

Instructions: calling AMLS Model via REST API using Swagger Plugin

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Once you have your model deployed on an inference cluster in AMLS, you will have access to a REST API to send data to that model and get back the predictions.

Written by:
Adelina Balasa
adbalasa@microsoft.com

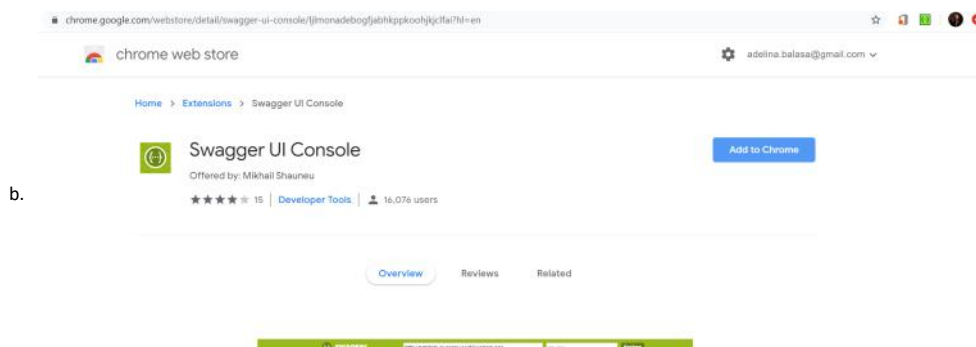
Currently, AMLS doesn't provide the capability to call the REST API from the UI, however you can test your model using the steps below.

Steps (high level)

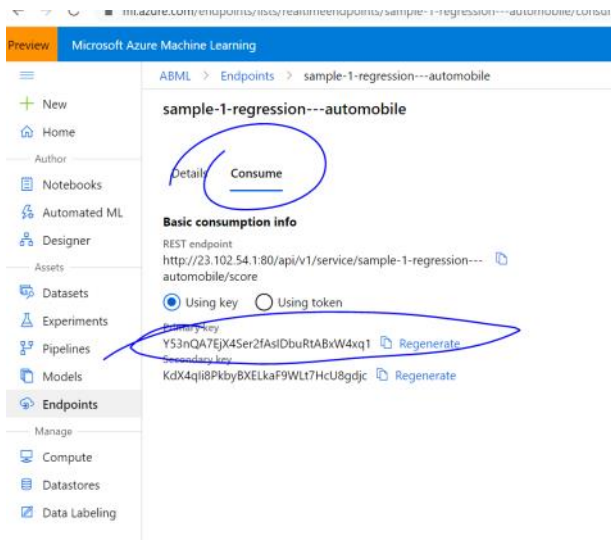
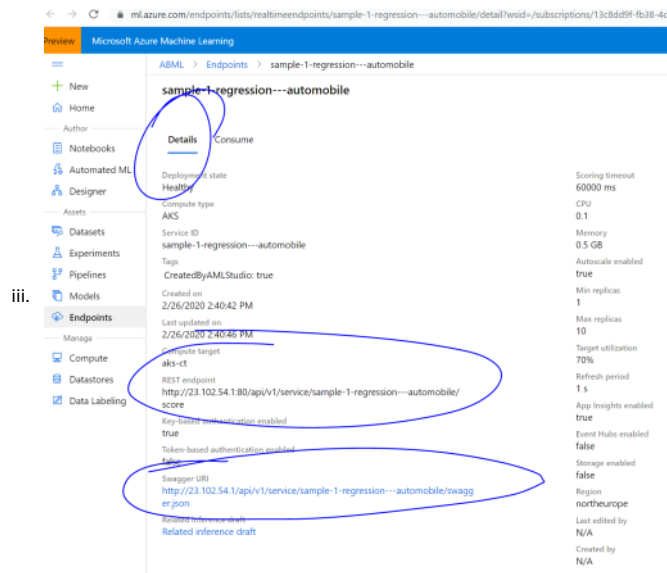
1. Install *Swagger UI Console* plugin for your browser
2. In AMLS Workspace, get the URL and authentication information:
 - a. On the left hand side of the menu, go to "Endpoints":
 - i. Details Tab - Make a note of the REST Endpoint and the Swagger URI
 - ii. Consume Tab - Make a note of the Primary Key
3. In the Swagger UI plugin:
 - a. Add swagger url in the input bar at the top and click "Explore"
 - b. Add authentication token
 - i. Click on Authorise (top right) and add in the text "Bearer " followed by your Primary Key. Click on "Authorise"
 - c. Click on "List Operations" and Select "Post",
 - d. Click on the "Example Value" on your left. This will populate your input parameter with sample text; you can change the values of your inputs to test out different data
 - e. Click on "Try it out" to visualise the results.
 - f. Visualise results

Steps (Detailed instructions)

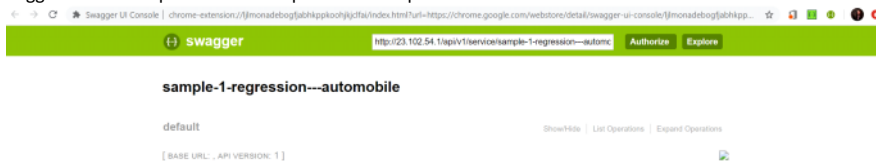
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 - a. <https://chrome.google.com/webstore/detail/swagger-ui-console/ljimonadebogfjzhkpkkoohkjcifai?hl=en>



