

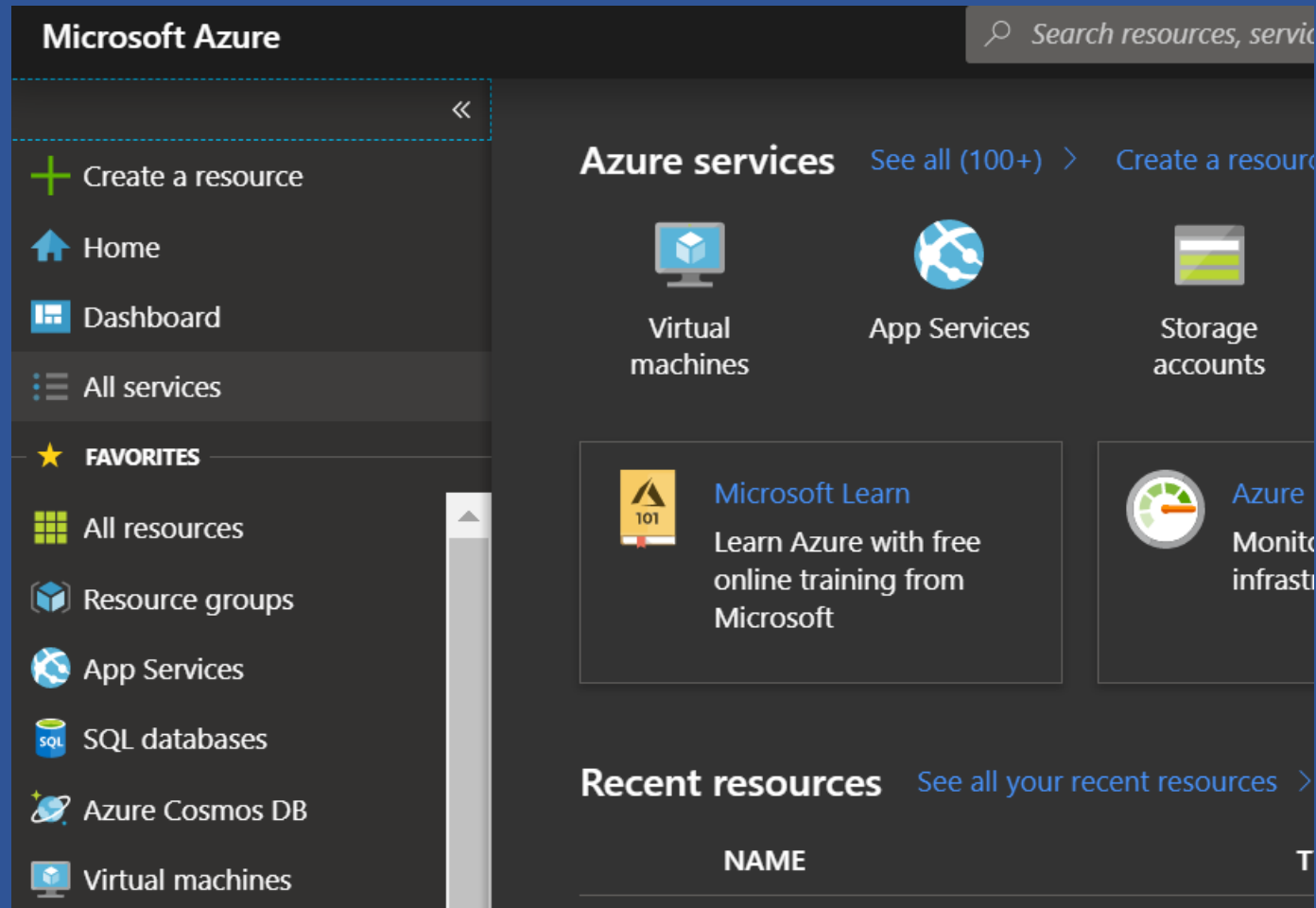
Create Azure Stream Analytics Job



Create Azure Stream Analytics Job

1. Open Azure Portal
2. Create Consumer Group
3. Create Storage Account
4. Create New Stream Analytics Job
5. Setup Input
6. Setup Output
7. Write query

