



cloud  
lunch & learn

**Marathon**

# Intro to the cloud ETL and ELT services in Azure

Sponsored by



**Microsoft**



# T-FREX



**Elkhan Yusubov**  
Principal Cloud Architect



Elkhan is a principal cloud architect and 14 times MSFT MCT with experience in cloud solutions, enterprise healthcare systems and healthcare data, and API standards (HL7 FHIR, EDI X12).

He is an active MCT, a Microsoft Tech Community Contributor and Azure SME (Architecture, DevOps, Security).

He is a frequent speaker at tech meetups and has volunteered for Give Camps, Azure Data Fest, SQL Saturday and Global Azure events.

The Cloud Marathoner:

[www.thecloudmarathoner.com](http://www.thecloudmarathoner.com)



# Company Snapshot: T- Rex Is...

- ▶ **An Innovative NGIT Provider:** a leading solutions provider of innovative and modernizing Next Generation IT capabilities and enabling skills to the federal government
- ▶ **A first to market in migrating large federal mission applications and data** into a citizen-facing public cloud, giving the Company the capabilities and past performance to bid and win future NGIT opportunities in adjacent federal agencies
- ▶ **A Prime Contractor on 2020 Census,** one of the largest (scale) and most complex mission critical cloud/cyber/data analytics integration projects within the federal government



- ▶ **Integrated 52 mission-critical systems comprised of 200+ applications** operating in a hybrid hyper-converged data center and Amazon Web Service ("AWS") public facing GovCloud protected by a world class active cyber defense (ACD) solution. Also includes a VDI-based Office 365 solution supporting 40k+ users and MS Azure AD managing 350k+ mobile users

## Achievements & Partnerships



Silver Data Analytics  
Silver Application Development  
Silver Data Platform

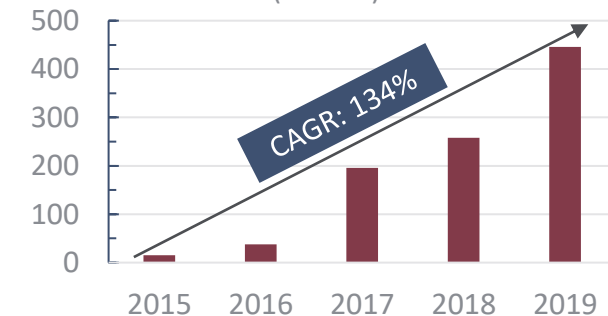


## Company Info

- **Established:** 1999
  - **Legal Structure:** LLC
  - **Headquarters:** Greenbelt, MD
  - **8(a)/HUBZone & SDVOSB Joint Ventures:** Ability to deliver services as a small business concern
  - **Prime/Sub (09/20):** 98.5% Prime
  - **Backlog (09/20):** \$341.6MM
- Prime Vehicles/BPAs:**
- GSA Schedule 70
  - USDA Cloud COE BPA
  - Dept of Commerce ESF

## Financial Summary

T-Rex Annual Revenue (USD M)



