

# 2nd PHYSICS Hackathon 2023

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# Game Challenge

# Game Challenge

**Game Points: 600**

**Objectives:**

1. [PHYSICS] Importing Sliding Window Action Tab
2. [PHYSICS] Using Sliding Window Subflow
3. Create your First Flow
4. Request a remote resource
5. Function API Node Flow
6. Switch API Node Flow

**Achievements:**

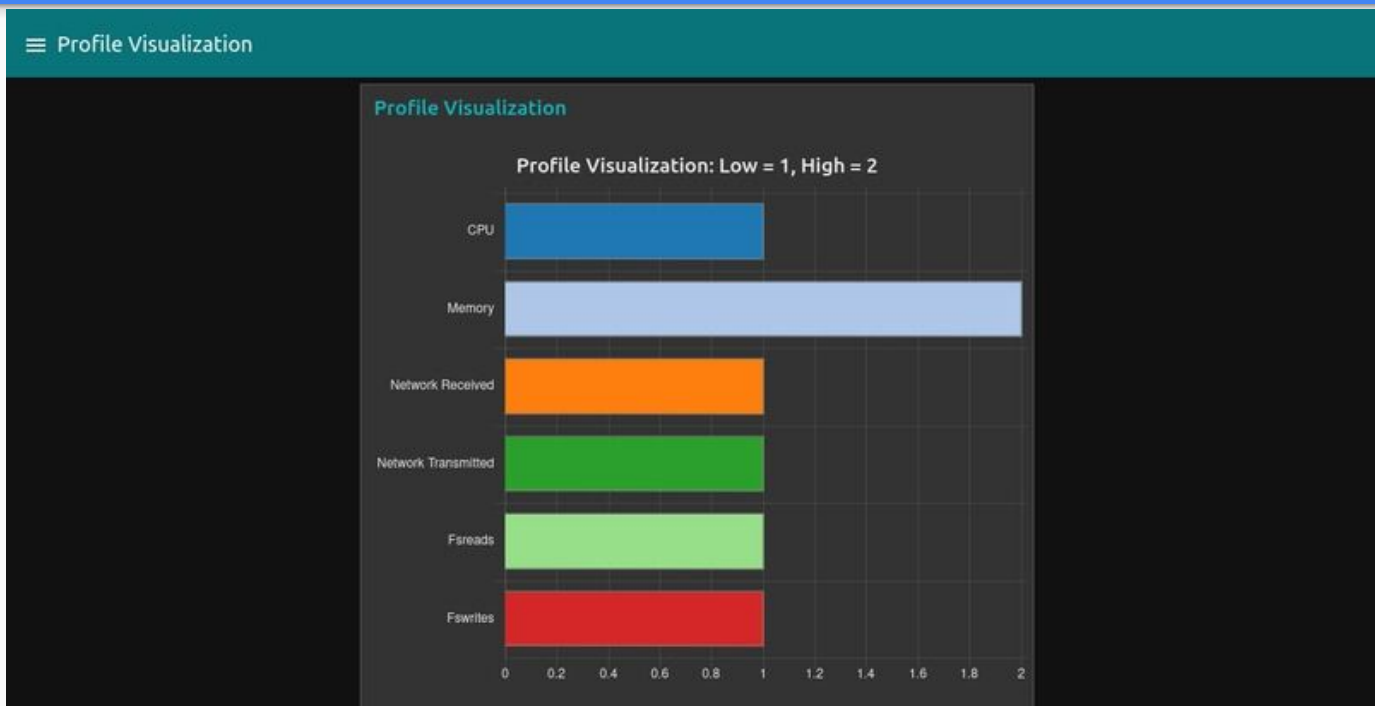
- Window Slider: Import the Openwhisk Sliding Window subflow.
- Window Slider: Import the Openwhisk Sliding Window subflow.
- Resourceful: Input the correct number.
- Hello Manousos: Introduce yourself from the function API.

