

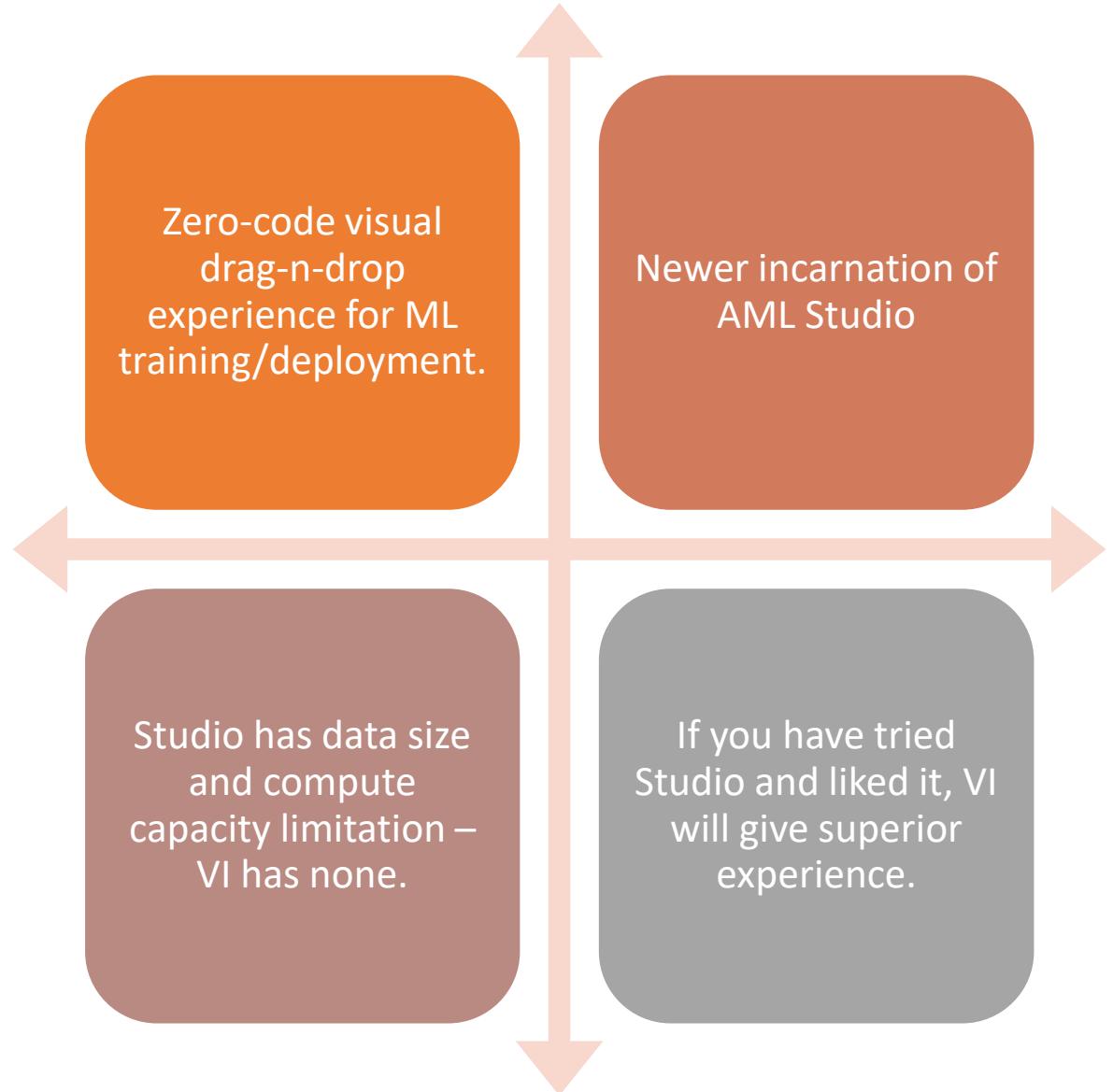
Azure ML Service

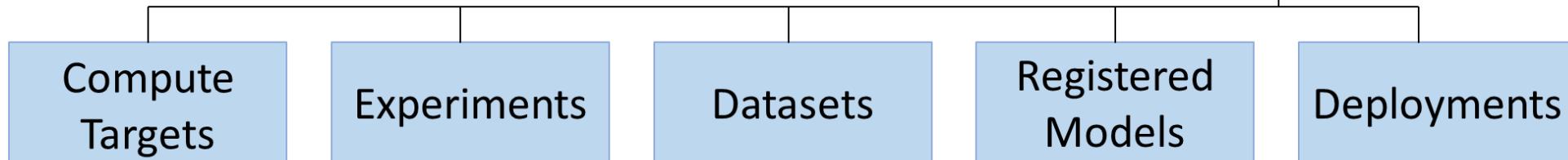
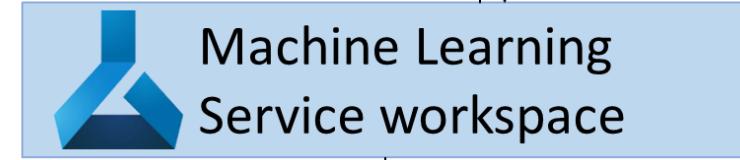
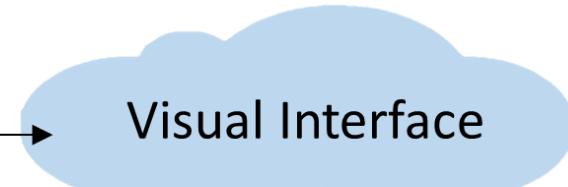
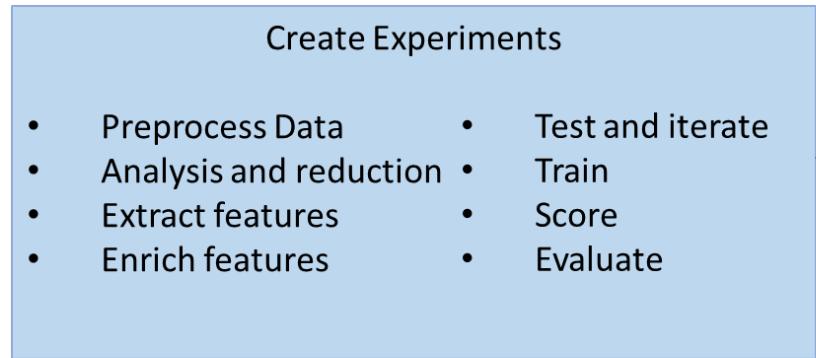
Visual  
Interface



- You will get this slide (screenshots)
- You will get URLs and Video links

# AML Service – Visual Interface





The screenshot shows the Azure portal interface for the resource group 'AMLdemo601'. The left sidebar contains various navigation links such as Home, Dashboard, All services, Security Center, Resource groups, All resources, Azure Databricks, Recent, App Services, Virtual machines (classic), Virtual machines, SQL data warehouses, SQL databases, SQL servers, Cloud services (classic), Subscriptions, Data Lake Storage Gen1, Data Lake Analytics, and HDInsight clusters. The main content area displays the 'Overview' of the resource group, including the subscription information ('Subscription (change) : Subhransu Sahoo's Azure', 'Subscription ID : 37c231d3-ed24-4e8b-b984-f283acba2edf'), deployment status ('Deployments : 1 Succeeded'), and a list of resources. The 'amldemo601aml' resource is highlighted with a red box.

