A CLOUD GURU

Kineses Data Analytics

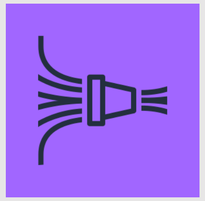
Brock Tubre
INSTRUCTOR

The Kinesis Family

The Kinesis Family

Kinesis

Kinesis
Data Streams



Kinesis
Data Firehose

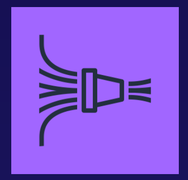
Kinesis
Video Streams

Kinesis
Data Analytics

Kinesis Data Analytics

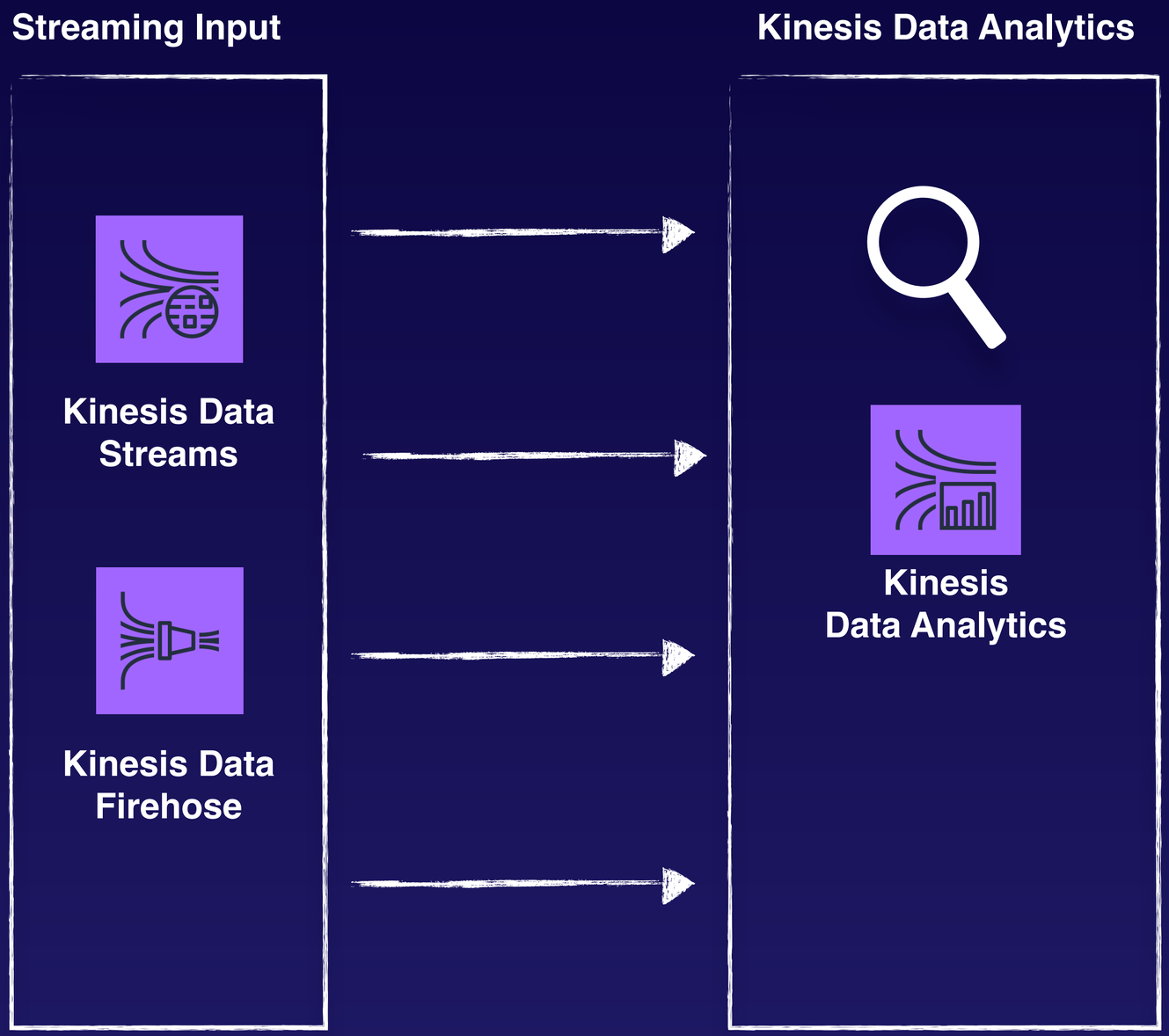
Streaming Input

Kinesis Data Streams

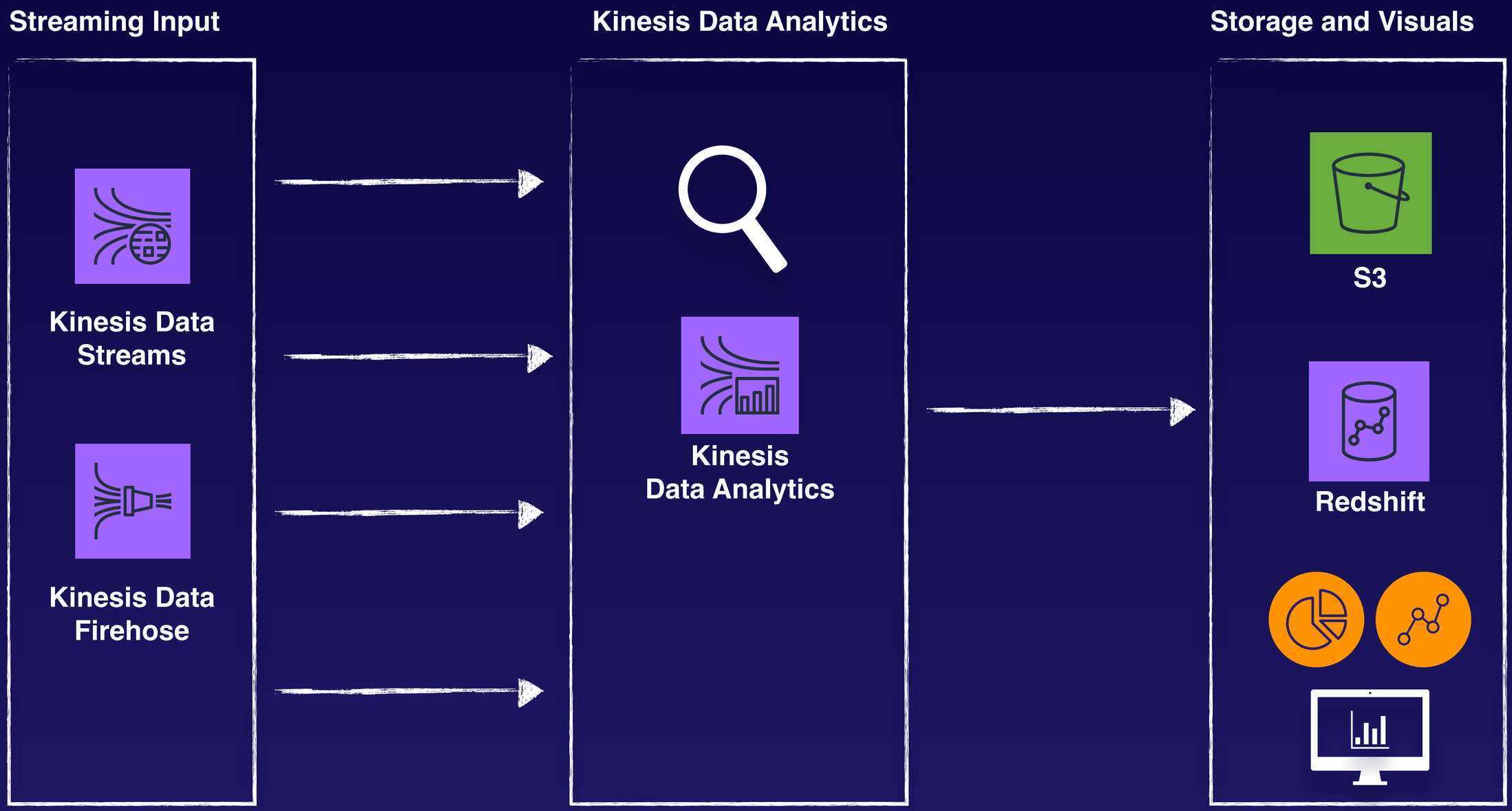


Kinesis Data Firehose

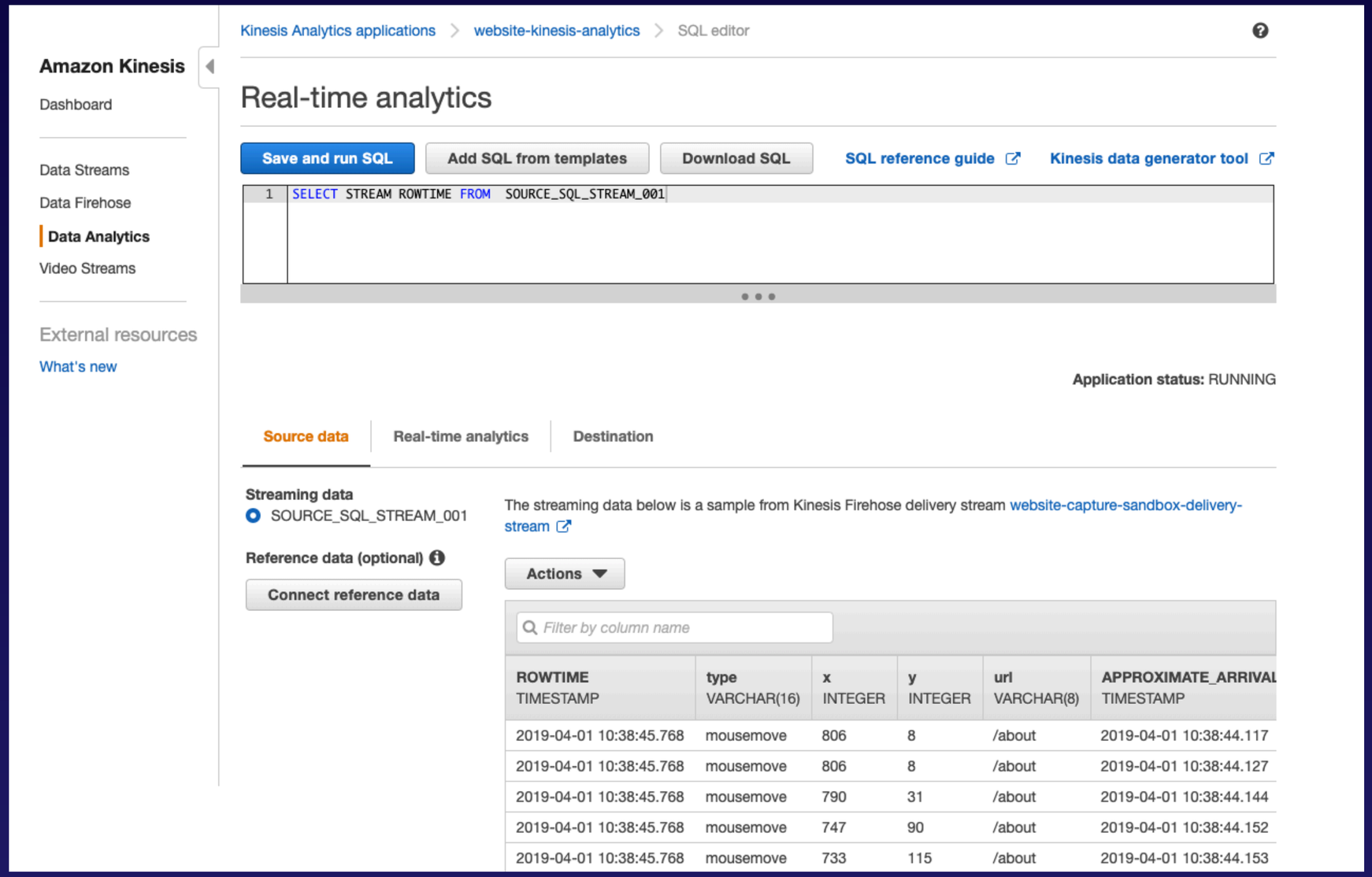
Kinesis Data Analytics



Kinesis Data Analytics



Kinesis Data Analytics