Go to Azure Dashboard
<https://portal.azure.com/>



Create resource Group

Click at your IoT Hub

Microsoft Azure

Search resources, services, and docs (G+/)

«

+

 Create a resource

Home

Dashboard

All services

★ FAVORITES

All resources

Resource groups

App Services

SQL databases

Azure Cosmos DB

Virtual machines

Load balancers

Storage accounts

Virtual networks

Azure Active Directory

Monitor

Azure services [See all \(100+\)](#) [Create a resource >](#)

Virtual machines

App Services

Storage accounts

SQL databases

Azure Database for PostgreSQL

Microsoft Learn
Learn Azure with free online training from Microsoft

Azure Monitor
Monitor your apps and infrastructure

Security Center
Secure your infrastructure

Recent resources [See all your recent resources >](#) [See all your resources >](#)

NAME	TYPE
stream1	Stream Analytics job
loy-sa-1	Stream Analytics job
loyiothub1	IoT Hub
loyrg1	Resource group
loystorage1	Storage account

Click **Built-in endpoints** / **Events**

Home > loyiothub1 - Built-in endpoints

loyiothub1 - Built-in endpoints

IoT Hub

Search (Ctrl+/)

- Shared access policies
- Pricing and scale
- IP Filter
- Certificates
- Built-in endpoints**
- Failover
- Properties
- Locks
- Export template

Save Undo

Each IoT hub comes with built-in system endpoints to

- Events**
- Cloud to device messaging

enter a name under **Consumer groups**. Select **Save**

Save Undo

Each IoT hub comes with built-in system endpoints to handle system and device messages.

^ Events

Events is the the default endpoint, and is used until custom routing rules are created.

Partitions ⓘ

2

Event Hub-compatible name ⓘ

iothub-ehub-loyiothub1-2144308-c4bf924f3c

Event Hub-compatible endpoint ⓘ

Endpoint=sb://ihsuprodsgres001dednamespace.servicebus.windows.net/;SharedAccessKeyName=iothubowne

Retain for ⓘ

Consumer Groups ⓘ

CONSUMER GROUPS

\$Default

loy-cg1

Create new consumer group

Create Storage Account

Home / Storage accounts / + Add

Microsoft Azure

Search resources, services, and docs (G+)

Home > Storage accounts

Storage accounts

Default Directory

+ Add Edit columns Refresh Assign tags Delete

Subscription: Loy2019a

Filter by name... All resource groups All types All locations

1 items

NAME ↑↓	TYPE ↑↓	KIND ↑↓
<input type="checkbox"/> loystorage1	Storage account	StorageV2

Configure and Create

Home > Storage accounts > Create storage account

Create storage account

Basics Networking Advanced Tags Review + create

Azure Storage is a Microsoft-managed service providing cloud storage that is highly available, secure, durable, scalable, and redundant. Azure Storage includes Azure Blobs (objects), Azure Data Lake Storage Gen2, Azure Files, Azure Queues, and Azure Tables. The cost of your storage account depends on the usage and the options you choose below. [Learn more](#)

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

* Subscription

* Resource group [Create new](#)

Instance details

The default deployment model is Resource Manager, which supports the latest Azure features. You may choose to deploy using the classic deployment model instead. [Choose classic deployment model](#)