NAME	TYPE	LOCATION
amldemo601aml	Machine Learning service workspace	West US 2
amldemo601appi	Application Insights	West US 2
amldemo601cr	Container registry	West US 2
amldemo601kv	Key vault	West US 2
amldemo601sa	Storage account	West US 2

The screenshot shows the Azure Machine Learning service workspace 'amldemo601aml'. The left sidebar contains navigation links for creating resources, home, dashboard, all services, favorites, security center, resource groups, all resources, Azure Databricks, recent, app services, virtual machines (classic), virtual machines, SQL data warehouses, SQL databases, SQL servers, cloud services (classic), subscriptions, Data Lake Storage Gen1, Data Lake Analytics, and HDInsight clusters. The main content area displays the workspace details: Resource group: AMLdemo601, Location: West US 2, Subscription: Subhransu Sahoo's Azure, Subscription ID: 37c231d3-ed24-4e8b-b984-f283acba2edf, Storage: amldemo601sa, Registry: amldemo601cr, Key Vault: amldemo601kv, and Application Insights: amldemo601appi. Below this, there is a 'Getting Started' section with several cards:

- Create Notebooks in an Azure Machine Learning Notebook VM (Preview)**: Explore data, create models, and deploy services in your Notebook VM.
- Build a model using the Visual Interface (Preview)**: Drag and drop existing components to create new models. This card is highlighted with a red box.
- View more samples at GitHub**: Get inspired by a large collection of machine learning examples.
- View Documentation**: Learn how to use Azure Machine Learning.
- View Forum**: Join the discussion of Azure Machine Learning.
- Get Started in Azure Notebooks**: Quickly get started with the SDK and run sample experiments in

Home > AMLdemo601 > amldemo601aml - Compute

## amldemo601aml - Compute

Machine Learning service workspace

Search (Ctrl+ /)

Experiments Pipelines Compute Models Images Deployments Activities

### Add Compute

\* Compute name

\* Compute type

 Machine Learning Compute is a managed training environment consisting of one or more nodes. [Learn more.](#)

\* Region

\* Virtual machine size   
Choose Virtual machine size

\* Virtual machine priority  Dedicated  Low priority

\* Minimum number of nodes

\* Maximum number of nodes

\* Idle seconds before scale down

Advanced Settings

The visual interface can only run experiments on Machine Learning Compute targets, at this time.

Home > AMLdemo601 > amldemo601aml - Compute

## amldemo601aml - Compute

Machine Learning service workspace

Search (Ctrl+ /)

Experiments Pipelines Compute Models Images Deployments Activities

### Add Compute

\* Compute name

\* Compute type

\* Kubernetes Service  Create new  Use existing

\* Region

\* Virtual machine size   
Choose Virtual machine size

\* Number of nodes

\* Network configuration  Basic  Advanced

Minimum 12 cores needed for AKS.  
Accept the default here or choose VM size accordingly.

Create a resource Home Dashboard All services FAVORITES Security Center Resource groups All resources Azure Databricks Recent App Services Virtual machines (classic) Virtual machines SQL data warehouses SQL databases SQL servers Cloud services (classic) Subscriptions Data Lake Storage Gen1 Data Lake Analytics HDInsight clusters

The screenshot shows the Azure Machine Learning service workspace titled "amldemo601aml - Visual interface". The left sidebar contains a navigation menu with various options like Home, Dashboard, All services, Security Center, Resource groups, All resources, Azure Databricks, Recent, App Services, Virtual machines (classic), Virtual machines, SQL data warehouses, SQL databases, SQL servers, Cloud services (classic), Subscriptions, Data Lake Storage Gen1, Data Lake Analytics, and HDInsight clusters. A "FAVORITES" section is also present. The main content area displays the "Visual interface (preview)" section, which includes a search bar, a sidebar with links like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, and sections for Authoring (Preview), Assets, and a list of what's possible with the visual interface. Two buttons at the bottom are "Launch visual interface" and "View Documentation".

