

IBM Developer Series

Join our webinar series to expand your development skills

Cloud Native Thursdays

Data Science Fridays

Red Hat OpenShift Saturdays

AI Sundays

meetup.com/IBM-Cloud-MEA/

Create your First Data Streaming Application without any Code

Khalil Faraj

Developer Advocate, UAE

Lungelo Sikobi

Developer Advocate, UAE

Get Started Here: ibm.biz/StreamsFlow

Agenda

Data	04	Hands-On	12
		Useful Links	13
Streams	06		
Use Case Examples	08		
Terms and Concepts	09		
IBM Streams Flow.	11		

What is Data?

- Useful information generated from a process
- Has various formats: sensor, geospatial, audio, video, structured and unstructured text
- Most of the companies use data to improve the customer's experience



<https://intellipaat.com/blog/tutorial/hadoop-tutorial/big-data-overview/>

Data is Everywhere

- Netflix provides personalized recommendations
 - Waze provides a personalized driving experience
 - Self driving cars react to changing conditions
 - Online Ads



<https://lutech.group/en/social-analytics-the-importance-of-opinions>

Data Streaming

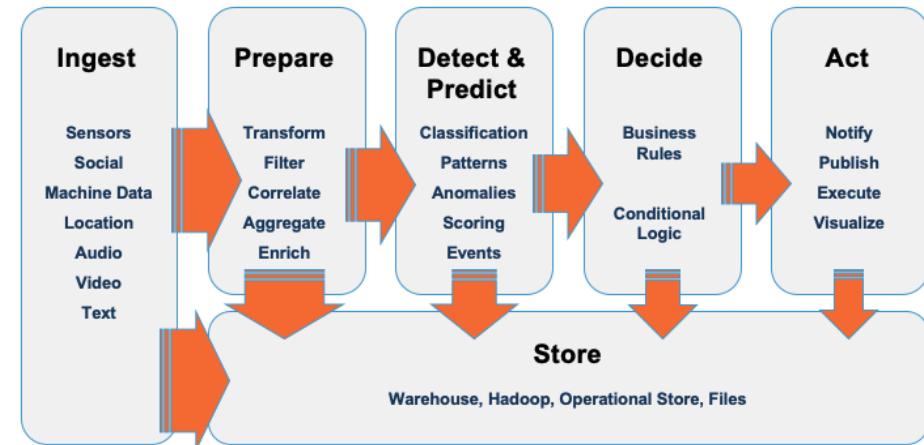
- Ingest and correlate data from thousands of sources in real time.
- Continuously analyze data with low-latency response times.
- Respond to events as they occur



<https://www.onlinewebfonts.com/icon/434777>

Typical Flow

- Ingest data from many sources.
- Prepare the data for analysis.
- Detect and predict event and patterns in the data.
- Store any data that is of long-term value.



Use Case Examples

Here are some of use cases for data streaming:

- Payment Processing
- Fraud detection.
- Anomaly detection
- Predictive Maintenance
- IoT Analytics
- Clickstream analysis