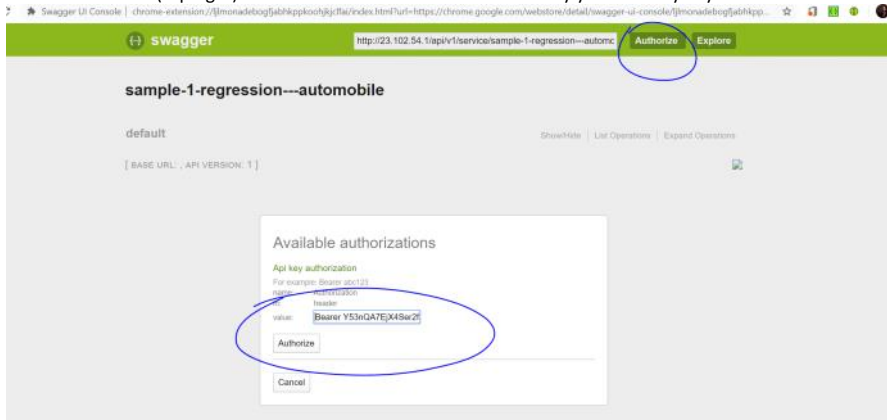
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- c. Click on "List Operations" and Select "Post",

sample-1-regression---automobile

default

Show/Hide List Operations Expand Operations

Get /api/v1/service/sample-1-regression---automobile/swagger.json
 Get /api/v1/service/sample-1-regression---automobile/swagger.json
 Get /api/v1/service/sample-1-regression---automobile/swagger.json
 Post /api/v1/service/sample-1-regression---automobile/score

[BASE URL: / API VERSION: 1]

- d. Click on the "Example Value" on your left. This will populate your input parameter with sample text; you can change the values of your inputs to test out different data
 e. Click on "Try it out" to visualise the results.

chrome-extension://fjmonadebogfjabhkpkoohjkgcfai/index.html?url=https://chrome.google.com/webstore/detail/swagger-ui-console/fjmonadebogfjabhkp...

Post /api/v1/service/sample-1-regression---automobile/score

Implementation Notes
 Run web service's model and get the prediction output

Response Class (Status 200)
 The service processed the input correctly and provided a result prediction, if applicable.

Model Example Value

```
{
  "Results": {
    "WebServiceOutput0": {
      "symboling": 0,
      "make": "string",
      "fuel-type": "string",
      "aspiration": "string",
      "num-of-doors": "string",
      "body-style": "string",
    }
  }
}
```

Response Content Type | application/json

Parameters

Parameter	Value	Description	Parameter Type	Content Type	Model	Example Value
serviceInputPayload	{ "Inputs": { "WebServiceInput0": { "symboling": 3, "normalized-losses": 1, } } }	The input payload for executing the real-time machine learning service	body	application/json		{ "Inputs": { "WebServiceInput0": { "symboling": 3, "normalized-losses": 1, "make": "alfa-romeo", "fuel-type": "gas", "aspiration": "std", "num-of-doors": "two", "body-style": "convertible", "drive-wheels": "rwd", } } }

Parameter content type: application/json

Response Messages

HTTP Status Code	Reason	Response Model	Headers
default	The service failed to execute due to an error	Model Example Value	

```
{
  "status_code": 0,
  "message": "string"
}
```

Try it out

- f. Visualise results

i.

Try it out!

Hide response

Curl

```
"aspiration": "std", \
"num-of-doors": "two", \
"body-style": "convertible", \
"drive-wheels": "rwd", \
"engine-location": "front", \
"wheel-base": 88.6, \
"length": 166.6, \
"width": 64.1, \
"height": 48.5, \
"curb-weight": 2548, \
"engine-type": "dohc", \
"num-of-cylinders": "four", \
"engine-size": 130, \
"fuel-system": "mpi", \
"bore": 3.47, \
"stroke": 2.68, \
"compression-ratio": 9, \
"horsepower": 111, \
"peak-rpm": 5000, \
"city-mpg": 21, \
"highway-mpg": 27, \
"price": 16500
} \
{
  "symboling": 1, \
  "normalized-losses": 1, \
  "make": "alfa-romero", \
  "fuel-type": "gas", \
  "aspiration": "std", \
  "num-of-doors": "two", \
  "body-style": "hatchback", \
  "drive-wheels": "rwd", \

```

Request URL

```
http://23.182.54.1/api/v1/service/sample-1-regression---automobile/score
```

Response Body

```
pg": 27, "price": 13495.0, "Scored labels": 13903.183696628472], [{"symboling": 3, "make": "alfa-romero", "fuel-type": "gas", "asp:
```

Response Code

```
200
```

Response Headers

```
{
  "access-control-allow-origin": "*",
  "cache-control": "max-age=0, private, must-revalidate",
  "connection": "keep-alive",
  "content-encoding": "gzip",
  "content-length": 725,
  "content-type": "text/html; charset=utf-8",
  "date": "Wed, 26 Feb 2020 15:11:39 GMT",
  "server": "nginx/1.10.3 (Ubuntu)",
  "x-ms-request-id": "37a539f1-9159-426d-bdb3-5eabafa891c5",
  "x-ms-run-function-failed": "False"
}
```