Home > amldemo601 > amldemo601aml - Visual interface

## amldemo601aml - Visual interface

Machine Learning service workspace

Search (Ctrl+ /)

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

**Authoring (Preview)**

Automated machine learning

Notebook VMs

**Visual interface**

**Assets**

Experiments

Pipelines

Compute

Models

Images

Deployments

Activities

## Visual interface (preview)

### What's possible with visual interface

- ✓ Drag-n-Drop to build machine learning models
- ✓ No limit to data size or compute capacity for model training
- ✓ Intrinsic and powerful Python support
- ✓ One click to deploy your web service
- ✓ Rich and fast-growing modules support

**Launch visual interface** **View Documentation**

Exam Dl × | Browse × | Extract × | Summa × | Build AI × | Course × | Example × | azure dji × | Spark T × | Introdu × | amldem × | Experim × + - □ X

← → C ⌂ 🔍 https://studio.azureml.com/subscription/37c231d3-ed24-4e8b-b984-f283acba2edf/resourcegroup/AMLdemo601/workspace/amldemo601aml#Workspace/Experiments>ListExperiments ☆ Incognito ☰ ⌂

OTN The Netflix Tech Blog Google Google Advanced S... AWS AWS Insider AZURE 10 Best Practices fo... KrishnaNilamadhav... Tech Life READ Time.is 12:10 » Other bookmarks

Visual interface (Preview) for Azure Machine Learning service amldemo601aml (West US 2) ? ⌂ ☰ ☺ ☰

Experiments

No experiments have been created.

**+ New**

Delete

Experiments Web Services Datasets

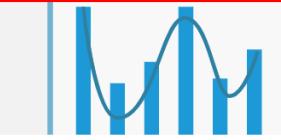
## Experiments

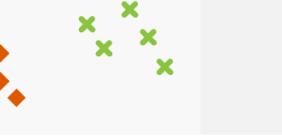
No experiments have been created.

New Experiments

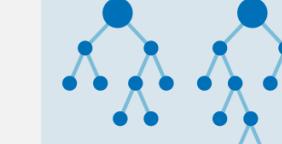
 Blank Experiment

 Sample 1 - Regression: Automobile Price Prediction (Basic)  
This sample experiment shows how to build a regression model to predict the automobile's price. [learn more](#)

 Sample 2 - Regression: Automobile Price Prediction (Compare Algorithm)  
This sample experiment shows how to compare two regression models' performance on automobile ... [learn more](#)

 Sample 3 - Classification: Credit Risk Prediction (Basic)  
This sample demonstrates how to perform binary classification to predict credit risk based on information given o... [learn more](#)

 Sample 4 - Classification: Credit Risk Prediction (Cost Sensitive)

 Sample 5 - Classification: Customer Relationship Prediction

Visual interface (Preview) for Azure Machine Learning service

amldemo601aml (West US 2)

Sample 2 - Regression: Automobile Price Prediction (Compare ...)

In draft

Properties

Experiment Properties

- Start time -
- End time -
- Status code InDraft
- Status details None
- Compute target None

Summary

This sample experiment shows how to compare two regression models' performance on automobile price prediction.

Description

Enter the detailed description for your experiment.

Quick Help

Run History

Save

Save As

Discard Changes

Run

Create Predictive Experiment

Search experiment items

Saved Datasets

Data Format Conversions

Data Input and Output

Data Transformation

Machine Learning

Python Language Modules

R Language Modules

Web Service

Automobile price data (Raw)

Select Columns in Dataset

Clean Missing Data

Split Data

Boosted Decision Tree Regr...

Decision Forest Regression

Train Model

Score Model

Evaluate Model

Mini Map

A red box highlights the 'Run' button at the bottom center of the interface.

# Sample Experiment

## Setup Compute Target to Run Experiment

**Compute target**

Select existing  Create new

Existing compute target(s)

Compute name	#Idle nodes / Max nodes	Region	Status
aml601compute	1 / 5	West US 2	Succeeded

Note: Compute preparation takes time, may be a few minutes or even longer. Experiment will start to run as soon as the compute resource is available.

**Properties**

**Experiment Properties**

- Start time -
- End time -
- Status code InDraft
- Status details None
- Compute target None

**Summary**

This sample experiment shows how to compare two regression models' performance on automobile price prediction.

**Description**

Enter the detailed description for your experiment.

**Run**

Cancel Run

Run History Save Save As Discard Changes Run Create Predictive Experiment

Visual interface (Preview) for Azure Machine Learning service

Sample 2 - Regression: Automobile Price Prediction (Compare ...)

