C# and Batch Execution API

C# AND BATCH EXECUTION API

C# and Batch Execution API

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- Find Storage container Name
- Find Storage container Name
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- Create C# Batch Execution API

C# and Batch Execution API

Check list before we continue

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1. Create Microsoft Azure Account
2. Create Microsoft Azure Resource Group
3. Create Microsoft Azure Storage Account
4. Create Microsoft Azure ML Account
5. Create Titanic ML experiment
6. Deploy Web Service Titanic
7. Test Web Service REQUEST/RESPONSE using Azure ML WS dashboard
8. Test Web Service REQUEST/RESPONSE using Excel
9. Test Web Service BATCH EXECUTION using Excel

C# and Batch Execution API

Test titanic Batch Execution API

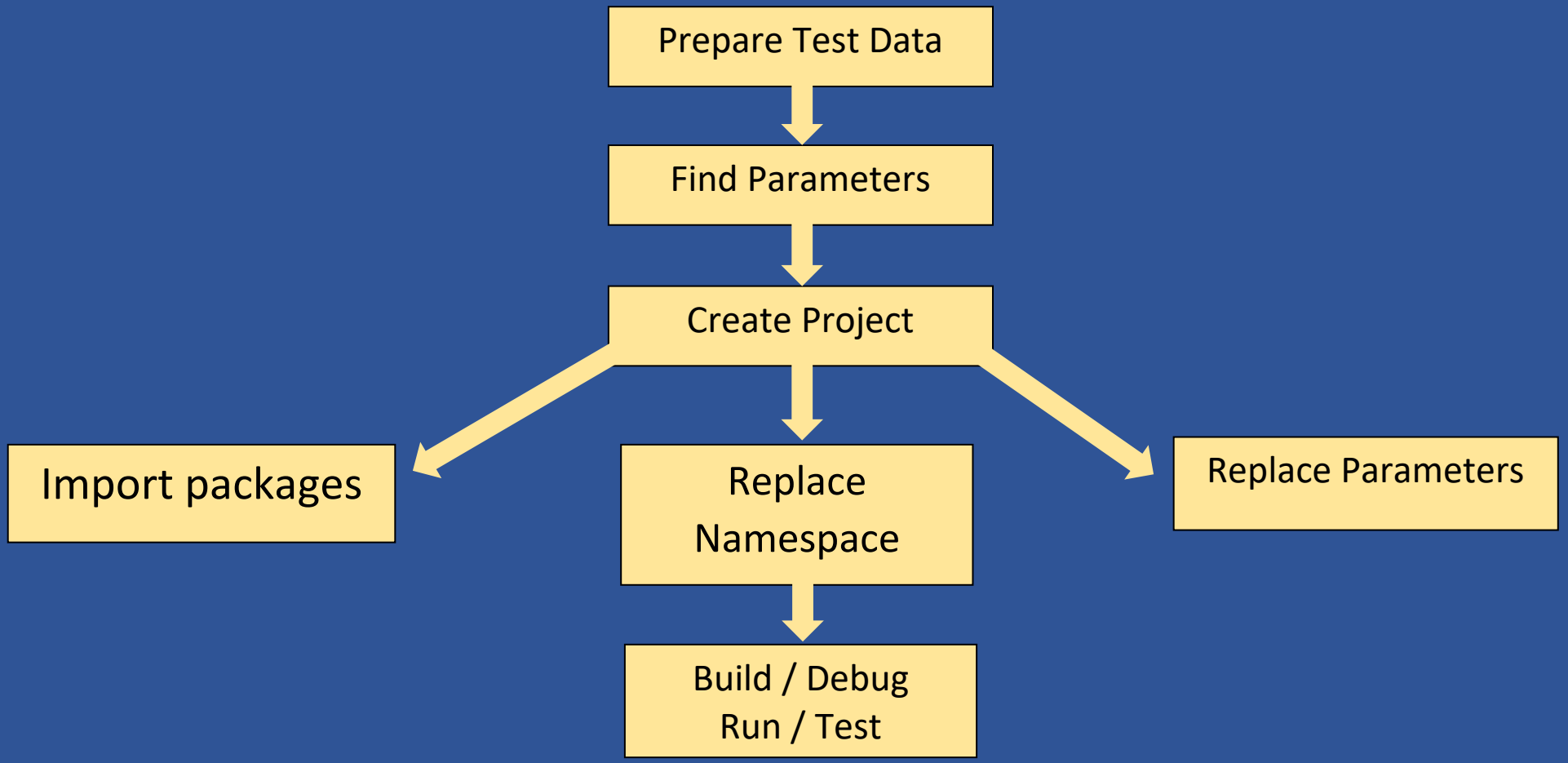
Test titanic Batch Execution API

1. Go to github.com/laploy/ML
2. Download file data.csv
3. Place file data.csv in to folder c:\temp
4. Download file test3.zip
5. Unzip
6. Run program test3