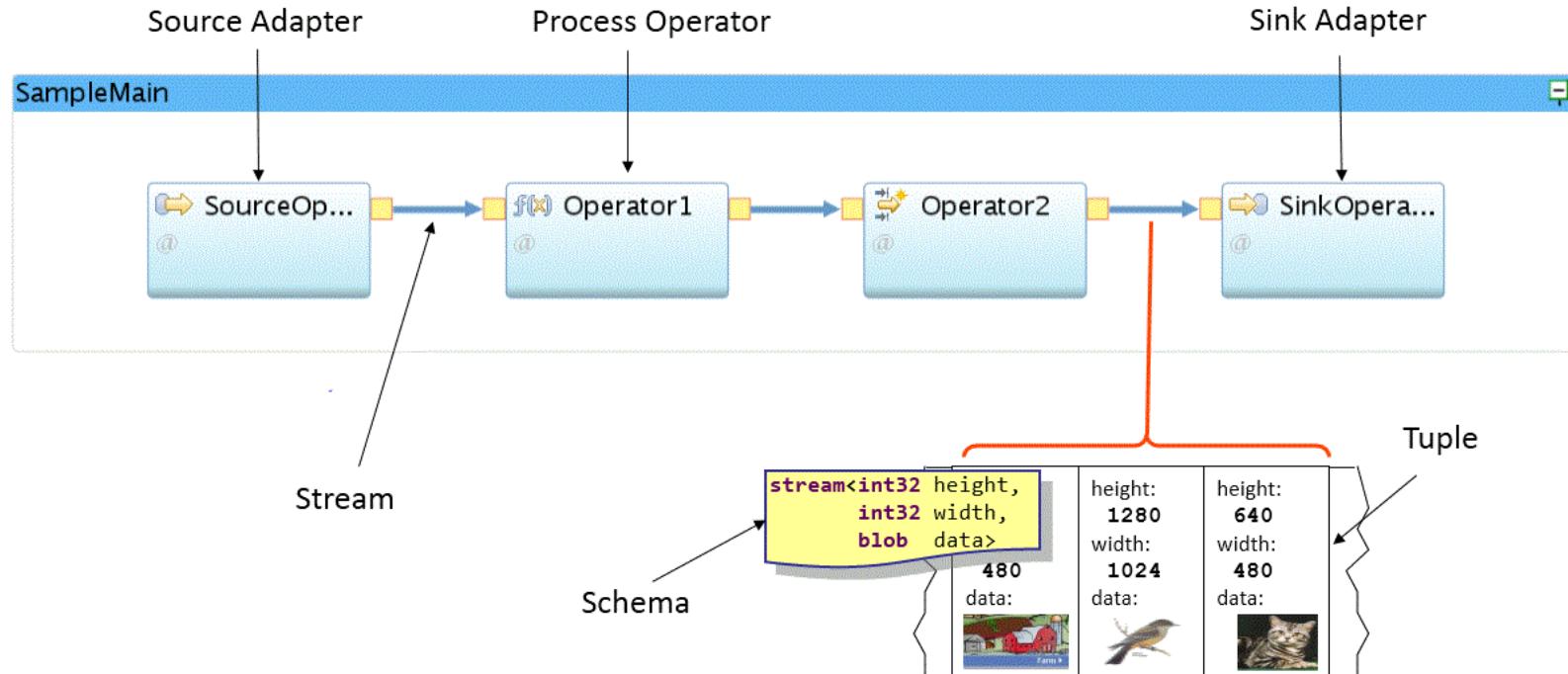


<https://mydata2018.org/programme/cases/>

IBM Streams Basic Terms and Concepts

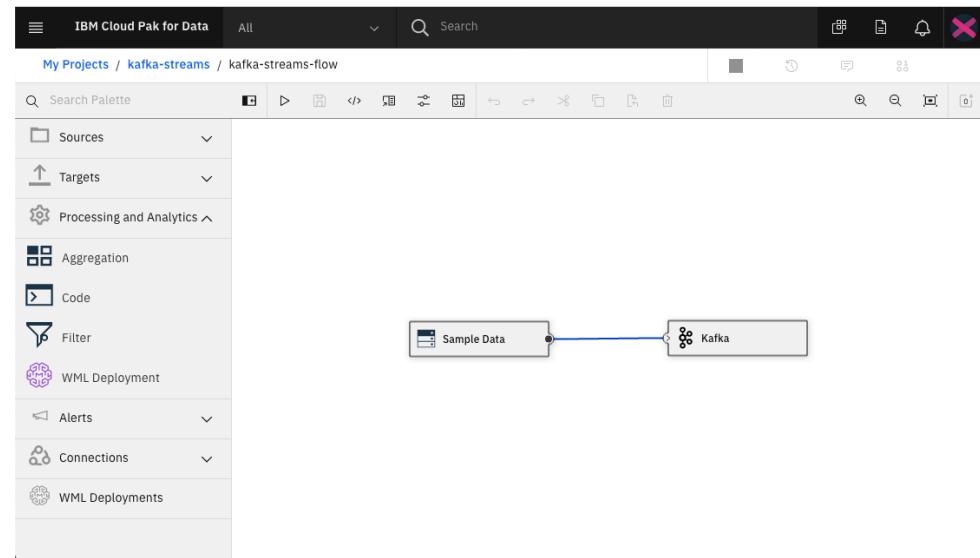
- **Operator:** perform some action on the stream (like filters, aggregators...)
- **Source:** The data source the application uses to ingest streaming data
- **Stream:** The data that passes between operators.
- **Target:** The final output of the streaming data (like Cloudant®, MySQL...)
- **Schema:** The format of the stream data as it moves between operators.
- **Tuple:** A single entry or event in the stream data.

IBM Streams Basic Terms and Concepts



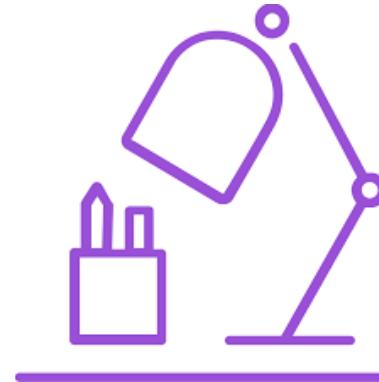
IBM Streams Flow

- Build streaming application without writing code
- Easy to use visual interface with drag and drop
- Accessible to everyone: technical and non-technical people



Hands On

- Sign up/Log in to your IBM Cloud Account ibm.biz/StreamsFlow
- Follow along for the hands-on ibm.biz/StreamsFlowLab



Useful Links

Learn - develop - connect

Get Started Here (<https://ibm.biz/StreamsFlow>)

Hands-On Lab (<https://ibm.biz/StreamsFlowLab>)

IBM Developer (<https://developer.ibm.com/>)

Meetup (<https://www.meetup.com/IBM-Cloud-MEA/>)

Call for Code Spot Challenge for Wildfires

Create models to predict wildfires – Build & test your models through January 31, 2021

Prize – 5K US Dollars

Learn more by attending sessions:

- Session : Monday Nov 23 noon EDT, 6pm CET, 10:30pm IST – Datasets & Notebooks
 - Register <https://www.crowdcast.io/e/call-for-code-spot/>
- Conference : Tuesday Nov 24, 5:30am CET, 10:00am IST – Track 4 sessions include challenge
 - Register <https://developer.ibm.com/conferences/digital-developer-conference-data-ai-in/>
 - Sessions available on demand



Canberra Bushfires Creative Commons



Gregory Bramble,
Research Software Engineer



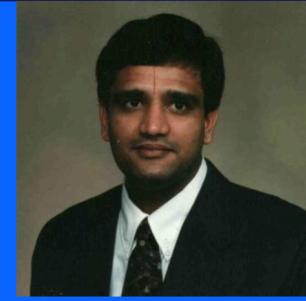
Margriet Groenendijk, Data
Scientist & Developer Advocate



Hendrik Hamann, Chief
Scientist for Geoinformatics
& PAIRS Geoscope



Omid Meh,
Developer Advocate



Sundar Saranathan,
Senior Software
Architect

More information about the challenge & challenge registration: <http://ibm.biz/cfcsc-wildfires>

Thank you.

Khalil Faraj

Developer Advocate

—

khalil.faraj@ibm.com

Fawaz Siddiqi

Developer Advocate

—

lungelo.sikobi@ibm.com

Survey



<https://www.surveymonkey.com/r/YMP5V96>