Finished running ✓

Properties

**Experiment Properties**

- Start time 7/3/2019 ...
- End time 7/3/2019 ...
- Status code Finished
- Status details None
- Compute target aml601co...

**Summary**

This sample experiment shows how to compare two regression models' performance on automobile price prediction.

**Description**

Enter the detailed description for your experiment.

Search experiment items

- Saved Datasets
- Data Format Conversions
- Data Input and Output
- Data Transformation
- Machine Learning
- Python Language Modules
- R Language Modules
- Web Service

Automobile price data (Raw)

Select Columns in Dataset  
Exclude normalized-losses which has many missing values

Clean Missing Data  
Remove missing value rows

Split Data  
Split the data into training set(0.7) and testing set

Boosted Decision Tree Regr... ✓

Decision Forest Regression ✓

Train Model

Score Model  
Use the test set to get the predicted price with Boosted Decision Tree Regression mo ...

Score Model  
Use the training set to get the predicted price with Decision Forest Regression Model

Score Model  
Use the test set to get the predicted price with Decision Forest Regression model

Mini Map

Evaluate Model  
Compare the performance of two algorithms on training data set

Download

Save as Dataset

Save as Trained Model

Save as Transform

Visualize

Generate Data Access Code

Run History

Save

Save As

Discard Changes

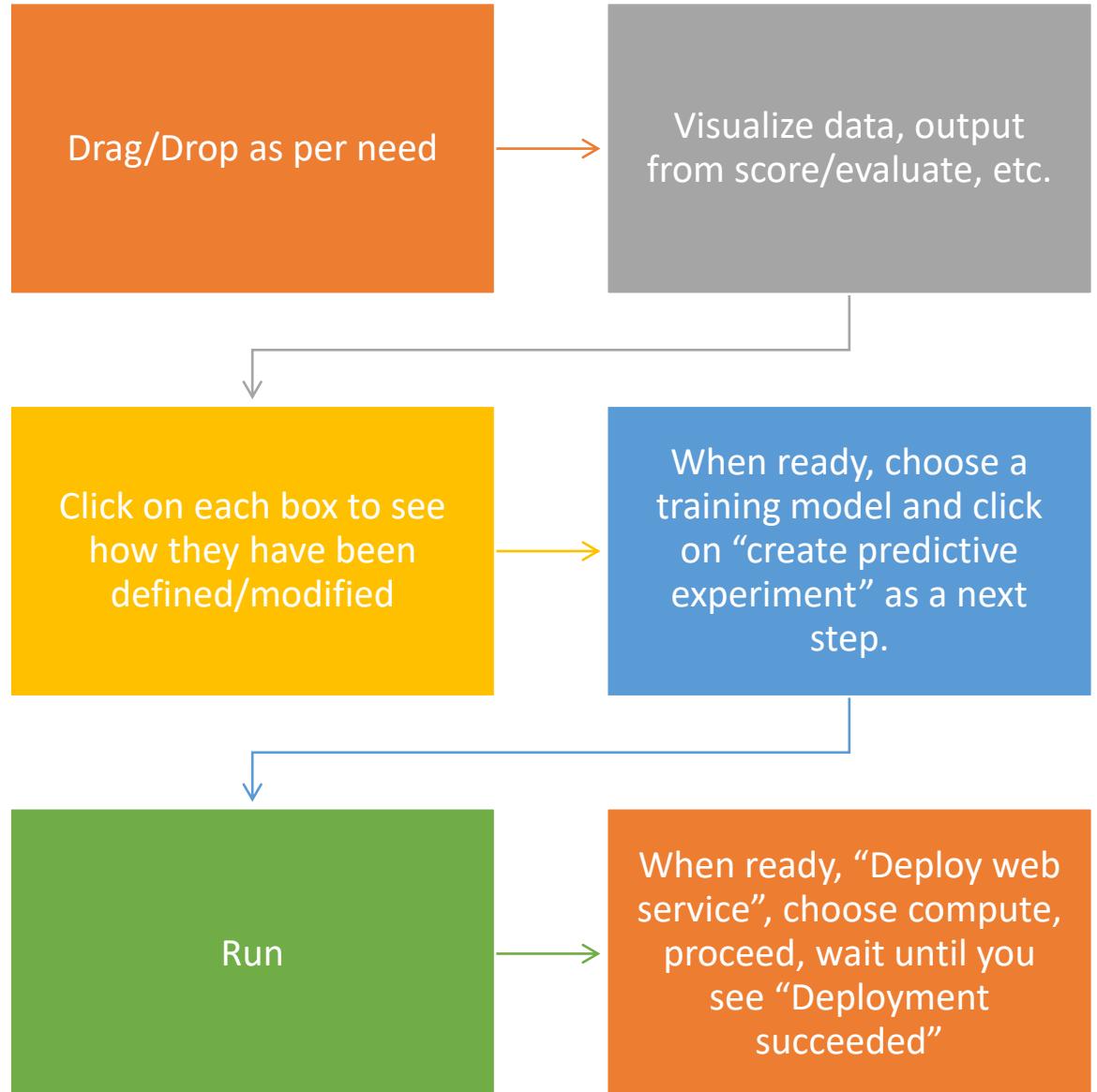
Run

Create Predictive Experiment

+ New

Quick Help

# Next steps..



< Web Services

## Sample 2 - Regression: Automobile Price Prediction (Compare Algorithms) [Predictive Exp.]

General Test Consume API Doc

Compute target aml601deploy

(i) This is an insecure web service due to the limitation with your AKS. You can continue to use it but it will be on your risk. It's recommended to follow the Instruction Doc to secure your web service. [View Instruction Doc.](#)