Download data.csv and test3.zip from github.com/laploy/ML

C# and Batch Execution API

C# Batch App development steps

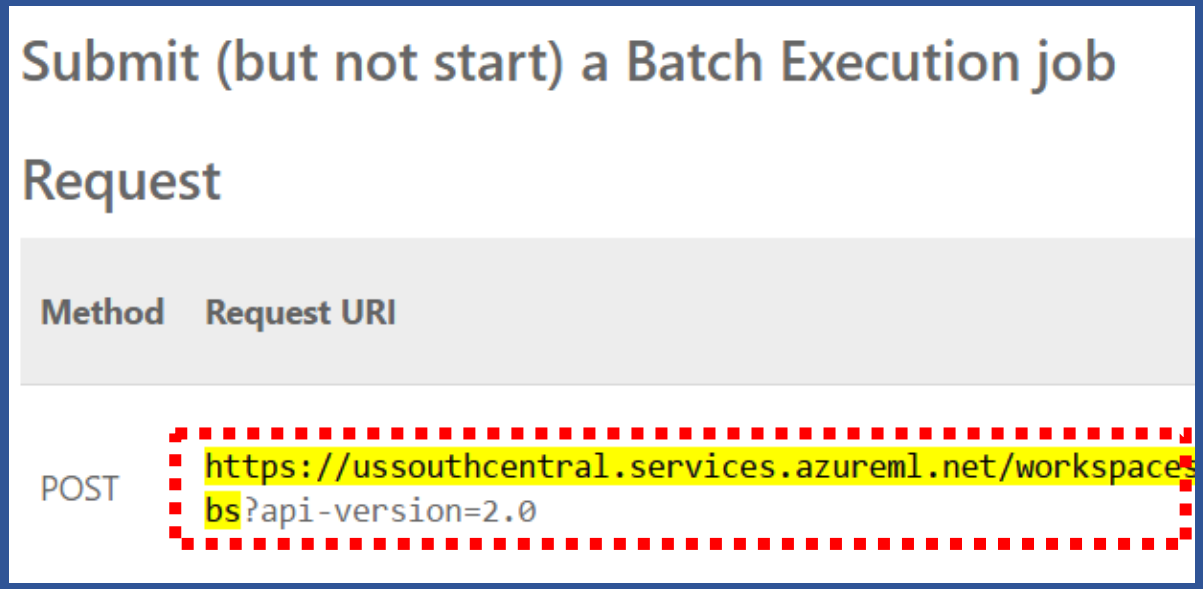


C# and Batch Execution API

Find Base Address

Base Address

1. Go to Azure ML home page
2. Click Web services (left side-bar)
3. Click Titanic
4. Click API HELP PAGE / BATCH EXECUTION
5. Find topic submit (but not start) a Batch Execution job (remove query)