**Storylines:**

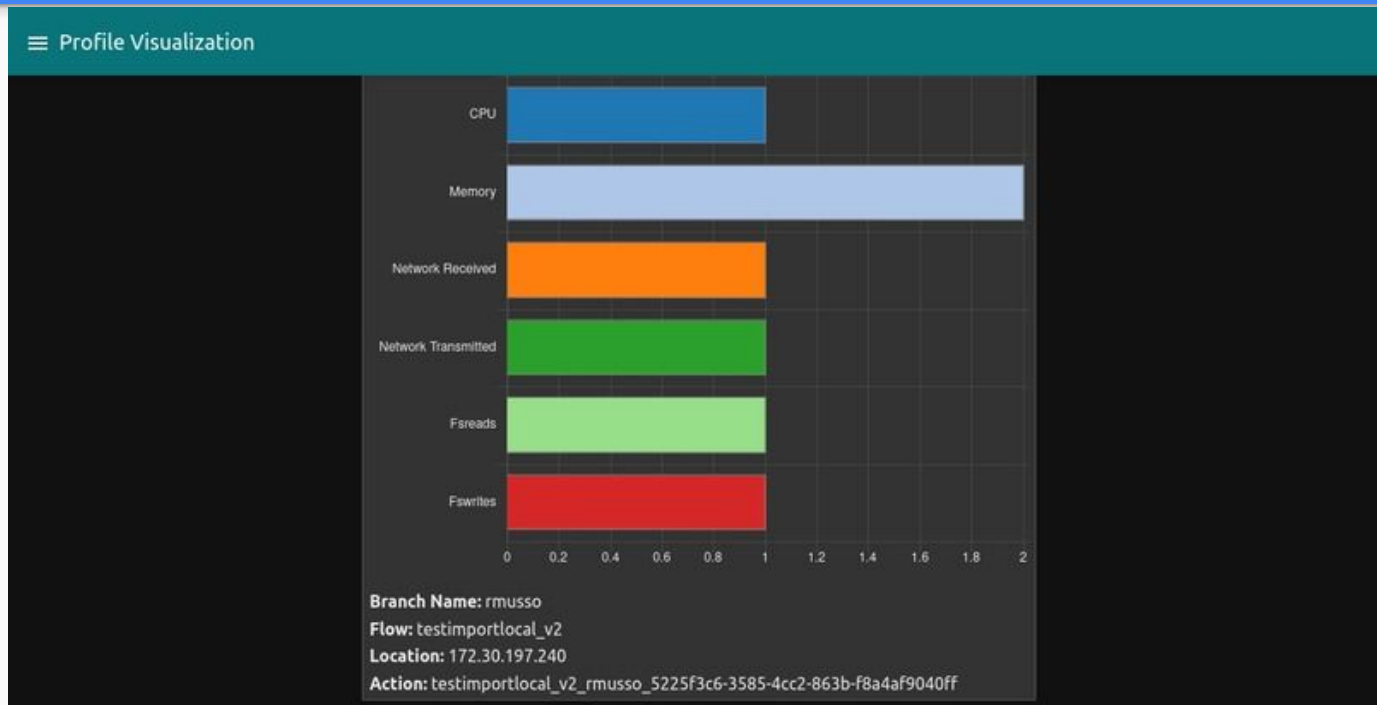
- [PHYSICS] OpenWhisk Storyline

# Data Visualization Challenge

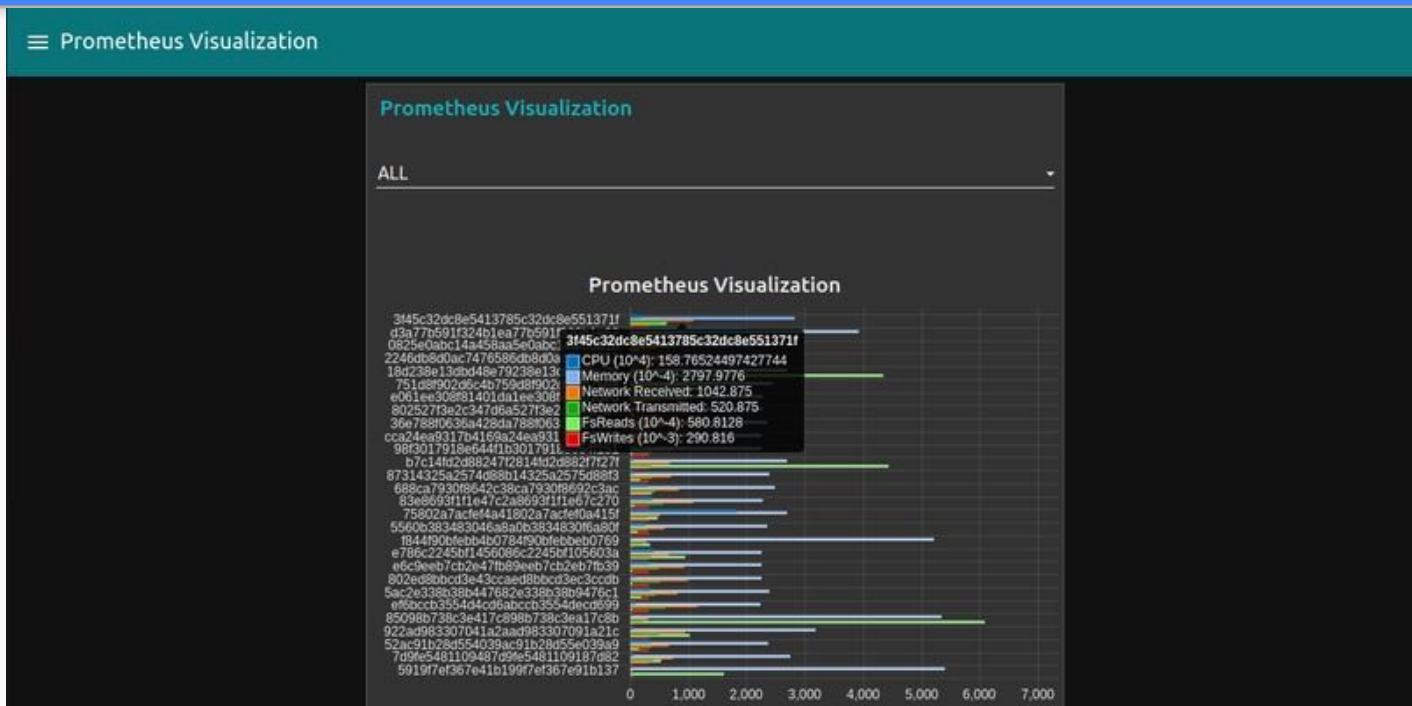
# Profile Data Visualization



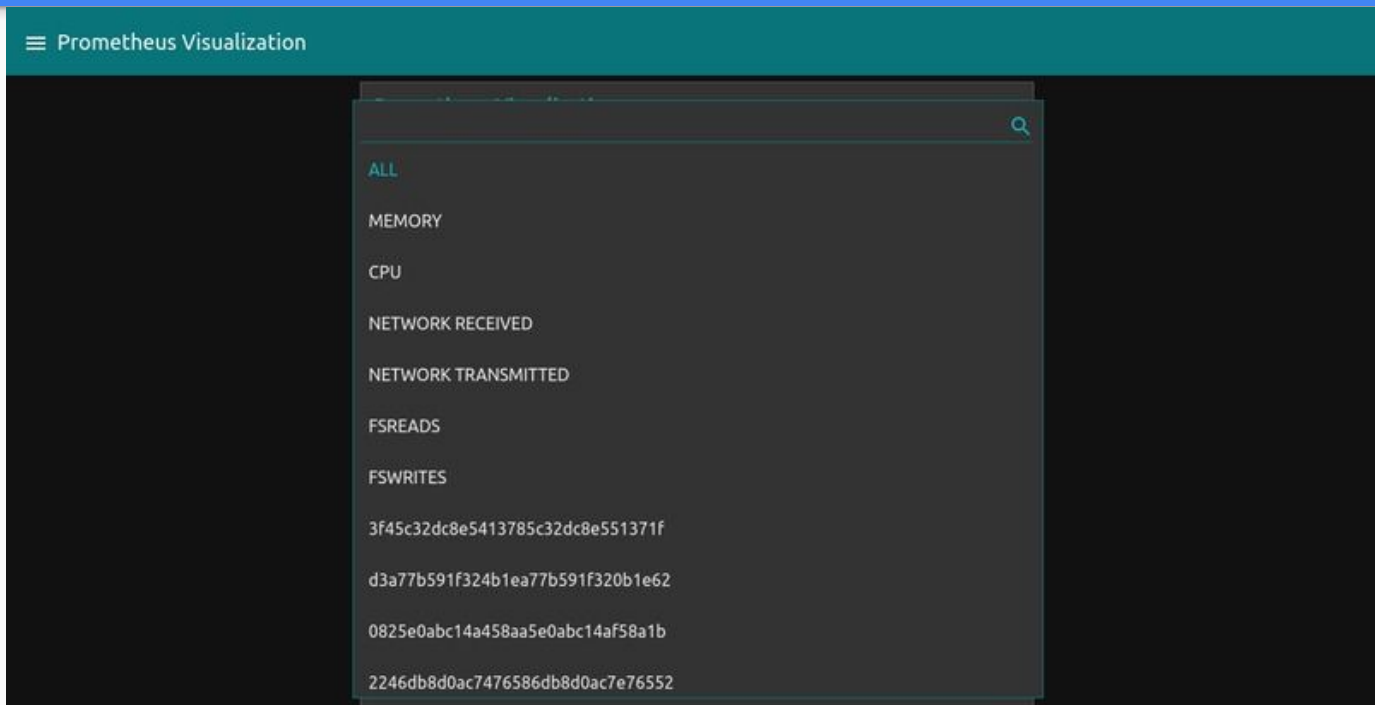
# Profile Data Visualization



# Prometheus Data Visualization

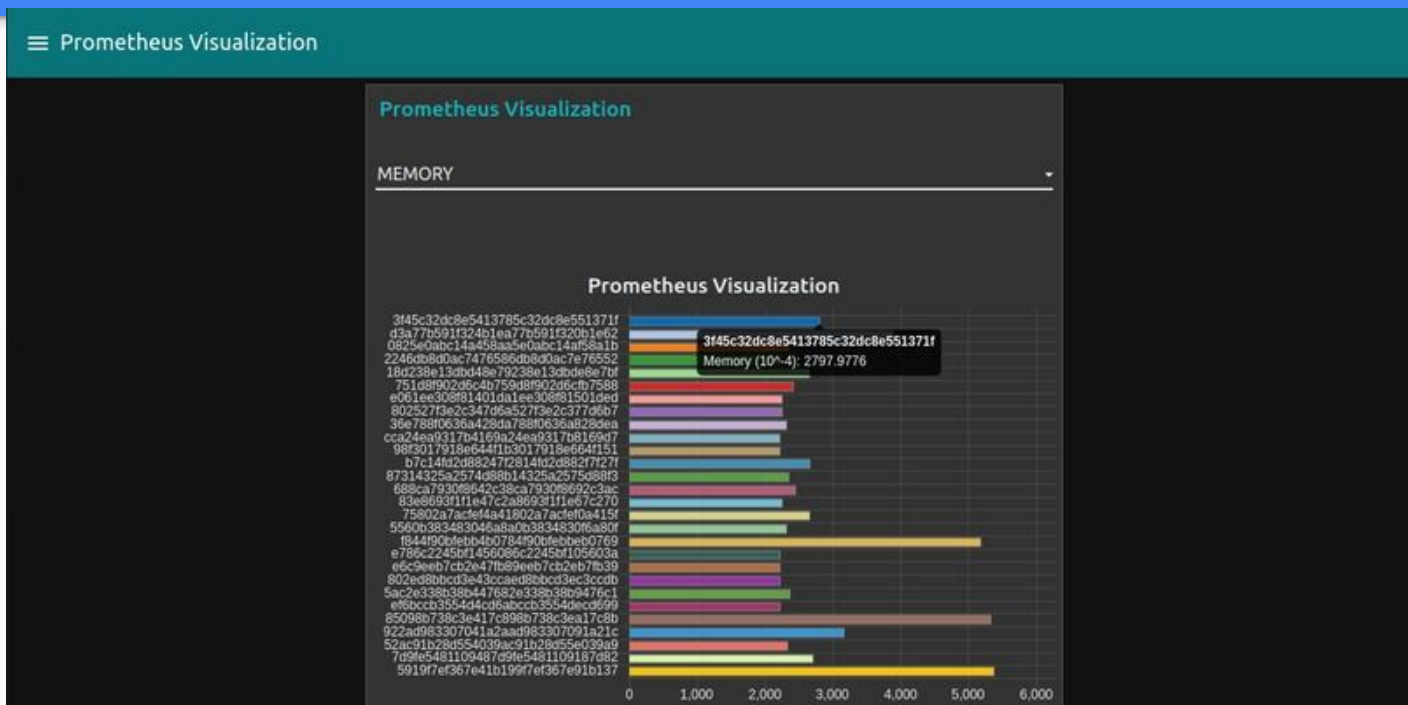