## What we will cover

---

ADF  
Concepts

Pipelines and  
Activities

Linked  
Services

Datasets

Pipeline  
execution

Monitoring

Triggers

Data flows

## What we will not cover

---



Integration with 3<sup>rd</sup> part services



CI/CD in pipelines



ADF supported external activities



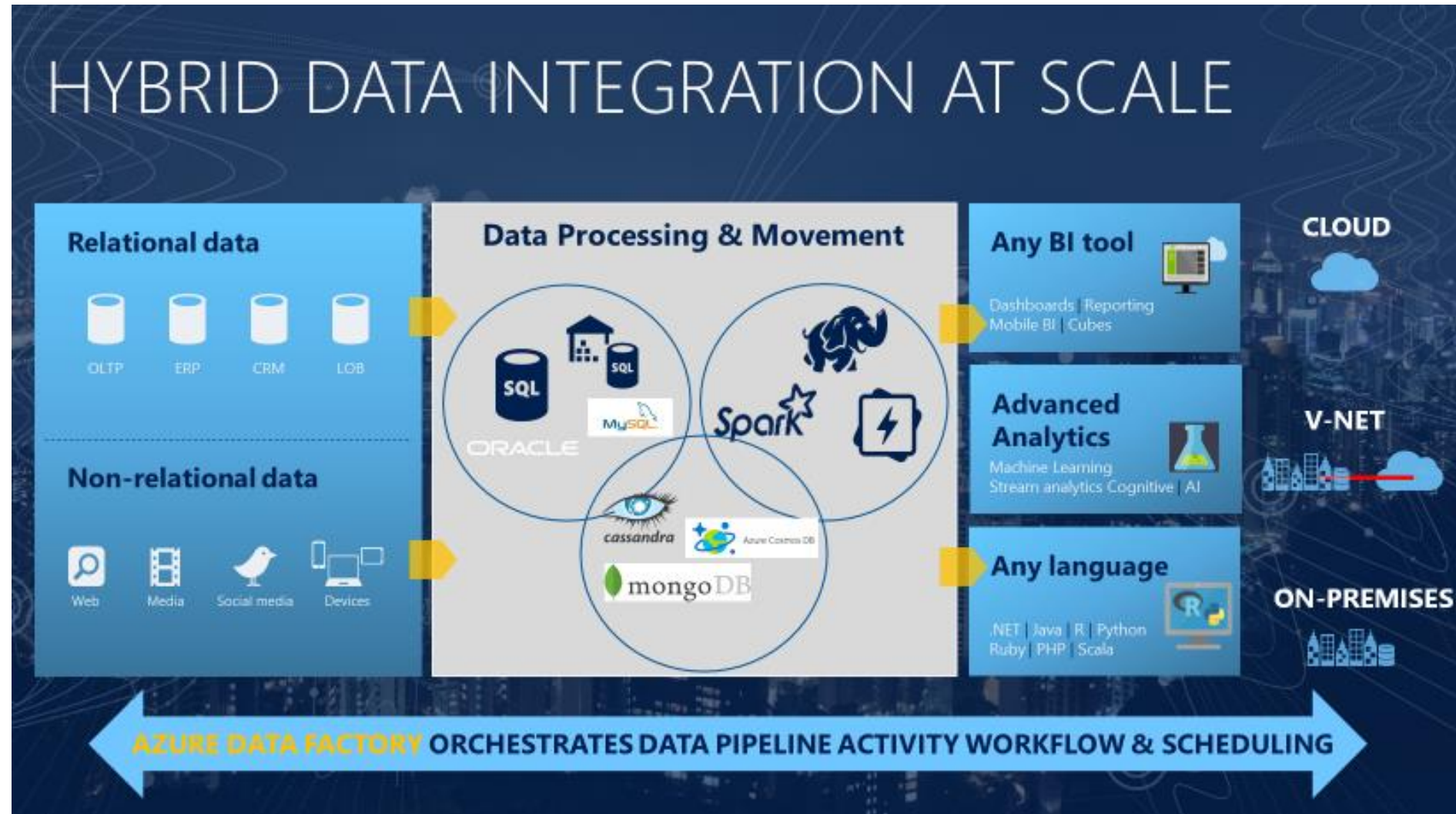
Integration Runtimes



Advanced topics



# What is ADF and WHY ?



# Top Concepts in ADF

Pipelines