Deployment state	Healthy
Operation Status	Create - Succeeded - 7/3/2019 7:45:34 PM
Region	West US 2
Created on	7/3/2019 7:41:08 PM
Last Updated	7/3/2019 7:45:34 PM
Description	No description provided for this web service.

[View deployment](#)

[View experiment snapshot](#)

[View latest experiment](#)

## Datasets

## My Datasets      Samples

 Search by name or description

Name	Data type	Size	Created on	Description
Telescope data	GenericCsv	1.43 MB	4/27/2019 8:45:41 PM	MC Simulated high energy...
Pima Indians Diabetes Bin...	GenericCsv	23.78 KB	4/27/2019 8:45:41 PM	Dataset contains the distri...
IMDB Movie Titles	GenericCsv	532.29 KB	4/27/2019 8:45:41 PM	IMDB Movie Titles
Energy Efficiency Regressi...	GenericCsv	39.87 KB	4/27/2019 8:45:41 PM	This dataset contains the e...
CRM Appetency Labels Sh...	GenericTsvNoHeader	194.44 KB	4/27/2019 8:45:41 PM	CRM Appetency Labels
Time Series Dataset	GenericCsv	1.14 KB	4/27/2019 8:45:41 PM	Time Series Dataset
Book Reviews from Amazon	GenericTsvNoHeader	9.28 MB	4/27/2019 8:45:41 PM	Book Reviews from Amazon
MPG data for various auto...	GenericCsv	17.45 KB	4/27/2019 8:45:41 PM	This data can be used to p...
Blood donation data	GenericCsv	12.47 KB	4/27/2019 8:45:41 PM	Blood donor data taken fr...
Airport Codes Dataset	GenericCsv	16.64 KB	4/27/2019 8:45:41 PM	Airport Codes Dataset
CRM Dataset Shared	GenericTsv	24.99 MB	4/27/2019 8:45:41 PM	CRM Dataset

Home > AMLdemo601 > amldemo601aml - Experiments

## amldemo601aml - Experiments

Machine Learning service workspace

Search (Ctrl+ /)

Experiments Pipelines Compute Models Images Deployments Activities

### Sample\_2\_-\_Regression\_Automobile\_Pr | All Runs ▾

Add Chart Edit Columns Filter Get Link Refresh

Include child runs

PREPARING	RUNNING	COMPLETED	FAILED
0	0	2	0

DURATION (SECONDS)

