

Database Management Systems

Lecture 12

Azure Machine Learning*

Azure Stream Analytics*

* not among the exam topics

Analiza sentimentelor Azure Machine Learning și Azure Stream Analytics

Job

* configurare output

The screenshot displays the Microsoft Azure portal interface. The left-hand navigation pane lists various services, with 'samljob' highlighted under the 'FAVORITES' section. The main content area is titled 'samljob - Outputs' and shows a list of resources. A search bar is present, and a list of resources is displayed with columns for NAME, LOCATION, and STATUS. The 'samljob' resource is selected, and its configuration page is shown. The 'Outputs' tab is active, displaying a list of output sinks. A dropdown menu is open, showing a list of available output types: Event Hub, SQL Database, Blob storage, Table storage, Service Bus topic, Service Bus queue, Cosmos DB, Power BI, and Data Lake Storage Gen1. The 'Blob storage' option is highlighted, and a tooltip labeled 'Blob storage' is visible next to it.

Job

* configurare output

- *Event serialization format -> CSV*

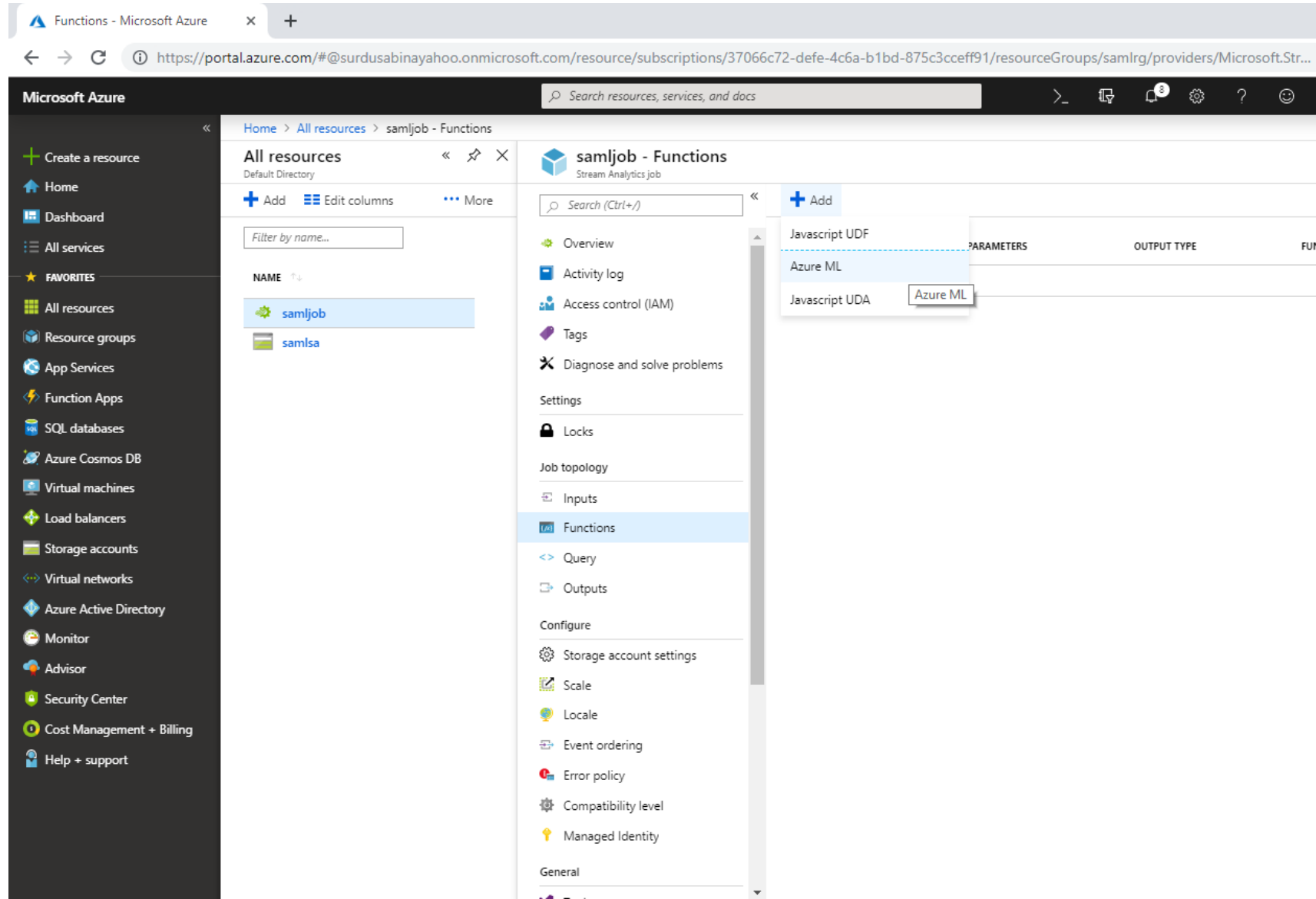
The screenshot displays the Azure portal interface for configuring a Stream Analytics job output. The left sidebar shows the navigation menu with 'All resources' selected. The main pane shows the 'samljob - Outputs' configuration page. The 'Outputs' section is active, showing a table with one output named 'samloutput'. The 'Blob storage' configuration panel is open on the right, showing the following settings:

- Output alias:** samloutput
- Provide Blob storage settings manually:** ☒ Select Blob storage from your subscriptions
- Subscription:** Pay-As-You-Go
- Storage account:** samlsa
- Storage account key:** [Redacted]
- Container:** ☒ Use existing (samlcontainer)
- Path pattern:** [Empty]
- Date format:** YYYY/MM/DD
- Time format:** HH
- Event serialization format:** CSV (highlighted with a red dashed box)
- Delimiter:** comma (,)

The 'Save' button is visible at the bottom of the configuration panel.

Job

* adăugare funcție



The screenshot displays the Microsoft Azure portal interface. The top navigation bar shows the URL: <https://portal.azure.com/#@surdusabinayahoo.onmicrosoft.com/resource/subscriptions/37066c72-defe-4c6a-b1bd-875c3ceff91/resourceGroups/samlrg/providers/Microsoft.Str...>. The left sidebar contains the 'Microsoft Azure' navigation menu with options like 'Create a resource', 'Home', 'Dashboard', 'All services', and 'FAVORITES'. The main content area is titled 'samljob - Functions' and shows a list of resources. The 'Add' button is clicked, opening a dropdown menu with the following options: 'Javascript UDF', 'Azure ML', and 'Javascript UDA'. The 'Azure ML' option is highlighted.

NAME	PARAMETERS	OUTPUT TYPE	FUI
Javascript UDF			
Azure ML			
Javascript UDA			

Job

* adăugare funcție

- *Provide Azure Machine Learning function settings manually*
- *introducere URL și Key din workbook Excel salvat anterior (Web Service URL și Access Key)*

The screenshot displays the Azure portal interface for configuring a function. The left sidebar shows the 'All resources' list with 'samjob' selected. The main pane shows the 'Functions' tab with a table containing one empty row. The right pane shows the 'Azure Machine Learning function' configuration form with the following fields:

- Function alias:** sentiment
- Provide Azure Machine Learning function settings manually:** Selected
- Subscription:** Subscription information not needed
- URL:** https://ussouthcentral.services.azureml.net/workspaces/bbf7
- Key:** [Masked]

A 'Save' button is located at the bottom of the form. A notification at the bottom right states: 'If the chosen resource and the stream analytics job are located in different regions, you will be billed to move data between regions.'

Job

* interogare

- definire interogare de transformare care apelează funcția creată anterior pe fiecare tweet input; *Save*

Home > All resources > samljob - Query

samljob - Query
Stream Analytics Job

Search (Ctrl+/)

Save Discard Test

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Locks

Job topology

Inputs

Functions

Query

Outputs

Configure

Storage account settings

Scale

Locale

Event ordering

Error policy

Compatibility level

Managed Identity

Need help with your query? Check out some of the most common Stream Analytics query patterns [here](#).

```
1 WITH sent AS
2 (SELECT text, sentiment(text) AS rezultat
3 FROM inputdata)
4
5 SELECT text, rezultat.[Score], rezultat.[Sentiment]
6 INTO samloutput
7 FROM sent
```

WITH sent AS
(SELECT text, sentiment(text) AS rezultat
FROM inputdata)

SELECT text, rezultat.[Score], rezultat.[Sentiment]
INTO samloutput
FROM sent

Your query could be put in logs that are in a potentially different geography.
Missing some language constructs? [Let us know!](#) (Powered by [UserVoice](#) - [Privacy Policy](#))