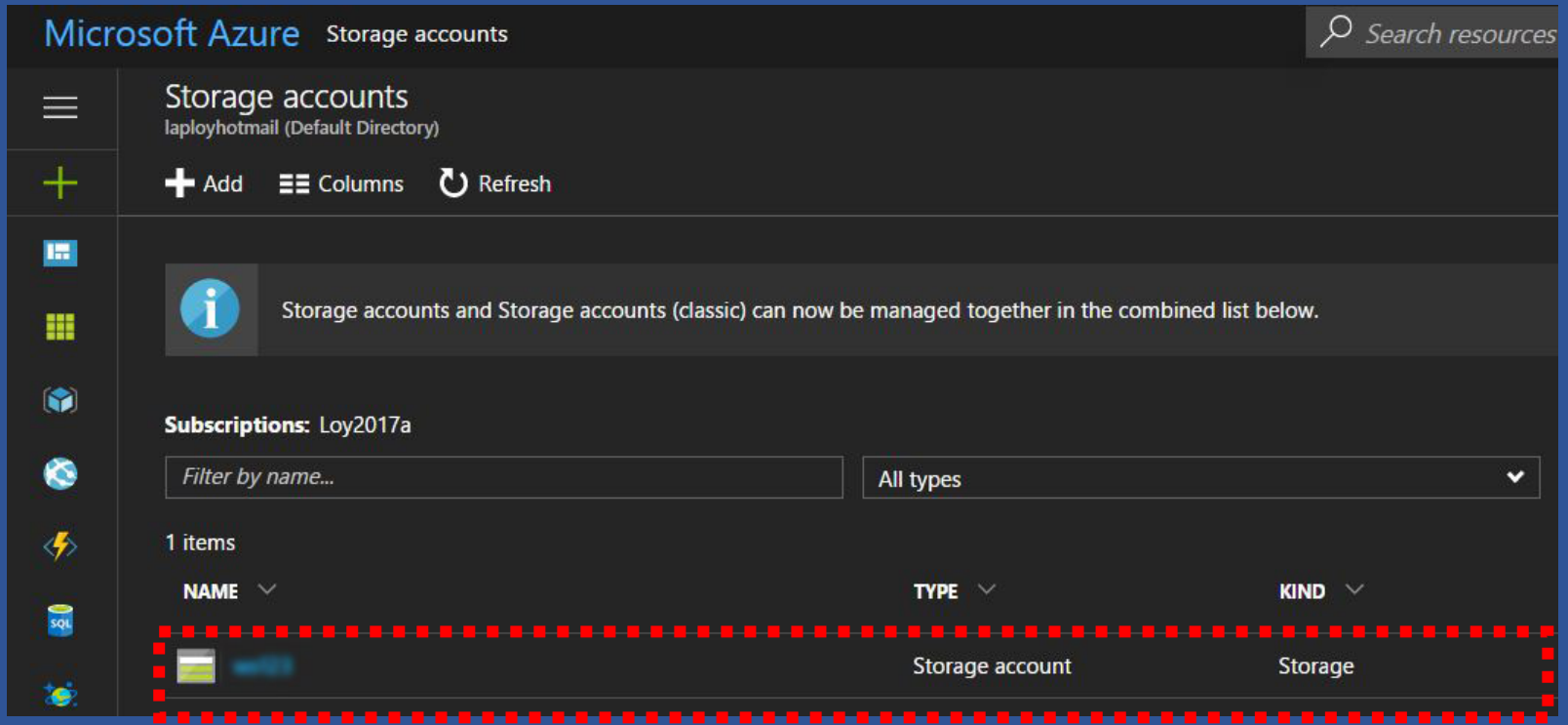


C# and Batch Execution API

Find Storage Account Name

Storage Account Name

1. Go to Azure portal (portal.azure.com)
2. Click Storage
3. Storage Account = Storage Account Name

