

Monitor and manage Stream Analytics jobs with Azure PowerShell cmdlets

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In this article:

[Prerequisites for running Azure PowerShell cmdlets for Stream Analytics](#)

[Azure PowerShell cmdlets for Stream Analytics](#)

[Get support](#)

[Next steps](#)

[3 Comments](#)

Learn how to monitor and manage Stream Analytics resources with Azure PowerShell cmdlets that execute basic Stream Analytics tasks.

Prerequisites for running Azure PowerShell cmdlets for Stream Analytics

1. Install and configure Azure PowerShell.

Follow the instructions in [How to install and configure Azure PowerShell](#) (<http://azure.microsoft.com/documentation/articles/install-configure-powershell/>) to install Azure PowerShell.

To connect to your Azure subscription by using the Azure Active Directory method:

```
Add-AzureAccount
```

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To select your Azure subscription with the Azure Stream Analytics service enabled use the method:

```
Select-AzureSubscription
```

[Copy](#)

2. Configure the Azure mode.

After installing Azure PowerShell, run the [Switch-AzureMode](#) (<http://msdn.microsoft.com/library/dn722470.aspx>) cmdlet to set the appropriate Azure mode to access Stream Analytics cmdlets:

```
Switch-AzureMode AzureResourceManager
```

[Copy](#)

NOTE:

Stream Analytics jobs created programmatically do not have monitoring enabled by default. You can manually enable monitoring in the Azure Portal by navigating to the job's Monitor page and clicking the Enable button or you can do this programmatically by following the steps located at [Azure Stream Analytics - Monitor Stream Analytics Jobs Programmatically \(../stream-analytics-monitor-jobs/\)](#)

Azure PowerShell cmdlets for Stream Analytics

The following Azure PowerShell cmdlets can be used to monitor and manage Azure Stream Analytics jobs.

Get-AzureStreamAnalyticsJob

Lists all Stream Analytics jobs defined in the Azure subscription or specified resource group, or gets job information about a specific job within a resource group.

Example 1

```
Get-AzureStreamAnalyticsJob
```

[Copy](#)

This PowerShell command returns information about all the Stream Analytics jobs in the Azure subscription.

Example 2

```
Get-AzureStreamAnalyticsJob -ResourceGroupName StreamAnalytics-Default-Central-US
```

[Copy](#)

This PowerShell command returns information about all the Stream Analytics jobs in the resource group StreamAnalytics-Default-Central-US.

Example 3

```
Get-AzureStreamAnalyticsJob -ResourceGroupName StreamAnalytics-Default-Central-US -Name StreamingJob
```

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This PowerShell command returns information about the Stream Analytics job StreamingJob in the resource group StreamAnalytics-Default-Central-US.

Get-AzureStreamAnalyticsInput

Lists all of the inputs that are defined in a specified Stream Analytics job, or gets information about a specific input.

Example 1

```
Get-AzureStreamAnalyticsInput -ResourceGroupName StreamAnalytics-Default-Central-US -JobName StreamingJob
```

Copy

This PowerShell command returns information about all the inputs defined in the job StreamingJob.

Example 2

```
Get-AzureStreamAnalyticsInput -ResourceGroupName StreamAnalytics-Default-Central-US -JobName StreamingJob -Name EntryStream
```

Copy

This PowerShell command returns information about the input named EntryStream defined in the job StreamingJob.

Get-AzureStreamAnalyticsOutput

Lists all of the outputs that are defined in a specified Stream Analytics job, or gets information about a specific output.

Example 1

```
Get-AzureStreamAnalyticsOutput -ResourceGroupName StreamAnalytics-Default-Central-US -JobName StreamingJob
```

Copy

This PowerShell command returns information about the outputs defined in the job StreamingJob.

Example 2

```
Get-AzureStreamAnalyticsOutput -ResourceGroupName StreamAnalytics-Default-Central-US -JobName StreamingJob -Name Output
```

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This PowerShell command returns information about the output named Output defined in the job StreamingJob.

Get-AzureStreamAnalyticsQuota

Gets information about the quota of streaming units in a specified region.

Example 1

```
Get-AzureStreamAnalyticsQuota -Location "Central US"
```

[Copy](#)

This PowerShell command returns information about the quota and usage of streaming units in the Central US region.

Get-AzureStreamAnalyticsTransformation

Gets information about a specific transformation defined in a Stream Analytics job.

Example 1

```
Get-AzureStreamAnalyticsTransformation -ResourceGroupName StreamAnalytics-Default-Central-US -JobName StreamingJob -Name StreamingJob
```

[Copy](#)

This PowerShell command returns information about the transformation called StreamingJob in the job StreamingJob.

New-AzureStreamAnalyticsInput

Creates a new input within a Stream Analytics job, or updates an existing specified input.

The name of the input can be specified in the .json file or on the command line. If both are specified, the name on the command line must be the same as the one in the file.

If you specify an input that already exists and do not specify the `-Force` parameter, the cmdlet will ask whether or not to replace the existing input.

If you specify the `-Force` parameter and specify an existing input name, the input will be replaced without confirmation.