* Storage account name ⓘ ✓

* Location

Performance ⓘ ☒ Standard ☐ Premium

Account kind ⓘ

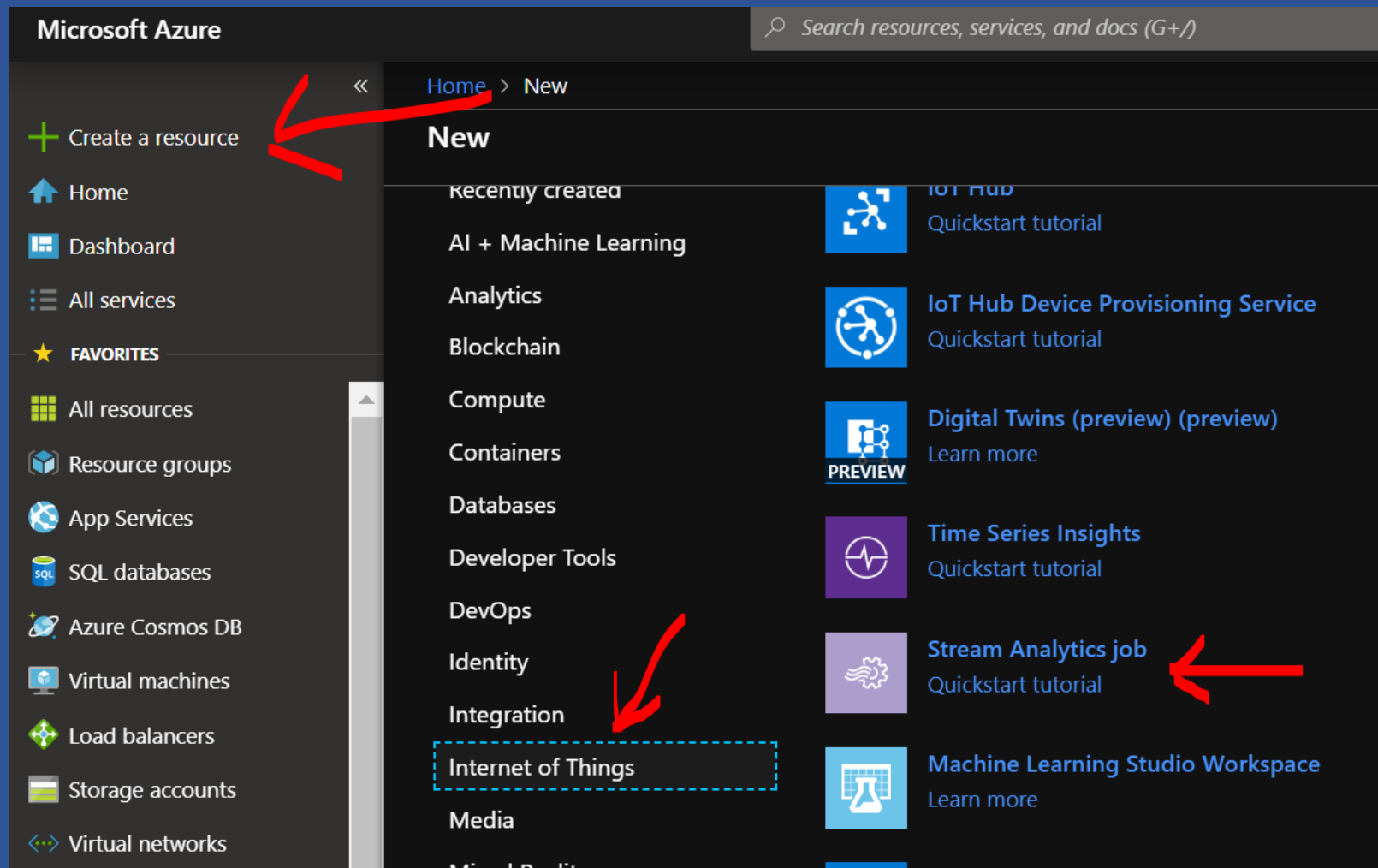
Replication ⓘ

Access tier (default) ⓘ ☐ Cool ☒ Hot

[Review + create](#) < Previous Next : Networking >

Create new Stream Analytics Job

Home / Create a resource / Internet of Things / Stream Analytics Job



Provide name / Resource group / location

Job name: The name must be **globally unique**.

Resource group: Use the same resource group that your IoT hub uses.

Location: Use **Southeast Asia**.