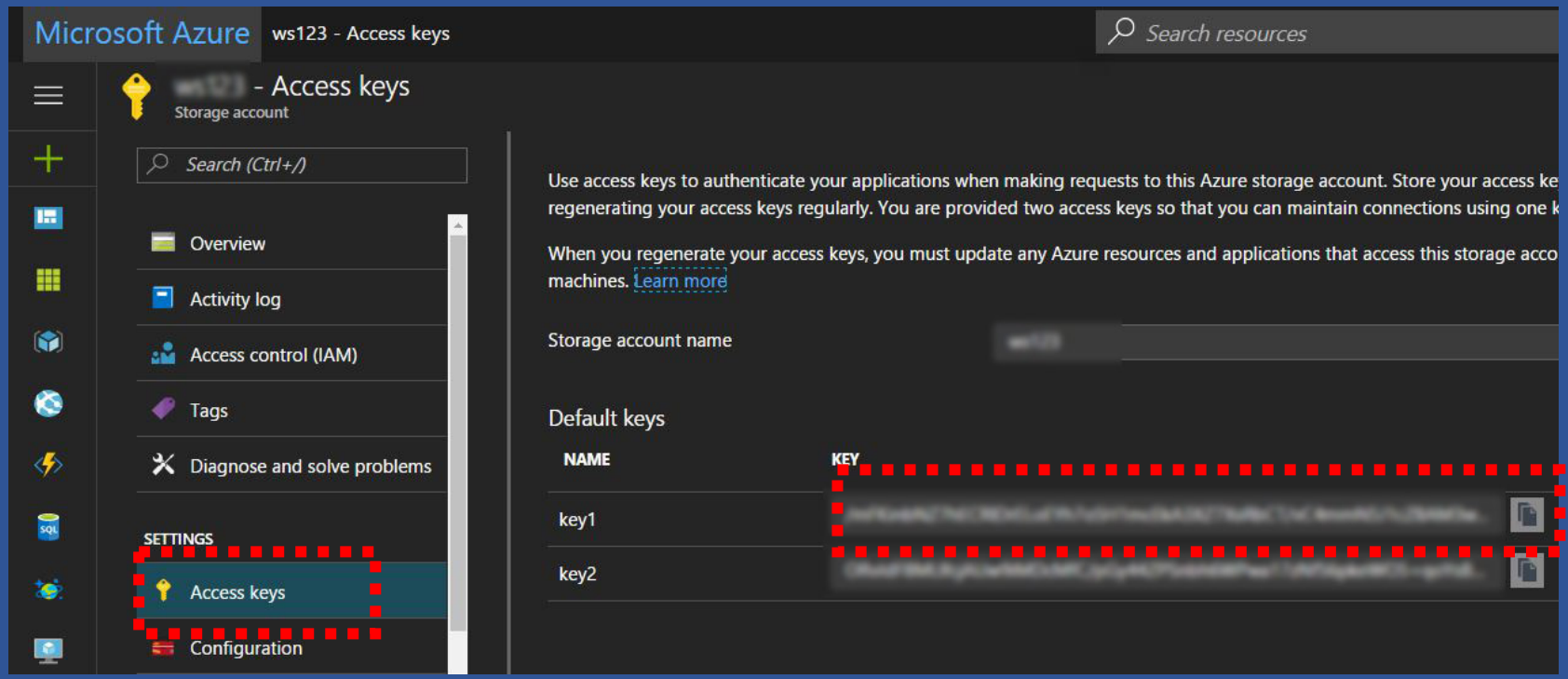


C# and Batch Execution API

Find Storage Account Key

Storage Account Key

1. Go to Azure portal (portal.azure.com)
2. Click Storage
3. Click Storage Account / Account
4. Click Settings / Access keys / Copy