# Prometheus Data Visualization

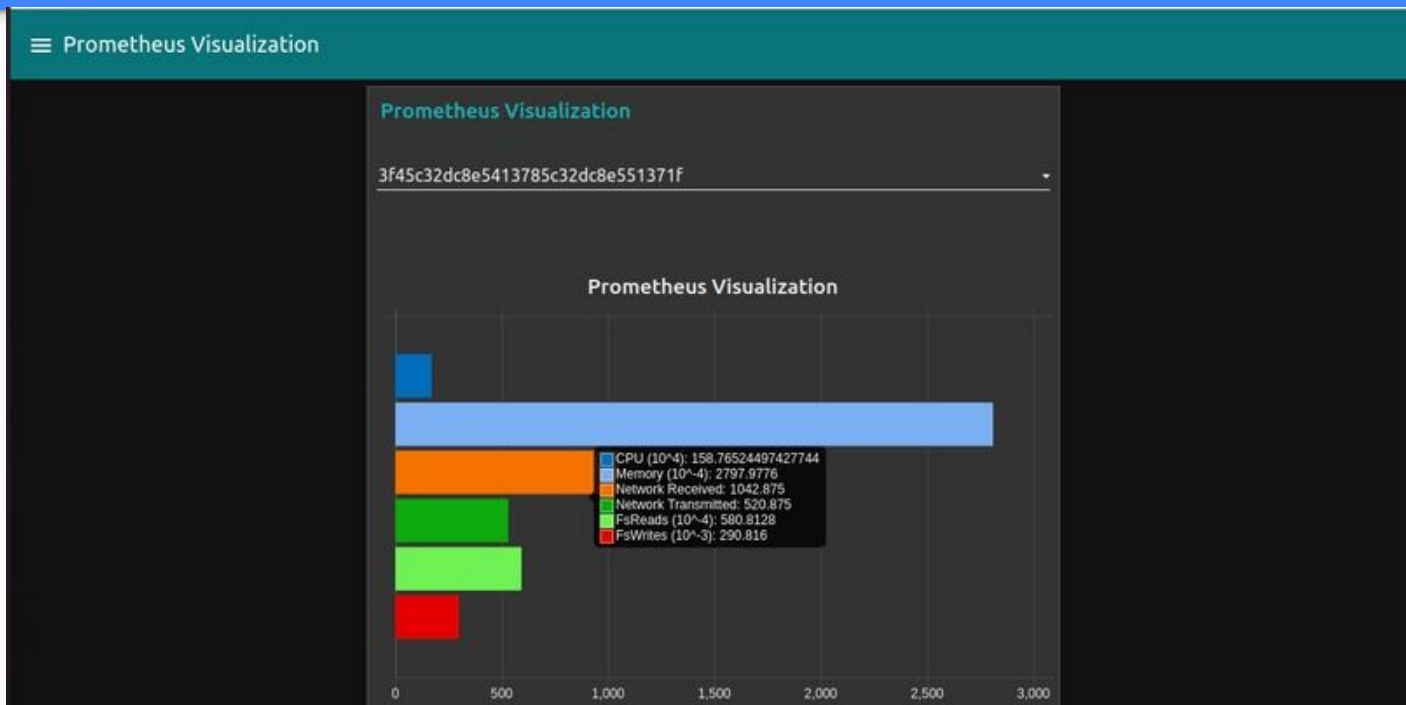




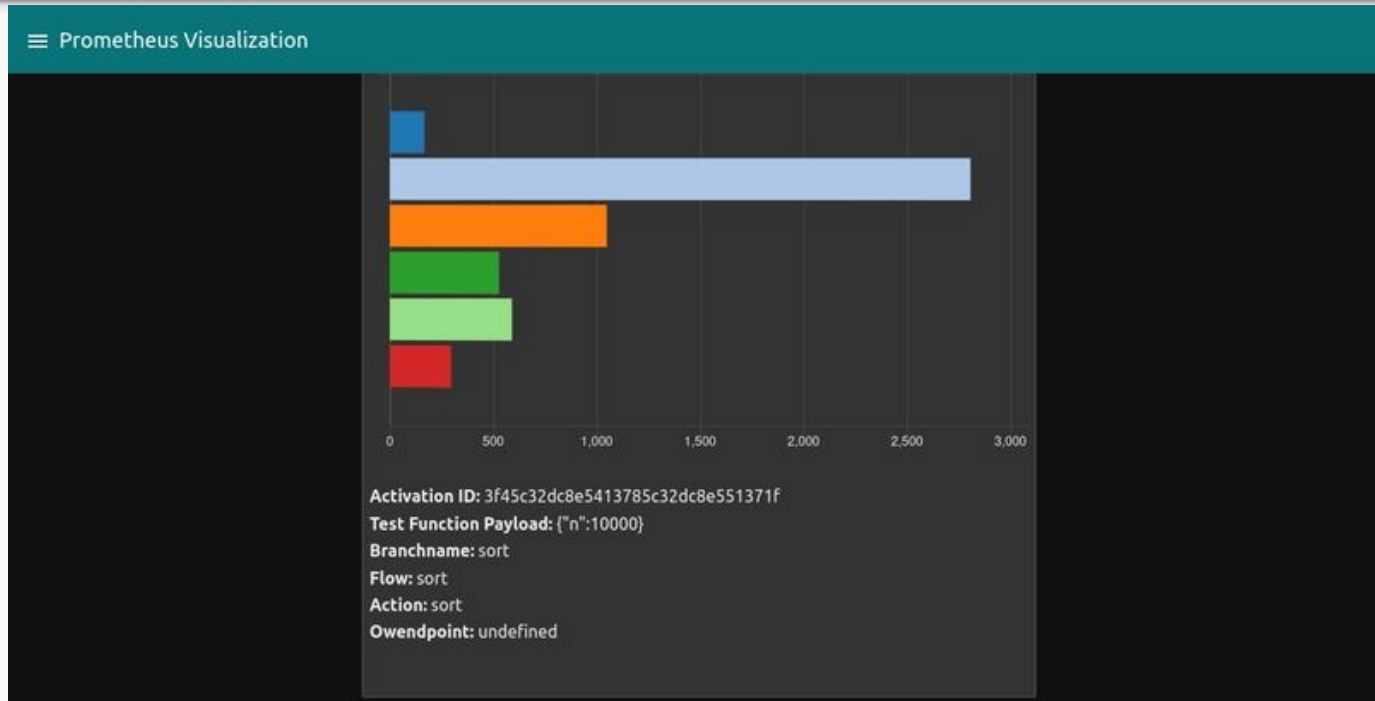
# Prometheus Data Visualization



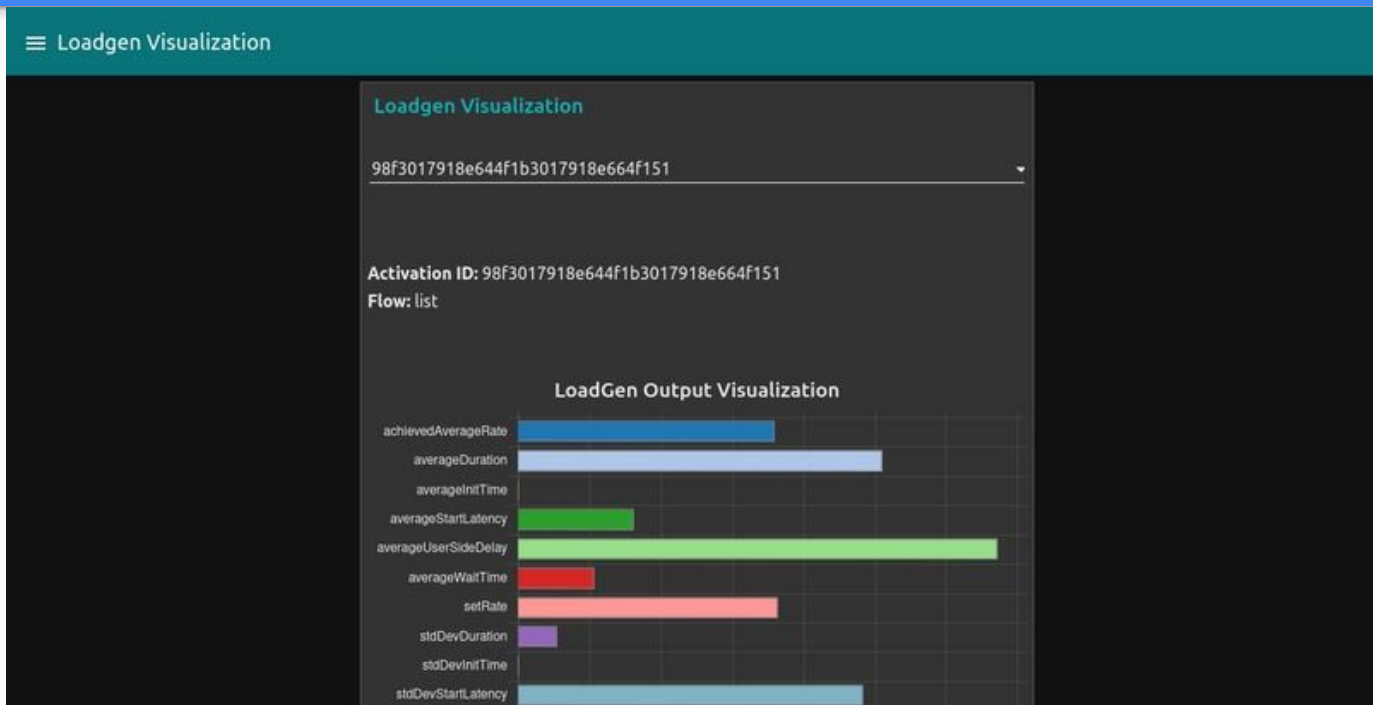
# Prometheus Data Visualization



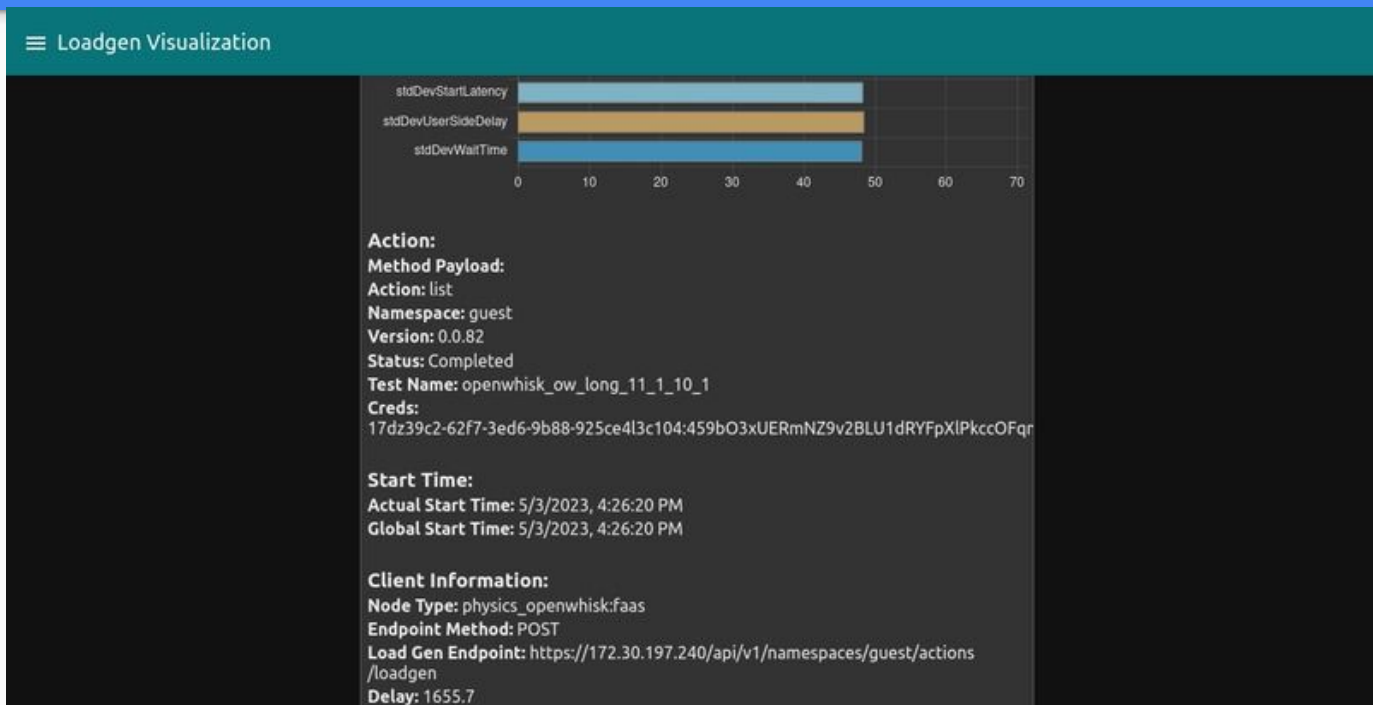
# Prometheus Data Visualization



# Loadgen Data Visualization



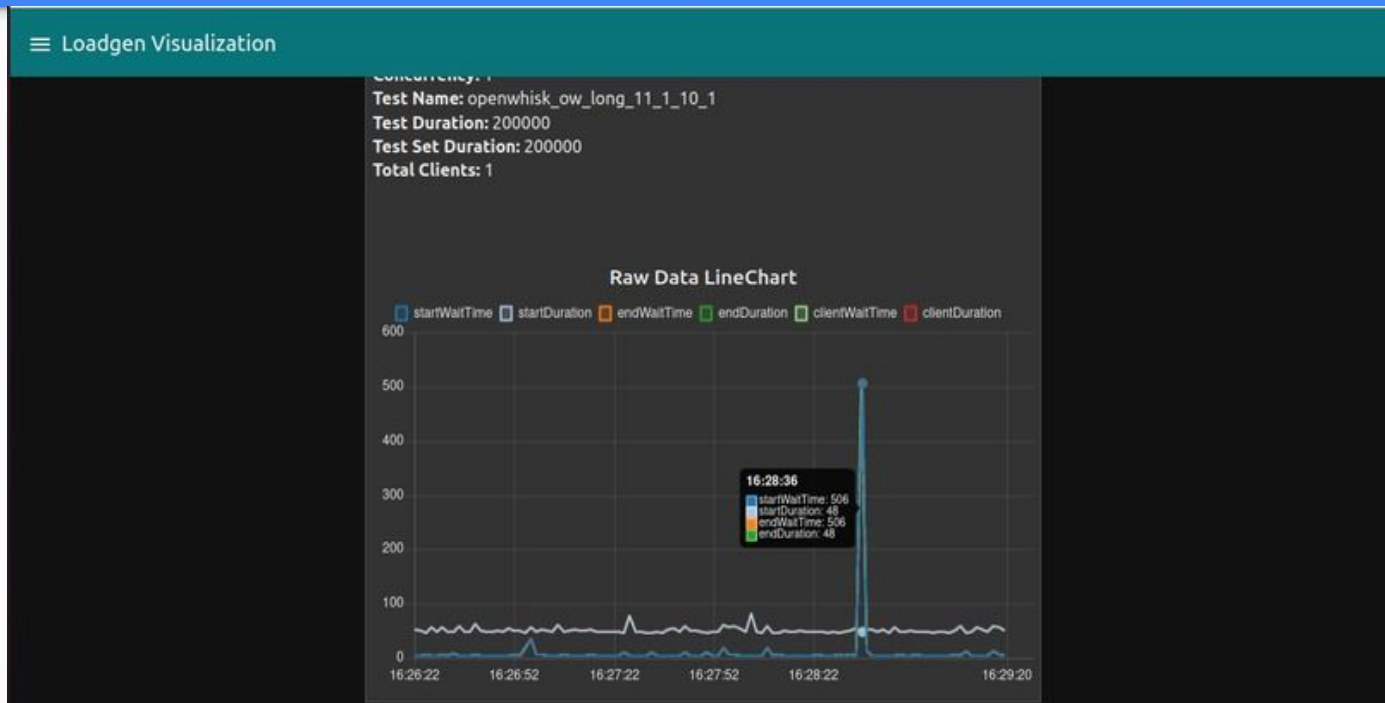