Microsoft Azure

Home > New > New Stream Analytics job

New Stream Analytics job

* Job name
stream1 ✓

* Subscription
Loy2019a

* Resource group
loyrg1
[Create new](#)

* Location
Southeast Asia

Hosting environment ⓘ
Cloud Edge

Streaming units (1 to 192) ⓘ
3

Create Automation options

Wait for Stream1 to be created

The screenshot shows the Microsoft Azure portal interface. On the left sidebar, under the 'FAVORITES' section, 'All resources' is highlighted with a red arrow. The main content area displays the 'All resources' page for the 'Default Directory'. It includes a search bar, filters for 'Subscription == all' and 'Resource group == all', and a table of resources. The table shows three records: 'loyiothub1' (IoT Hub), 'loystorage1' (Storage account), and 'loystream1' (Stream Analytics job). A red arrow points to the 'loystream1' entry in the table.

NAME	TYPE
loyiothub1	IoT Hub
loystorage1	Storage account
loystream1	Stream Analytics job

Create Stream Analytics Job **Input**

Open your Stream Analytic / Click input

Home > All resources > loystream1

loystream1
Stream Analytics job

>> ▶ Start ■ Stop 🗑 Delete

i To start your job, you need to add an input. →

Resource group (change)	: loyrg1	Send feedback	: UserVoice
Status	: ---	Created	: ---
Location	: Southeast Asia	Started	: ---
Subscription (change)	: Loy2019a	Output watermark	: ---
Subscription ID	: 3bcd7cd7-61ed-48e6-ad0f-d1d2258efcd9	Hosting environment	: Cloud

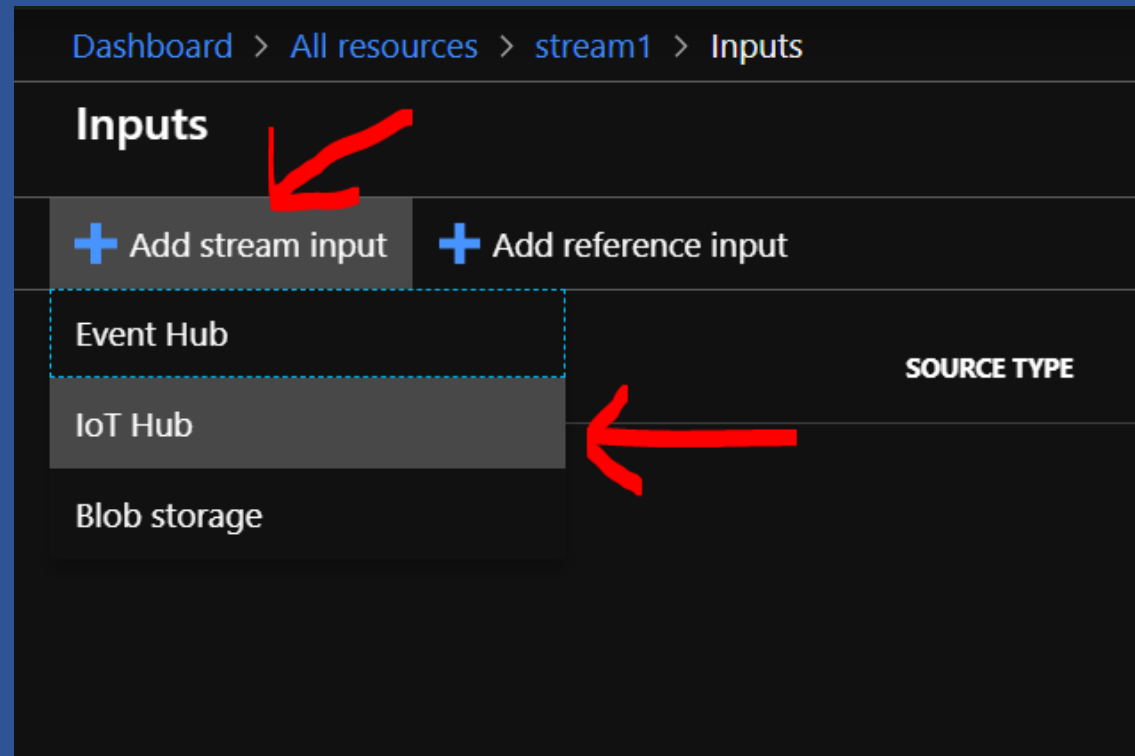
Inputs
0

Outputs
0

Query

```
1 SELECT
2   *
3 INTO
4   [YourOutputAlias]
5 FROM
6   [YourInputAlias]
```

Add stream input / IoT Hub



Configure input and save

IoT Hub

New input

* Input alias

input1 ✓

☐ Provide IoT Hub settings manually

☒ Select IoT Hub from your subscriptions

Subscription

Loy2019a

IoT Hub ⓘ

loyiothub1

Endpoint ⓘ

Messaging

Shared access policy name ⓘ

service

Shared access policy key ⓘ

.....