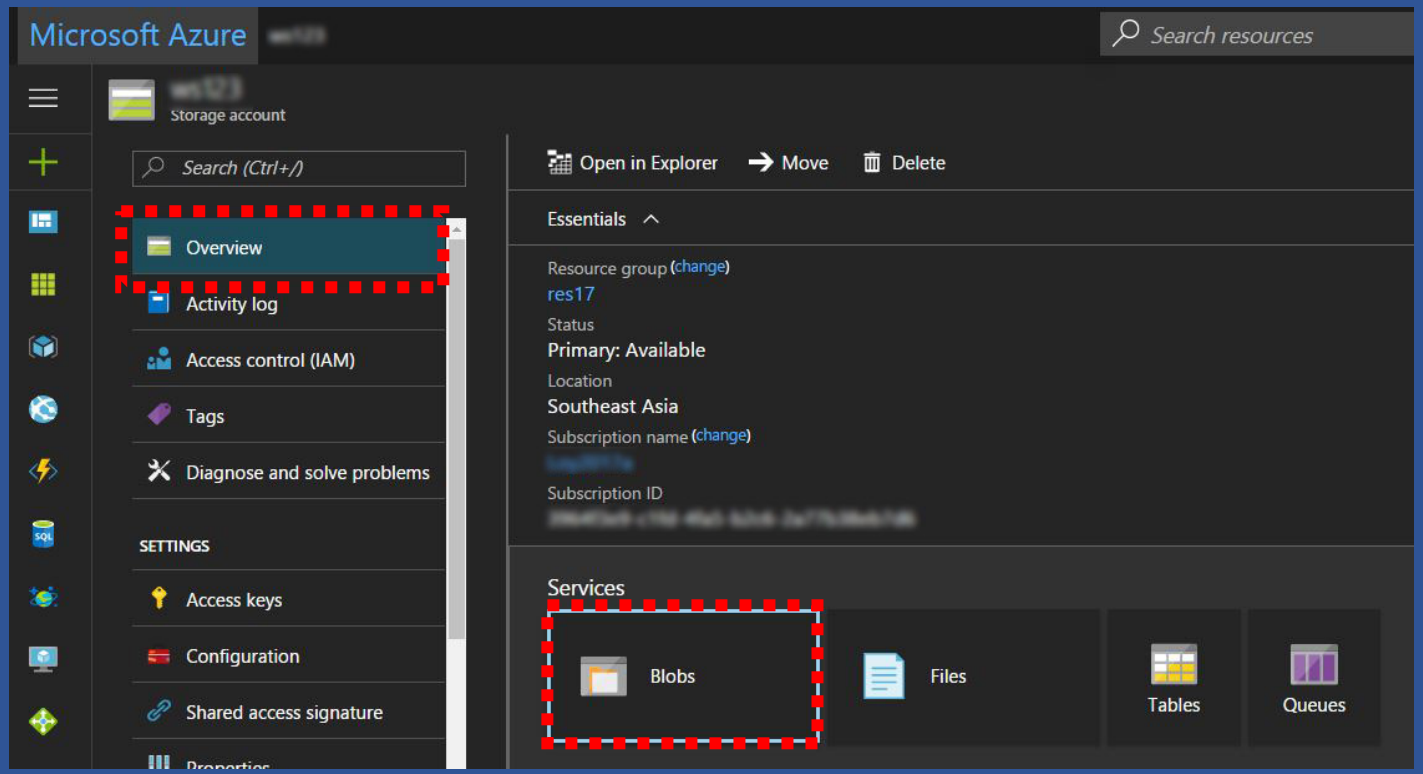


C# and Batch Execution API

Find Storage container Name

Storage container name