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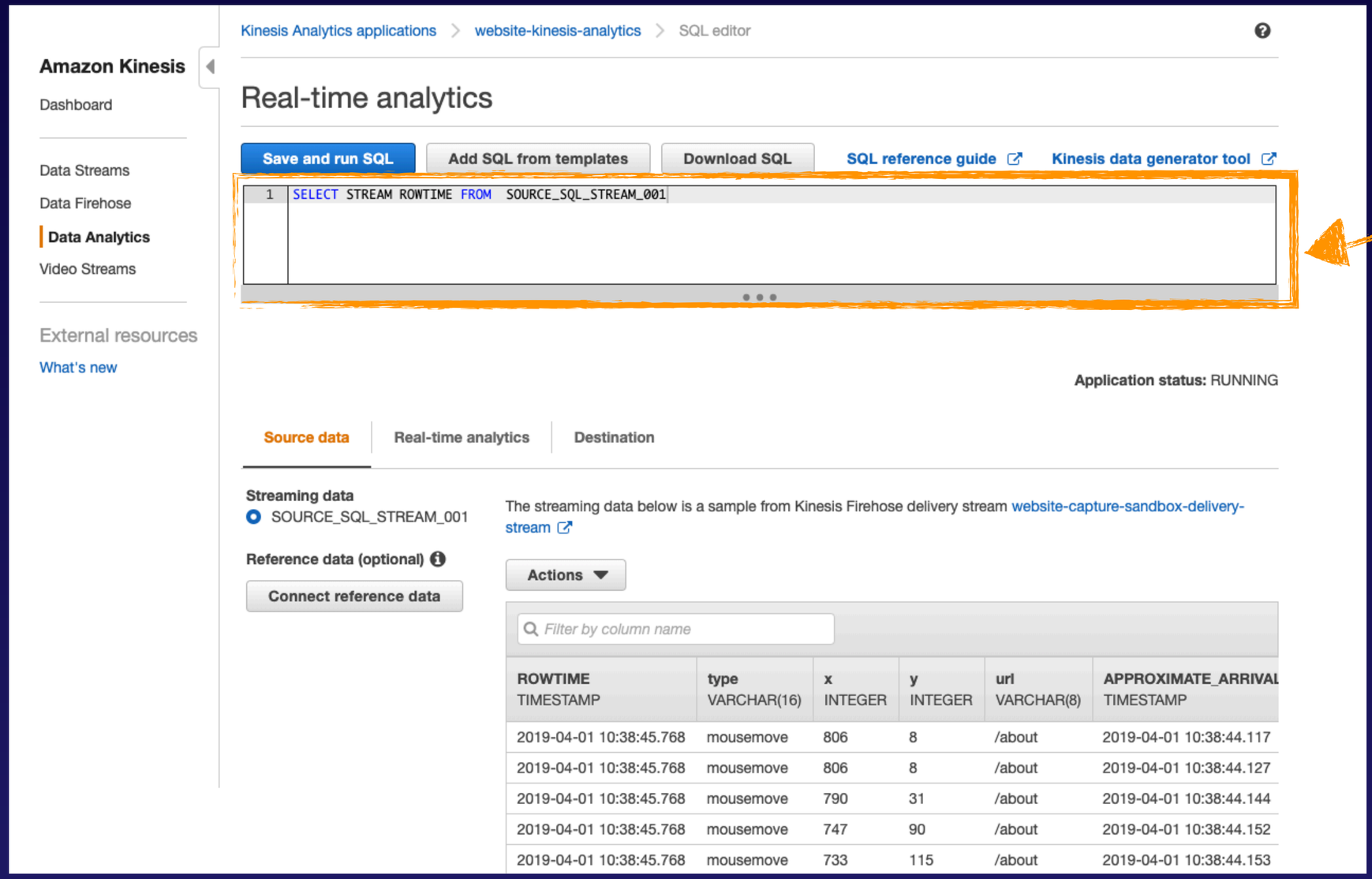

Kinesis Data Analytics

When should you use Kinesis Data Analytics?

- Run SQL queries on streaming data.
- Construct applications that provide insight on your data.
- Create metrics, dashboards, monitoring, notifications, and alarms.
- Output query results into S3 (other AWS datasources).

Kinesis Data Analytics - Use Cases

- **Responsive real-time analytics**

  Example: Send real-time alarms or notifications when certain metrics reach predefined threshold.

- **Stream ETL jobs**

  Example: Stream raw sensor data then, clean, enrich, organize, and transform it before it lands into data warehouse or data lake.

The Kinesis Family - Use Cases

Task at hand	Which Kinesis service to use?	Why?
Need to stream Apache log files directly from (100) EC2 instances and store them into Redshift.	Kinesis Firehose	Firehose is for easily streaming data directly to a final destination. First the data is loaded into S3, then copied into Redshfit.
Need to stream live video coverage of a sporting event to distribute to customers in near real-time.	Kinesis Video Streams	Kinesis Video Streams processes real-time streaming video data (audio, images, radar) and can be fed into other AWS services.
Need to transform real-time streaming data and immediately feed into a custom ML application.	Kinesis Streams	Kinesis Streams allows for streaming huge amounts of data, process/transform it, and then store it or feed into custom applications or other AWS services.
Need to query real-time data, create metric graphs, and store output into S3.	Kinesis Analytics	Kinesis Analytics gives you the ability to run SQL queries on streaming data, then store or feed the output into other AWS services.