Job

* demarare job

- *Start*
- *Job output start time -> Custom -> Start time: moment încărcare fișier input .csv - o zi*

The screenshot displays the Azure portal interface for configuring a Stream Analytics job. The left sidebar shows the navigation menu with options like 'Create a resource', 'Home', 'Dashboard', 'All services', and 'FAVORITES'. The main area is divided into three panes:

- All resources:** Shows a list of resources under the 'Default Directory'. The 'samljob' resource is selected.
- Overview:** Displays the job's metadata, including the resource group 'samlrg', status 'Created', location 'South Central US', and subscription ID '37066c72-defe-4c6a-b1bd-875c3ceff91'.
- Start job:** A configuration pane for starting the job. It includes a 'Job output start time' dropdown set to 'Custom', a 'Start time' input field with a date picker showing '2019-04-25' and a time picker showing '6:52:37 PM', and a 'Start' button at the bottom.

The 'Query' pane on the right shows a SQL query snippet:

```
1 WITH  
2 (SELE  
3 FROM  
4  
5 SELEC  
6 INTO  
7 FROM
```


Verificare output

- container
 - descărcare fișier generat

The screenshot shows the Azure portal interface for a container named 'samlcontainer'. The left sidebar contains navigation links for various Azure services. The main content area displays the container's details and a list of blobs.

Container Details:

- Authentication method:** Access key ([Switch to Azure AD User Account](#))
- Location:** samlcontainer

Blobs List:

NAME	MODIFIED	ACCESS TIER	BLOB TYPE	SIZE	LEASE STATE
430852246_9910bc3f97d34d92b54c661a67511314_1.csv	4/26/2019, 7:04:29 PM	Hot (Inferred)	Block blob	424 B	Available ...
input_saml.csv	4/26/2019, 2:56:00 PM	Hot (Inferred)	Block blob	100 B	Available ...

Verificare output

- container
 - descărcare fișier generat

<i>text</i>	<i>score</i>	<i>sentiment</i>
<i>They love ice cream</i>	<i>0.665407181</i>	<i>positive</i>
<i>The sky is blue</i>	<i>0.574048638</i>	<i>neutral</i>
<i>Machine Learning is cool</i>	<i>0.620857418</i>	<i>positive</i>
<i>Machine Learning is not cool</i>	<i>0.306780905</i>	<i>negative</i>

Eliminare resurse

Home > Resource groups

Resource groups

Default Directory

+ Add | Edit columns | Refresh | Assign tags | Export to CSV

Subscriptions: Pay-As-You-Go

Filter by name... | All locations | All tags | No grouping

1 of 1 items selected

<input checked="" type="checkbox"/>	NAME ↑↓	SUBSCRIPTION ↑↓	LOCATION ↑↓	
<input checked="" type="checkbox"/>	samlrg	Pay-As-You-Go	South Central	...

Delete resource group

Eliminare resurse

The screenshot shows the Azure portal interface. On the left is a dark sidebar with navigation links: 'Create a resource', 'Home', 'Dashboard', 'All services', 'FAVORITES', 'All resources', 'Resource groups', 'App Services', 'Function Apps', 'SQL databases', 'Azure Cosmos DB', 'Virtual machines', 'Load balancers', 'Storage accounts', 'Virtual networks', 'Azure Active Directory', 'Monitor', 'Advisor', 'Security Center', 'Cost Management + Billing', and 'Help + support'.

The main content area is divided into two panes. The left pane, titled 'Resource groups', shows a list with one entry: 'samlrg'. The right pane is a confirmation dialog titled 'Are you sure you want to delete "samlrg"?'.

The confirmation dialog contains the following information:

- A warning icon and text: 'Warning! Deleting the "samlrg" resource group is irreversible. The action you're about to take can't be undone. Going further will delete this resource group and all the resources in it permanently.'
- A text input field labeled 'TYPE THE RESOURCE GROUP NAME:' with the value 'samlrg' and a green checkmark.
- A section titled 'AFFECTED RESOURCES' with the text: 'There are 2 resources in this resource group that will be deleted.'
- A table listing the affected resources:

NAME	TYPE	LOCATION
samljob	Stream Analytics job	South Central US
samlsa	Storage account	South Central US

At the bottom of the dialog are two buttons: 'Delete' and 'Cancel'.