For detailed information on the JSON file structure and contents, refer to the [Create Input \(Azure Stream Analytics\)](https://msdn.microsoft.com/library/dn835010.aspx) (<https://msdn.microsoft.com/library/dn835010.aspx>) section of the [Stream Analytics Management REST API Reference Library](http://go.microsoft.com/fwlink/?linkid=517301&clcid=0x409) (<http://go.microsoft.com/fwlink/?linkid=517301&clcid=0x409>).

Example 1

```
New-AzureStreamAnalyticsInput -ResourceGroupName StreamAnalytics-Default-Central-US -JobName StreamingJob -File "C:\Input.json" Copy
```

This PowerShell command creates a new input from the file Input.json. If an existing input with the name specified in the input definition file is already defined, the cmdlet will ask whether or not to replace it.

Example 2

```
New-AzureStreamAnalyticsInput -ResourceGroupName StreamAnalytics-Default-Central-US -JobName StreamingJob -File "C:\Input.json" -Name EntryStream Copy
```

This PowerShell command creates a new input in the job called EntryStream. If an existing input with this name is already defined, the cmdlet will ask whether or not to replace it.

Example 3

```
New-AzureStreamAnalyticsInput -ResourceGroupName StreamAnalytics-Default-Central-US -JobName StreamingJob -File "C:\Input.json" -Name EntryStream -Force Copy
```

This PowerShell command replaces the definition of the existing input source called EntryStream with the definition from the file.

New-AzureStreamAnalyticsJob

Creates a new Stream Analytics job in Microsoft Azure, or updates the definition of an existing specified job.

The name of the job can be specified in the .json file or on the command line. If both are specified, the name on the command line must be the same as the one in the file.

If you specify a job name that already exists and do not specify the `-Force` parameter, the cmdlet will ask whether or not to replace the existing job.

If you specify the `-Force` parameter and specify an existing job name, the job definition will be replaced without confirmation.

For detailed information on the JSON file structure and contents, refer to the [Create Stream Analytics Job](https://msdn.microsoft.com/library/dn834994.aspx) (<https://msdn.microsoft.com/library/dn834994.aspx>) section of the [Stream Analytics Management REST API Reference Library](http://go.microsoft.com/fwlink/?linkid=517301&clcid=0x409) (<http://go.microsoft.com/fwlink/?linkid=517301&clcid=0x409>).

Example 1

```
New-AzureStreamAnalyticsJob -ResourceGroupName StreamAnalytics-Default-Central-US -File "C:\JobDefinition.json"
```

[Copy](#)

This PowerShell command creates a new job from the definition in JobDefinition.json. If an existing job with the name specified in the job definition file is already defined, the cmdlet will ask whether or not to replace it.

Example 2

```
New-AzureStreamAnalyticsJob -ResourceGroupName StreamAnalytics-Default-Central-US -File "C:\JobDefinition.json" -Name StreamingJob -Force
```

[Copy](#)

This PowerShell command replaces the job definition for StreamingJob.

New-AzureStreamAnalyticsOutput

Creates a new output within a Stream Analytics job, or updates an existing output.

The name of the output can be specified in the .json file or on the command line. If both are specified, the name on the command line must be the same as the one in the file.

If you specify an output that already exists and do not specify the `-Force` parameter, the cmdlet will ask whether or not to replace the existing output.

If you specify the `-Force` parameter and specify an existing output name, the output will be replaced without confirmation.

For detailed information on the JSON file structure and contents, refer to the [Create Output \(Azure Stream Analytics\)](https://msdn.microsoft.com/library/dn835015.aspx) (<https://msdn.microsoft.com/library/dn835015.aspx>) section of the [Stream Analytics Management REST API Reference Library](http://go.microsoft.com/fwlink/?linkid=517301&clcid=0x409) (<http://go.microsoft.com/fwlink/?linkid=517301&clcid=0x409>).

Example 1

```
New-AzureStreamAnalyticsOutput -ResourceGroupName StreamAnalytics-Default-Central-US -File "C:\Output.json" -JobName StreamingJob -Name output
```

[Copy](#)

This PowerShell command creates a new output called "output" in the job StreamingJob. If an existing output with this name is already defined, the cmdlet will ask whether or not to replace it.

Example 2

```
New-AzureStreamAnalyticsOutput -ResourceGroupName StreamAnalytics-Default-Central-US -File "C:\Output.json" -JobName StreamingJob -Name output -Force
```

[Copy](#)

This PowerShell command replaces the definition for "output" in the job StreamingJob.

New-AzureStreamAnalyticsTransformation

Creates a new transformation within a Stream Analytics job, or updates the existing transformation.

The name of the transformation can be specified in the .json file or on the command line. If both are specified, the name on the command line must be the same as the one in the file.

If you specify a transformation that already exists and do not specify the `-Force` parameter, the cmdlet will ask whether or not to replace the existing transformation.

If you specify the `-Force` parameter and specify an existing transformation name, the transformation will be replaced without confirmation.