Activities

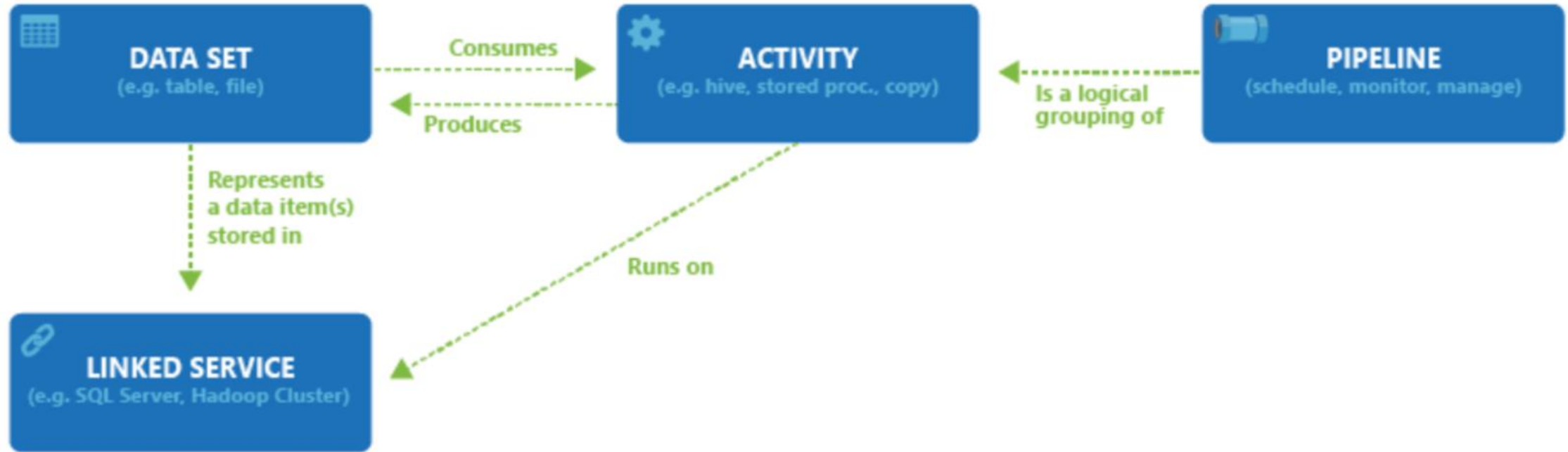
Datasets

Linked Services

Data Flows

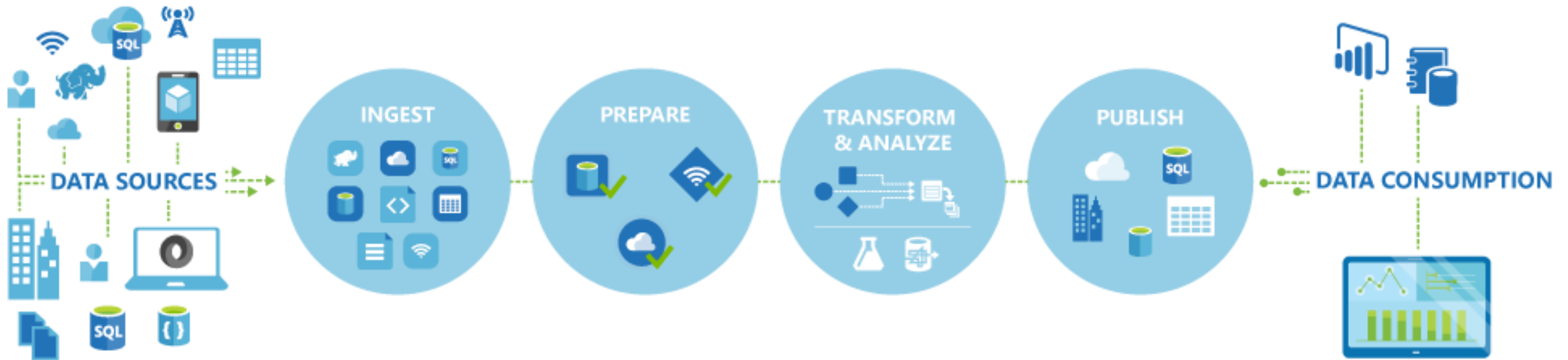
Integration Runtimes

# Relationship between ADF components



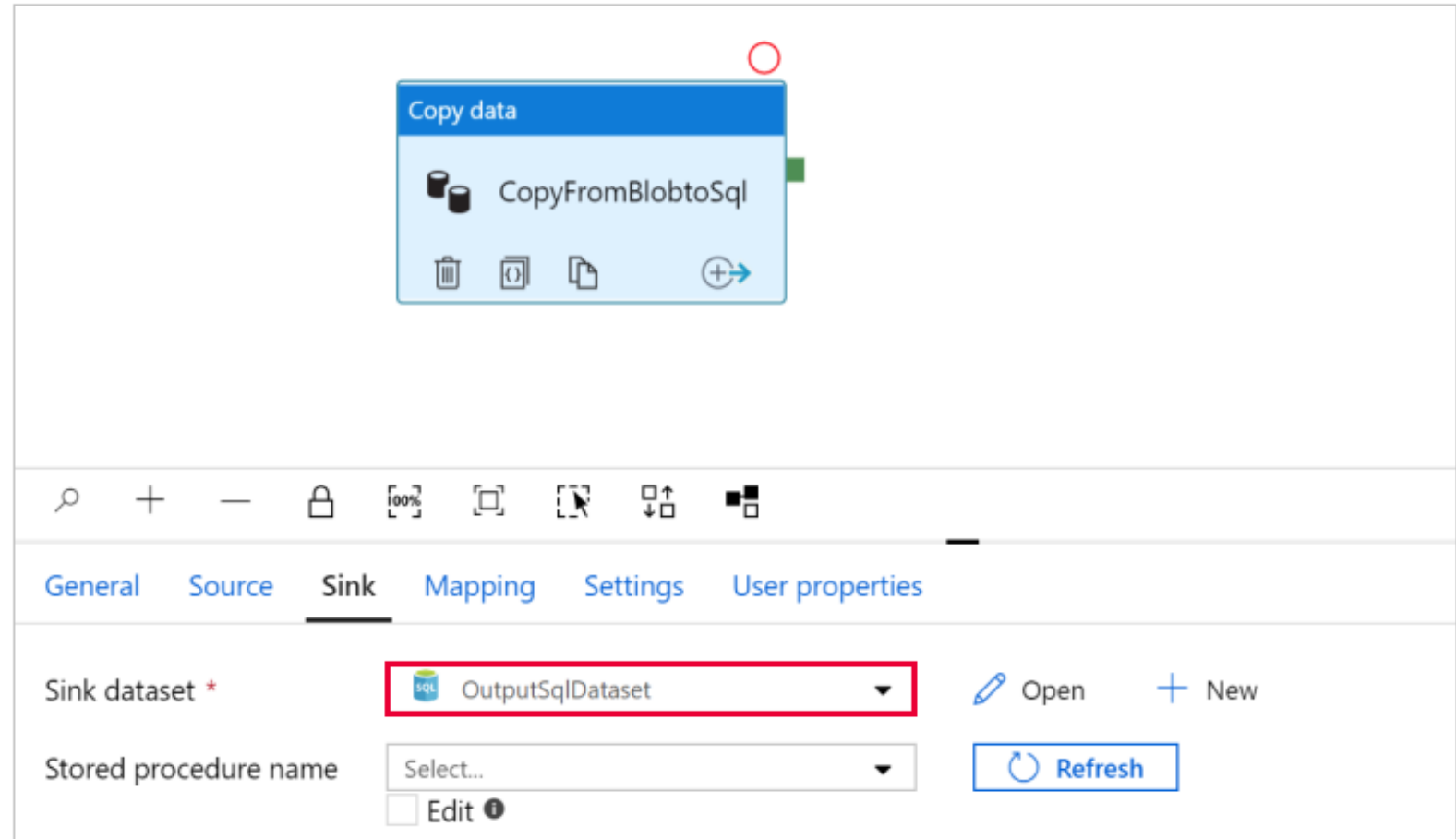


# What ADF does?



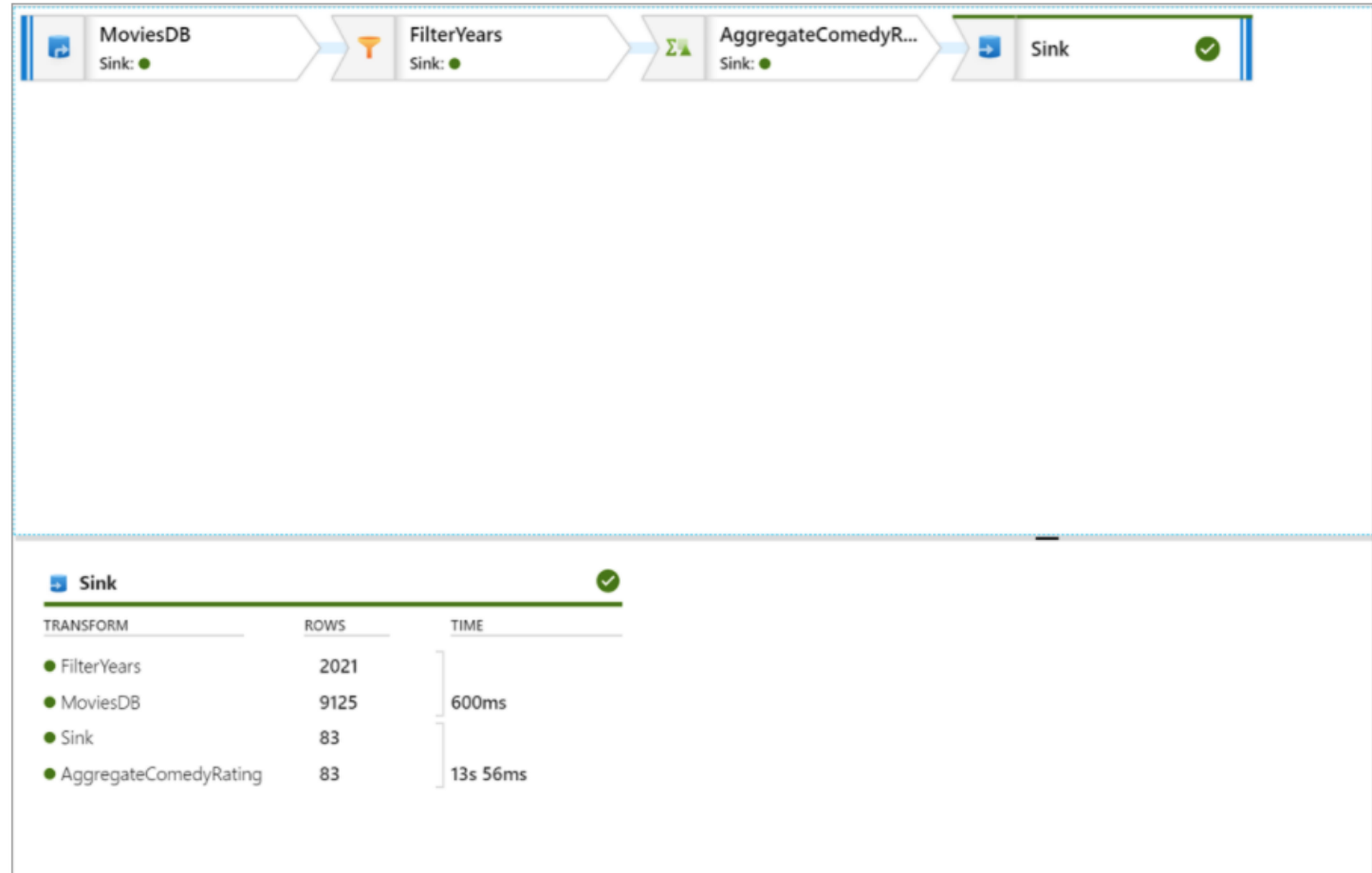
# Demo 1 – Data copy activity

**Azure Blob storage >>> Azure SQL Database, using Azure Data Factory**



# Demo 2 – Data Transformation

## Transform data using mapping data flows in Azure Data Factory



## What we have covered

---

ADF  
Concepts

Pipelines and  
Activities

Linked  
Services

Datasets

Pipeline  
execution

Monitoring

Triggers

Data flows

T-FREX

Q & A



**Elkhan Yusubov**  
Principal Cloud Architect  
T-Rex Solutions

 @ElYusubov

 ElkhanYusubov

 ElYusubov



# Data transformation services with ADF in Azure

All you need to know about data transformation journey





cloud  
lunch & learn

Marathon

# Thank you!

Share your Love with the speaker and team on social, using the hashtag *#cllmarathon* and *@CloudLunchLearn*

And follow us 



[youtube.com/c/CloudLunchandLearn](https://youtube.com/c/CloudLunchandLearn)



[@CloudLunchLearn](https://twitter.com/CloudLunchLearn)

In collaboration with