Consumer group ⓘ

loycg1

* Event serialization format ⓘ

JSON

You can implement a deserializer in C# that can read events in any format. You can try this out by [signing up for the preview program](#).

Encoding ⓘ

UTF-8

Event compression type ⓘ

None

Save




Test input

Microsoft Azure Search resources, services, and docs (G+)

Home > All resources > loystream1 > Inputs



Inputs

+ Add stream input + Add reference input

NAME	SOURCE TYPE	SOURCE	
input1	Stream	IoT Hub	  

Input details

input1

 Test  Delete

* Input alias
input1

☒ Provide IoT Hub settings manually
☐ Select IoT Hub from your subscriptions

Subscription
Subscription information not needed

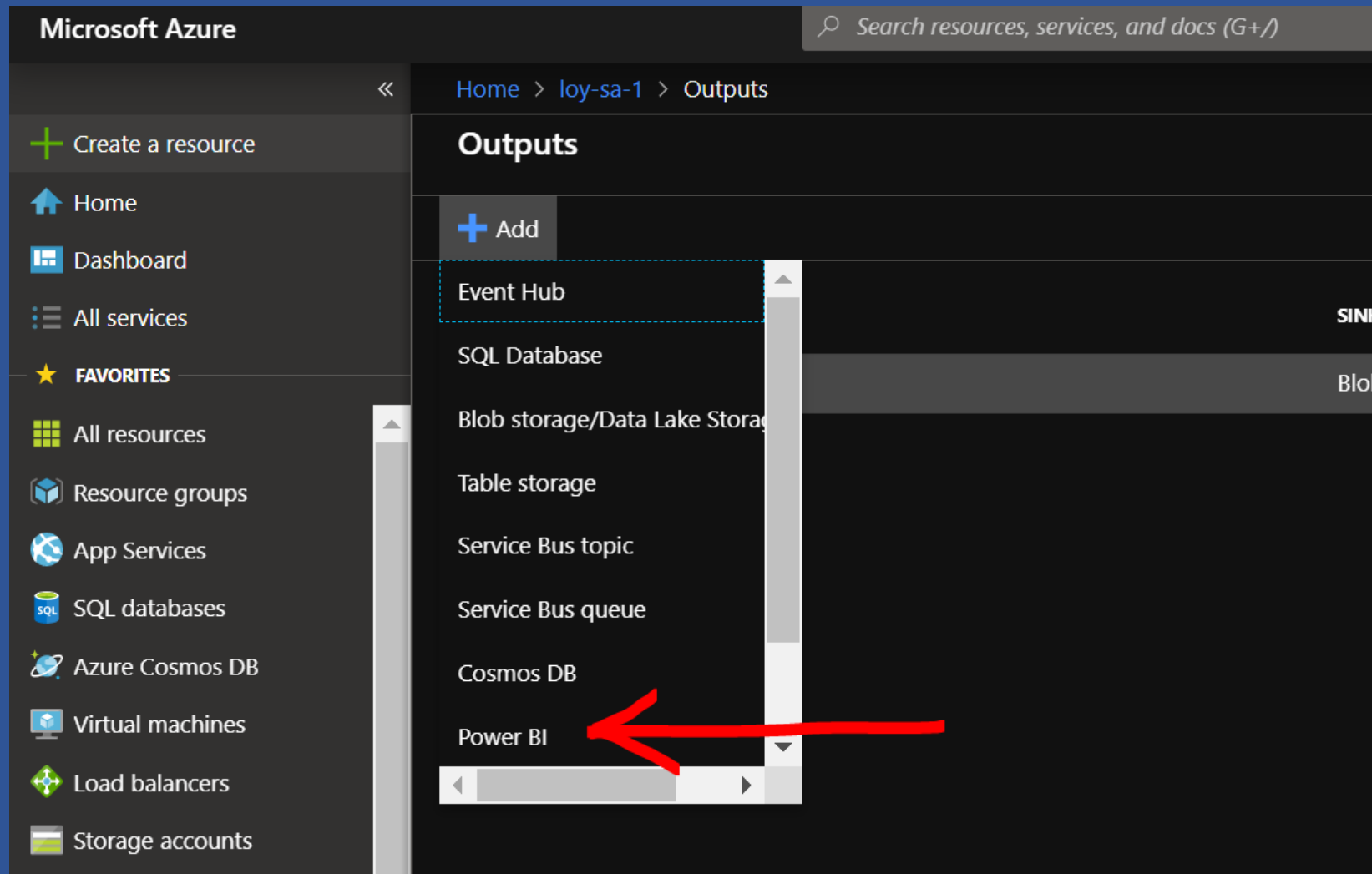
* IoT Hub ⓘ
loyiothub1

Endpoint ⓘ
Messaging

Create Stream Analytics Job **Output**

Open your Stream Analytic / Click output

+ Add / Power BI



Setup Power BI

Power BI
New output

* Output alias

output1 ✓

Group workspace

Authorize connection to load workspaces ✓

* Dataset name ⓘ

motor1 ✓

* Table name

loytable1 ✓

Setup Power BI Authorize

Authorize connection

You'll need to authorize with Power BI to configure your output settings.

Authorize



Don't have a Microsoft Power BI account yet?

[Sign up](#)




Note: You are granting this output permanent access to your Power BI dashboard. Should you need to revoke this access in the future you can do one of the following:

1. Change the user account password.
2. Delete this output.
3. Delete this job.

Sign in to Microsoft Power BI Account

Microsoft Azure

 Microsoft

Sign in

[Can't access your account?](#)

[Sign in with a security key ?](#)

[Next](#)

Successfully authorized / Click Save

Power BI
New output

* Output alias
output1 ✓

Group workspace
My workspace ▼

* Dataset name ⓘ
motor1 ✓

* Table name
loytable1 ✓

Currently authorized as [loy vanich \(me@laploy.com\)](#)

Authorize connection
You'll need to authorize with Power BI to configure your output settings.