# Loadgen Data Visualization



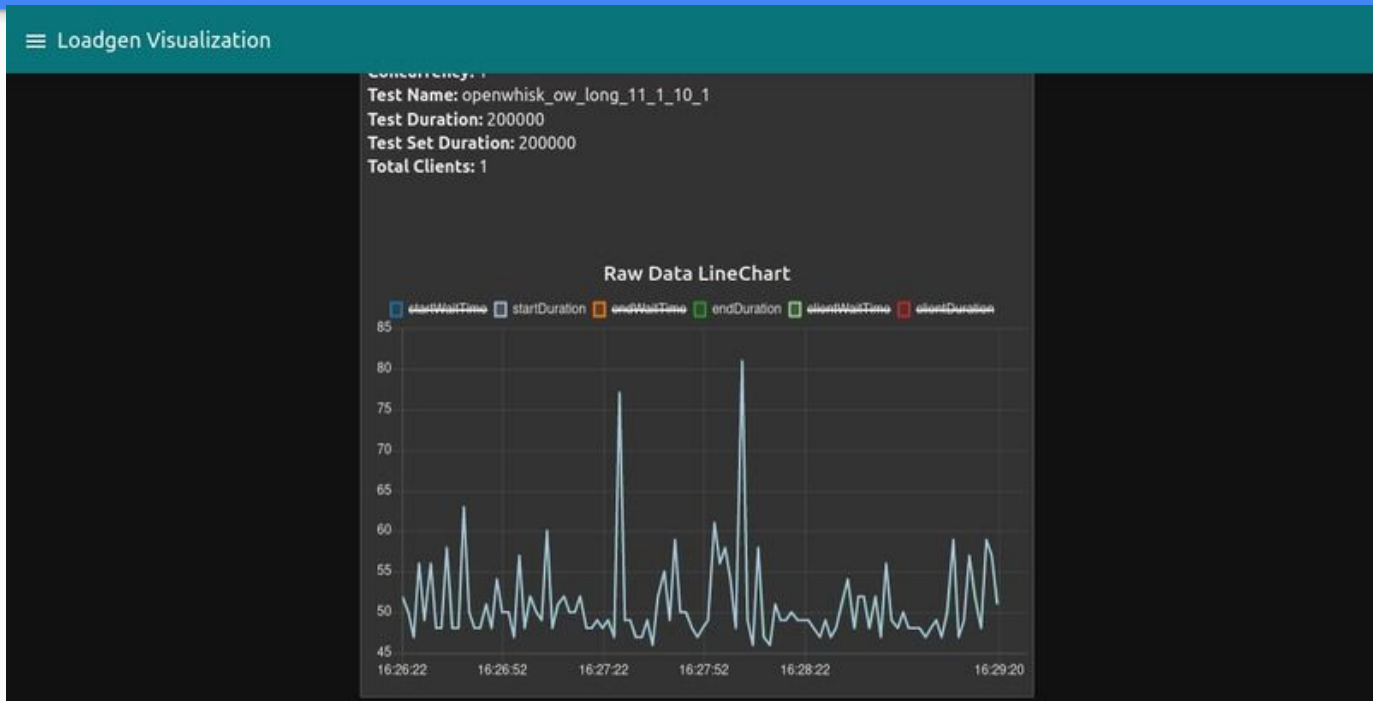
# Loadgen Data Visualization

Loadgen Visualization		
	<b>Client Information:</b> Node Type: physics_openwhisk:faas Endpoint Method: POST Load Gen Endpoint: https://172.30.197.240/api/v1/namespaces/guest/actions/loadgen Delay: 1655.7 