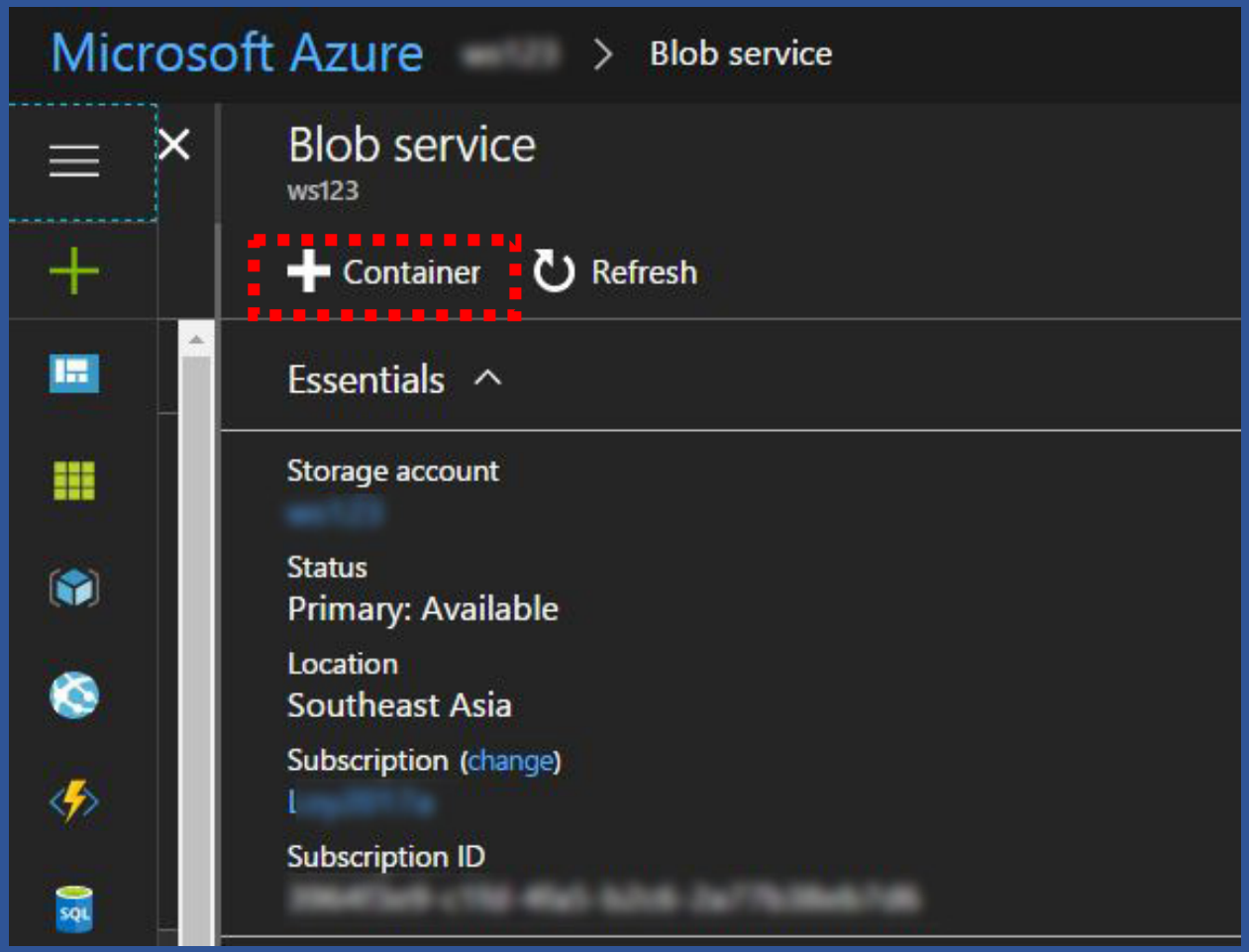
1. Go to Azure portal (portal.azure.com)
2. Click Storage / Over view
3. Click Services / Blobs