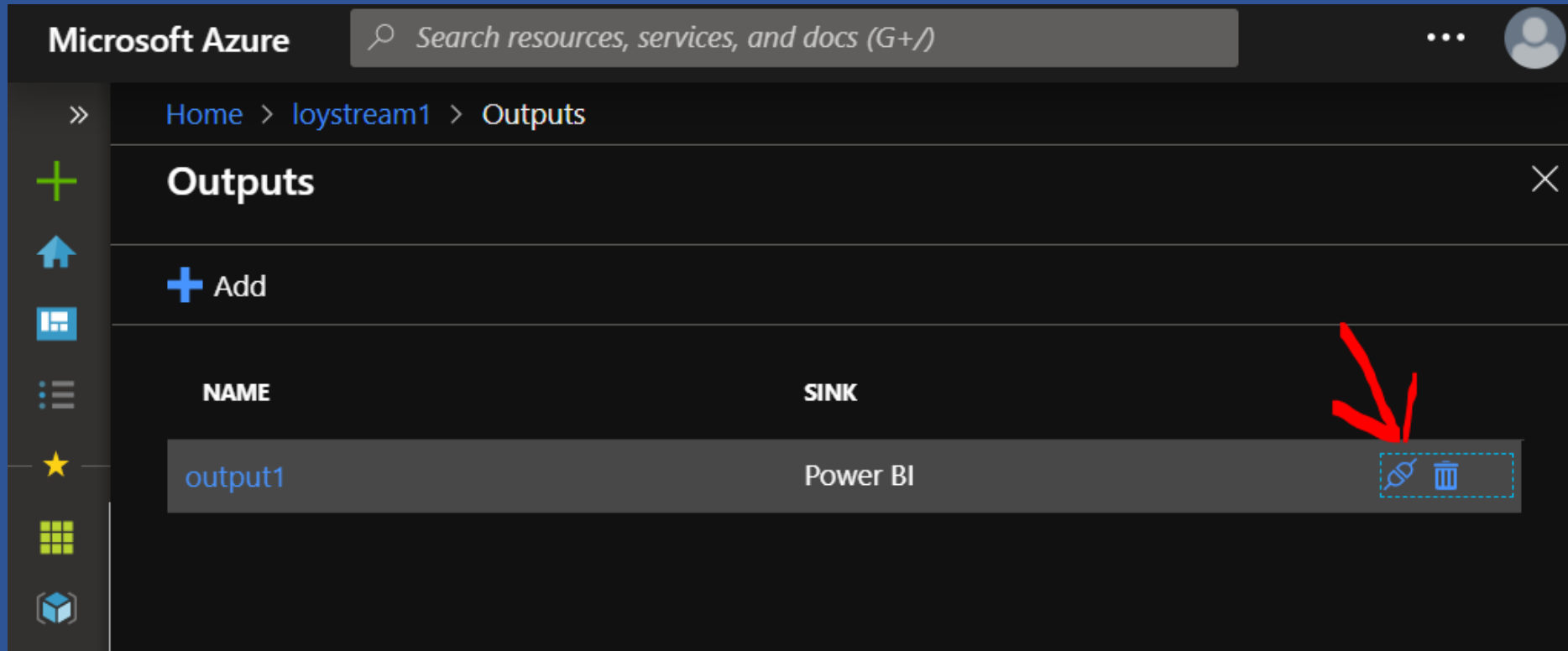
Authorize

Note: You are granting this output permanent access to your Power BI dashboard. Should you need to revoke this access in the future you can do one of the following:

1. Change the user account password.
2. Delete this output.
3. Delete this job.

Save

Test Output





Microsoft Azure

Search resources, services, and docs (G+)

Home > loystream1 > Outputs

Outputs

+ Add

NAME	SINK	
output1	Power BI	 

Click Edit query

Start Stop Delete

Subscription (change)
Loy2019a

Subscription ID
3bcdfcd7-81ed-48e6-ad0f-d1d2258efcd9

Output watermark
-

Hosting environment
Cloud

Inputs

1

loy-sa-input1 IoT Hub

Outputs

1

loy-output1 Blob storage

Query

```
1 SELECT
2   *
3 INTO
4   [YourOutputAlias]
5 FROM
6   [YourInputAlias]
```

Edit query

Edit query / Run motor / Send message / Test query / Save query

The screenshot shows a query editor interface. At the top, there are three buttons: 'Test query' (with a blue play icon), 'Save query' (with a floppy disk icon), and 'Discard changes' (with a red X icon). Below these buttons is a text area containing a SQL query:

```
1 SELECT
2   *
3 INTO
4   output1
5 FROM
6   input1
```

Red arrows point to the 'Test query' button, the 'Save query' button, the 'output1' table name, and the 'input1' table name. Below the query editor, there are two tabs: 'Input preview' and 'Test results'. The 'Test results' tab is active, showing the text 'Showing 2 rows from 'output1'.' Below this text is a table with 8 columns: 'am...', 'coo...', 'u_d', 'u_q', 'mo...', 'tor...', 'i_d', and 'i_q'. The table contains two rows of data. At the bottom of the interface, there is a green checkmark icon followed by the text 'Success'. A red arrow points to the 'Success' text.

am...	coo...	u_d	u_q	mo...	tor...	i_d	i_q
"-0.02...	"1.473...	"0.330...	"-1.24...	"-1.22...	"-0.25...	"1.029...	"-0.24...
"-0.01...	"1.480...	"0.330...	"-1.24...	"-1.22...	"-0.25...	"1.029...	"-0.24...

✓ Success

What's next?