For detailed information on the JSON file structure and contents, refer to the [Create Transformation \(Azure Stream Analytics\) \(https://msdn.microsoft.com/library/dn835007.aspx\)](https://msdn.microsoft.com/library/dn835007.aspx) section of the [Stream Analytics Management REST API Reference Library \(http://go.microsoft.com/fwlink/?linkid=517301&clcid=0x409\)](http://go.microsoft.com/fwlink/?linkid=517301&clcid=0x409).

Example 1

```
New-AzureStreamAnalyticsTransformation -ResourceGroupName StreamAnalytics-Default-Central-US -File "C:\Transformation.json" -JobName StreamingJob -Name StreamingJobTransform
```

This PowerShell command creates a new transformation called StreamingJobTransform in the job StreamingJob. If an existing transformation is already defined with this name, the cmdlet will ask whether or not to replace it.

Example 2

```
New-AzureStreamAnalyticsTransformation -ResourceGroupName StreamAnalytics-Default-Central-US -File "C:\Transformation.json" -JobName StreamingJob -Name StreamingJobTransform -Force
```

This PowerShell command replaces the definition of StreamingJobTransform in the job StreamingJob.

Remove-AzureStreamAnalyticsInput

Asynchronously deletes a specific input from a Stream Analytics job in Microsoft Azure. If you specify the `-Force` parameter, the input will be deleted without confirmation.

Example 1

```
Remove-AzureStreamAnalyticsInput -ResourceGroupName StreamAnalytics-Default-Central-US -JobName StreamingJob -Name EventStream
```

Copy

This PowerShell command removes the input EventStream in the job StreamingJob.

Remove-AzureStreamAnalyticsJob

Asynchronously deletes a specific Stream Analytics job in Microsoft Azure.

If you specify the `-Force` parameter, the job will be deleted without confirmation.

Example 1

```
Remove-AzureStreamAnalyticsJob -ResourceGroupName StreamAnalytics-Default-Central-US -Name StreamingJob
```

Copy

This PowerShell command removes the job StreamingJob.

Remove-AzureStreamAnalyticsOutput

Asynchronously deletes a specific output from a Stream Analytics job in Microsoft Azure.

If you specify the `-Force` parameter, the output will be deleted without confirmation.

Example 1

```
Remove-AzureStreamAnalyticsOutput -ResourceGroupName StreamAnalytics-Default-Central-US -JobName StreamingJob -Name Output
```

Copy

This PowerShell command removes the output Output in the job StreamingJob.

Start-AzureStreamAnalyticsJob

Asynchronously deploys and starts a Stream Analytics job in Microsoft Azure.

Example 1

```
Start-AzureStreamAnalyticsJob -ResourceGroupName StreamAnalytics-Default-Central-US -Name StreamingJob -OutputStartMode CustomTime -OutputStartTime 2012-12-12T12:12:12Z
```

Copy

This PowerShell command starts the job StreamingJob with a custom output start time set to December 12, 2012, 12:12:12 UTC.

Stop-AzureStreamAnalyticsJob

Asynchronously stops a Stream Analytics job from running in Microsoft Azure and de-allocates resources that were that were being used. The job definition and metadata will remain available within your subscription through both the Azure portal and management APIs, such that the job can be edited and restarted. You will not be charged for a job in the stopped state.

Example 1

```
Stop-AzureStreamAnalyticsJob -ResourceGroupName StreamAnalytics-Default-Central-US -Name StreamingJob
```

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This PowerShell command stops the job StreamingJob.

Test-AzureStreamAnalyticsInput

Tests the ability of Stream Analytics to connect to a specified input.

Example 1

```
Test-AzureStreamAnalyticsInput -ResourceGroupName StreamAnalytics-Default-Central-US -JobName StreamingJob -Name EntryStream
```

Copy

This PowerShell command tests the connection status of the input EntryStream in StreamingJob.

Test-AzureStreamAnalyticsOutput

Tests the ability of Stream Analytics to connect to a specified output.

Example 1

```
Test-AzureStreamAnalyticsOutput -ResourceGroupName StreamAnalytics-Default-Central-US -JobName StreamingJob -Name Output
```

Copy

This PowerShell command tests the connection status of the output Output in StreamingJob.

Get support

For further assistance, try our [Azure Stream Analytics forum](https://social.msdn.microsoft.com/Forums/en-US/home?forum=AzureStreamAnalytics) (<https://social.msdn.microsoft.com/Forums/en-US/home?forum=AzureStreamAnalytics>).

Next steps

- [Introduction to Azure Stream Analytics \(../stream-analytics-introduction/\)](#)

- [Get started using Azure Stream Analytics \(../stream-analytics-get-started/\)](#)
- [Scale Azure Stream Analytics jobs \(../stream-analytics-scale-jobs/\)](#)
- [Azure Stream Analytics Query Language Reference](#)
(<https://msdn.microsoft.com/library/azure/dn834998.aspx>)
- [Azure Stream Analytics Management REST API Reference](#)
(<https://msdn.microsoft.com/library/azure/dn835031.aspx>)

Need help?

Go to an MSDN forum (<https://social.msdn.microsoft.com/forums/azure/en-US/home?forum=windowsazureplatform>)

StackOverflow discussion (<http://stackoverflow.com/questions/tagged/azure>)