C# and Batch Execution API

Find Storage container Name

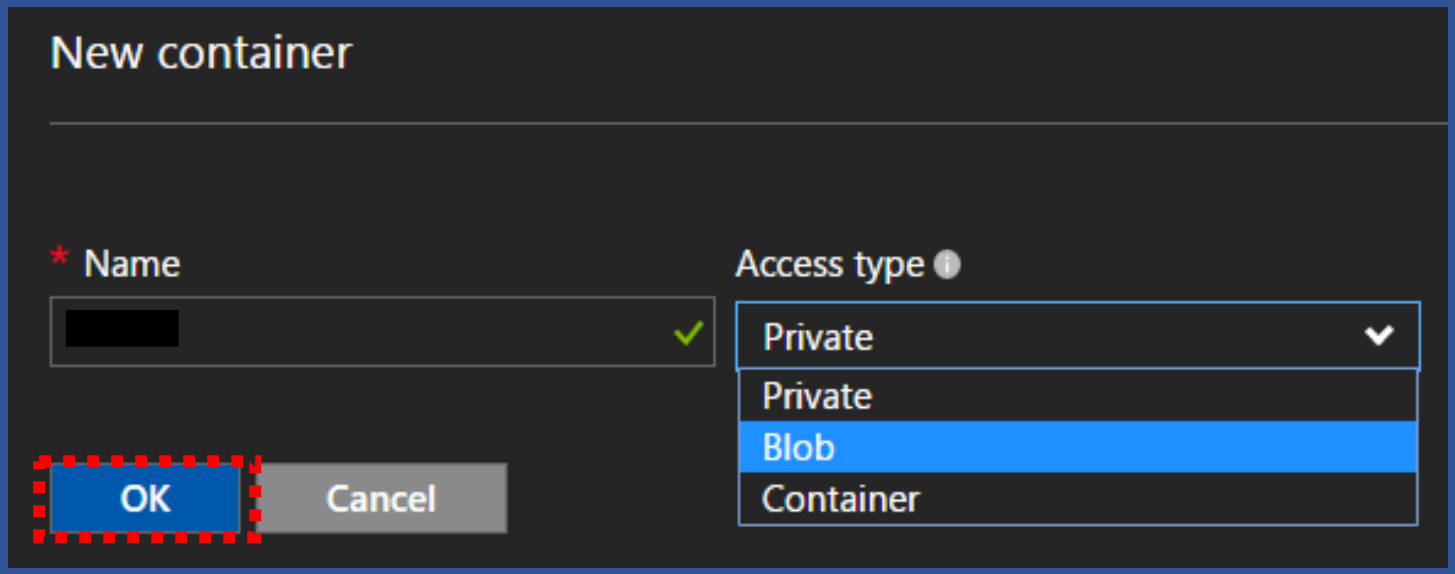
4. Click + Container



C# and Batch Execution API

Find Storage container Name

5. Enter name = blob1
6. Access type = Blob
7. Click OK

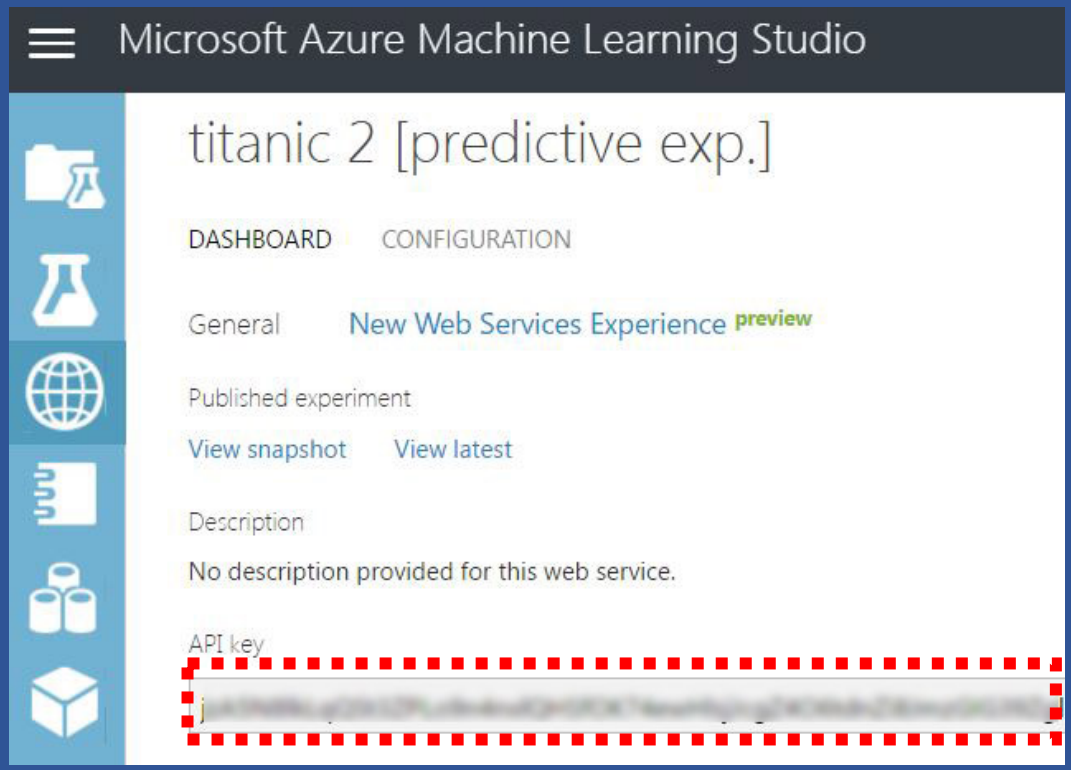


C# and Batch Execution API

Find Web Service API Key

Find Web Service API Key

1. Go to Azure ML home page
2. Click Web services (left side-bar)
3. Click Titanic
4. Copy API key



C# and Batch Execution API

Create C# Batch Execution API

- Go to your Azure ML home page
- Click Web services (at the left side-bar)
- Click Titanic Web Service
- Click API HELP PAGE / BATCH EXECUTION
- Select / Copy Sample C# code
- Open Visual Studio 2017
- Create New Project
    - Visual C#
    - Windows Classic Desktop
    - Console App (.NET Framework)
    - Name = TitanicBE

C# and Batch Execution API

Create C# Batch Execution API

- Past code in to Main
- Change name space to TitanicBE
- Add nugget
  - Microsoft.AspNet.WebApi.Client
  - Microsoft.WindowsAzure.Storage.dll
- Replace value of
  - const string StorageAccountName
  - const string StorageAccountKey
  - const string StorageContainerName
  - const string apiKey

C# and Batch Execution API

Create C# Batch Execution API

- Change input1data.csv to c:\temp\data.csv
- Change const string OutputFileLocation to c:\temp\myResult.csv
- Change input1datablob.csv to Intitanic.csv
- Build program
- Debug
- Run program
- Check the API job result at c:\temp\myResult.csv

You can download source code here

https://github.com/laploy/bs

C# and Batch Execution API

More information

How to consume an Azure Machine Learning Web service

https://docs.microsoft.com/en-us/azure/machine-learning/machine-learning-consume-web-services