Run Number	Duration (seconds)
1	400
15	160

RUN NUMBER RUN TYPE STATUS DURATION CREATED CREATED BY TAGS

15 azuredml Com 2m 42.7 Jul 3, 2023 76f465e3-6307-4028-8

Home > AMLdemo601 > amldemo601aml - Experiments

## amldemo601aml - Experiments

Machine Learning service workspace

Search (Ctrl+ /)

Experiments Pipelines Compute Models Images Deployments Activities

### Compute

+ Add Compute Refresh Delete Detach

<input type="checkbox"/>	NAME	TYPE	PROVISIONING STATE	CREATED DATE	VIRTUAL MACHINE SIZE
<input type="checkbox"/>	aml601deploy	Kubernetes Service	Succeeded	Wed Jul 03 2019	STANDARD_D3_V2
<input type="checkbox"/>	aml601compute	Machine Learning Compute	Succeeded (1 node)	Wed Jul 03 2019	STANDARD_DS14_V2

Create a resource

Home

Dashboard

All services

FAVORITES

Security Center

Resource groups

All resources

Azure Databricks

Recent

App Services

Virtual machines (classic)

Virtual machines

SQL data warehouses

SQL databases

SQL servers

Cloud services (classic)

Subscriptions

Data Lake Storage Gen1

Data Lake Analytics

HDInsight clusters

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Report a bug

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Data Lake Storage Gen1

Data Lake Analytics

HDInsight clusters

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AWS

AWS Insider

AZURE

10 Best Practices fo...

KrishnaNilamadhav...

Tech

Life

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Other bookmarks

susaho@microsoft.com

MICROSOFT

amldemo601aml - Experiments

Machine Learning service workspace

Search (Ctrl+ /)

Experiments Pipelines Compute Models Images Deployments Activities

amlstudio-ad188f2d134645e0bfa1bf

Back to Deployments Refresh Edit Delete Get Link

Details Models Images

ATTRIBUTES

Description	Sample 2 - Regression: Automobile Price Prediction (Compare Algorithms) [Predictive Exp.]
State	Healthy
Compute Type	AKS
Service ID	amlstudio-ad188f2d134645e0bfa1bf
Tags	CreatedByAMLStudio : true
Creation date	07/04/2019, 2:44:27 AM UTC
Last updated	07/04/2019, 2:44:36 AM UTC
Compute name	aml601deploy
Image ID	amlstudio-sample-2---regression:1
Scoring URI	http://52.247.235.8:80/api

Home > AMLdemo601 > amldemo601aml - Experiments

## amldemo601aml - Experiments

Machine Learning service workspace

Search (Ctrl+ /)

Experiments Pipelines Compute Models Images Deployments Activities

### Compute

+ Add Compute Refresh Delete Detach

NAME	TYPE	PROVISIONING STATE	CREATED DATE	VIRTUAL MACHINE SIZE
aml601compute	Machine Learning Compute	Deleting	Wed Jul 03 2019	STANDARD_DS14_V2
aml601deploy	Kubernetes Service	Deleting	Wed Jul 03 2019	STANDARD_D3_V2

Create a resource Home Dashboard All services FAVORITES Security Center Resource groups All resources Azure Databricks Recent App Services Virtual machines (classic) Virtual machines SQL data warehouses SQL databases SQL servers Cloud services (classic) Subscriptions Data Lake Storage Gen1 Data Lake Analytics HDInsight clusters

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Authoring (Preview) Automated machine learning Notebook VMs Visual interface Assets Experiments Pipelines Compute Models Images Deployments Activities

# Resources

- [6-minutes video to get started with visual interface](#)
- [10-minutes video for AML end to end flow overview](#)
- [Tutorial: Train & score ML model with visual interface](#)
- [Tutorial: Deploy ML model with visual interface](#)
- [Use SSL to secure a web service through Azure ML](#)