Client Number: 1 Cold Starts: 0 Launch Generator Delay: 160	
	<b>Additional Information:</b> Memory: 256 Other Info: 1000 Parent Sample Time: 5/3/2023, 4:26:20 PM Sample Number: 108 Status: Completed Status Endpoint: https://172.30.197.240/api/v1/namespaces/guest/activations/ Target Endpoint: https://172.30.197.240/api/v1/namespaces/guest/actions/list Success: true Success Percentage: 100 Concurrency: 1 Test Name: openwhisk_ow_long_11_1_10_1 Test Duration: 200000 Test Set Duration: 200000 Total Clients: 1	

# Loadgen Data Visualization



# Loadgen Data Visualization





# Common Functions Challenge

# Common Functions Challenge

- One docker image with 3 functions: Quicksort, Weighted Average and K-Means Clustering.
- Set the param function to the desired function.
- <https://hub.docker.com/r/kazakos13/common-functions>

# Subflows Challenge

# Subflows Challenge

- We have made a collection of subflows submitted in node red library.
- Implemented Subflows: Quicksort, Quicksort with Docker, Weighted Average, Weighted Average with Docker, Common Functions Subflow, Many Weather API Subflow, City Info Subflow.
- <https://flows.nodered.org/collection/052-kzn3RATd>

# Video Demonstration



# Documentation & Other Links

- [Documentation](#)
- [Github Repository](#)
- [Docker Image](#)
- [Node-red Collection](#)
- [App Video Showcase](#)

Thanks For Your Time!