms from use (which is a good way as well to see all the considered algorithms), select exit criterion
  - validation type
  - and concurrency.
- Here are some common values



1. AutoML

Azure Machine Learning

- For featurization, you can set
  - Feature selection
  - Specify feature type
  - And imputation method
- Here are some common values



- Click on save and submit the automated ML run!
- Once done you can find models here: