T-REX

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Principal Cloud Architect

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ElYusubov

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

aws

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

Concurrent Web Respondents (Peak)	Mobile Census Enumerators	Regional & Local Census Offices	Business Systems	Application Components
600,000+	500,000+	254 / 20K Workers	52	285+

▸ **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 Microsoft Partner
Silver Data Analytics
Silver Application Development
Silver Data Platform

aws partner network
Advanced Consulting Partner
Public Sector Partner

ISO 9001:2015 BUREAU VERITAS Certification

ISO 27001 BUREAU VERITAS Certification

CMMIDEV/3
Exp. 2022-03-15 / Appraisal #2472

CMMISVC/3
Exp. 2022-03-15 / Appraisal #2472

#1 Bloomberg Government Cloud Government Support Services PROVIDER 2016-20

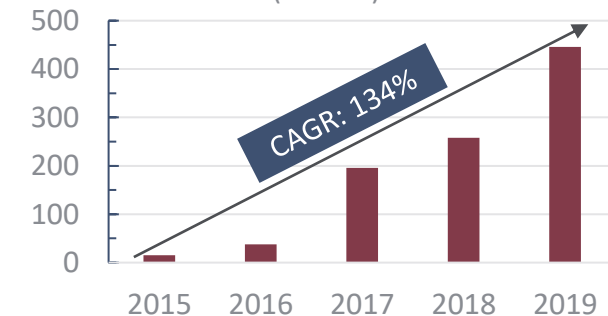Washington Technology 2020 Top 100 Government Contractors, Federal Market T-REX ▸ #41

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)

CAGR: 134%

	2015	2016	2017	2018	2019

(y-axis: 0, 100, 200, 300, 400, 500)

TOP WORK PLACES 2020
The Washington Post

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What we will cover

ADF Concepts	Piplines and Activities	Linked Services	Datasets
Pipline execution	Monitoring	Triggers	Data flows

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What we will not cover

- Integration with 3rd part services
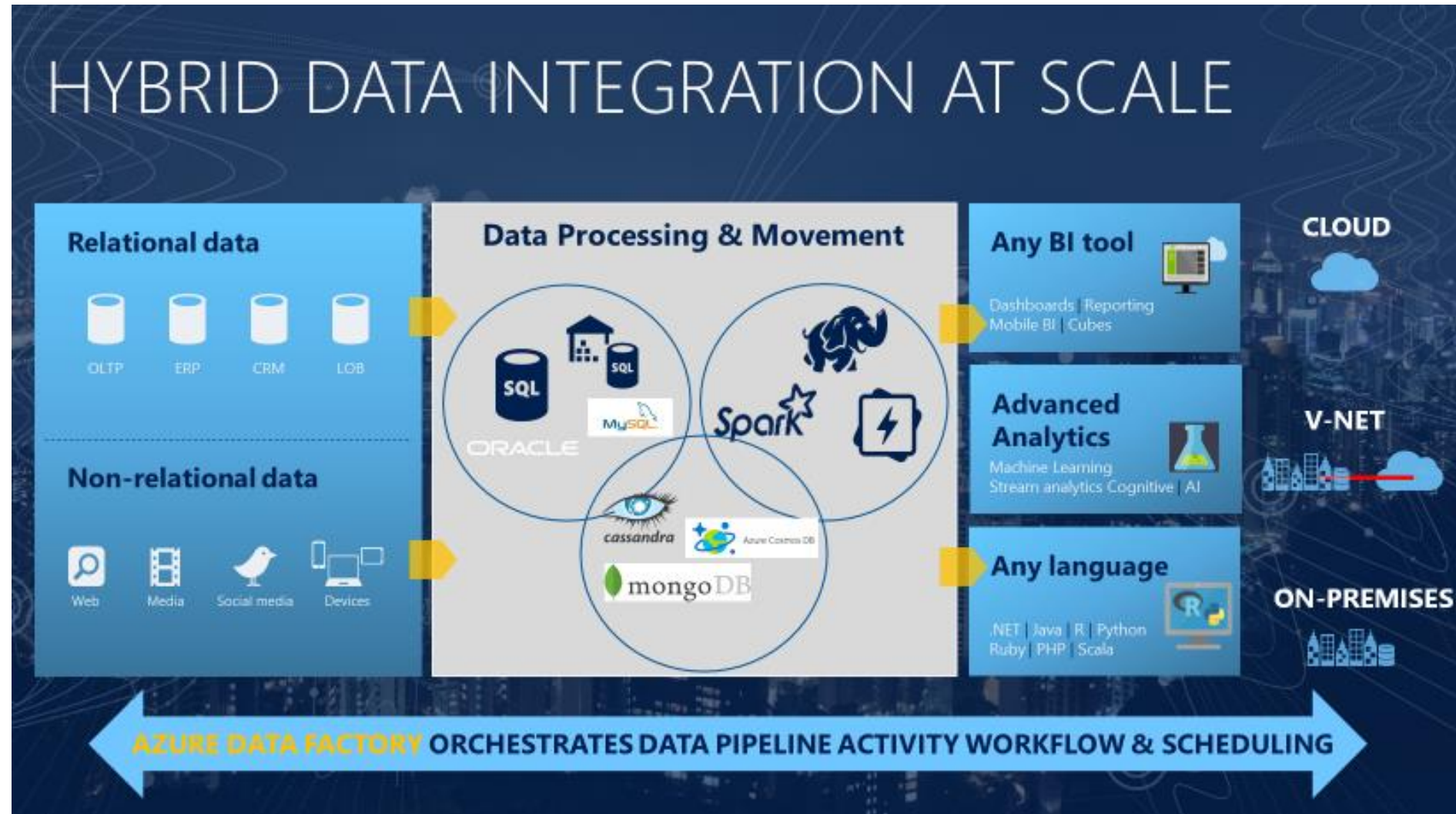- CI/CD in piplines
- ADF supported external activities
- Integration Runtimes
- Advanced topics

What is ADF and WHY ?
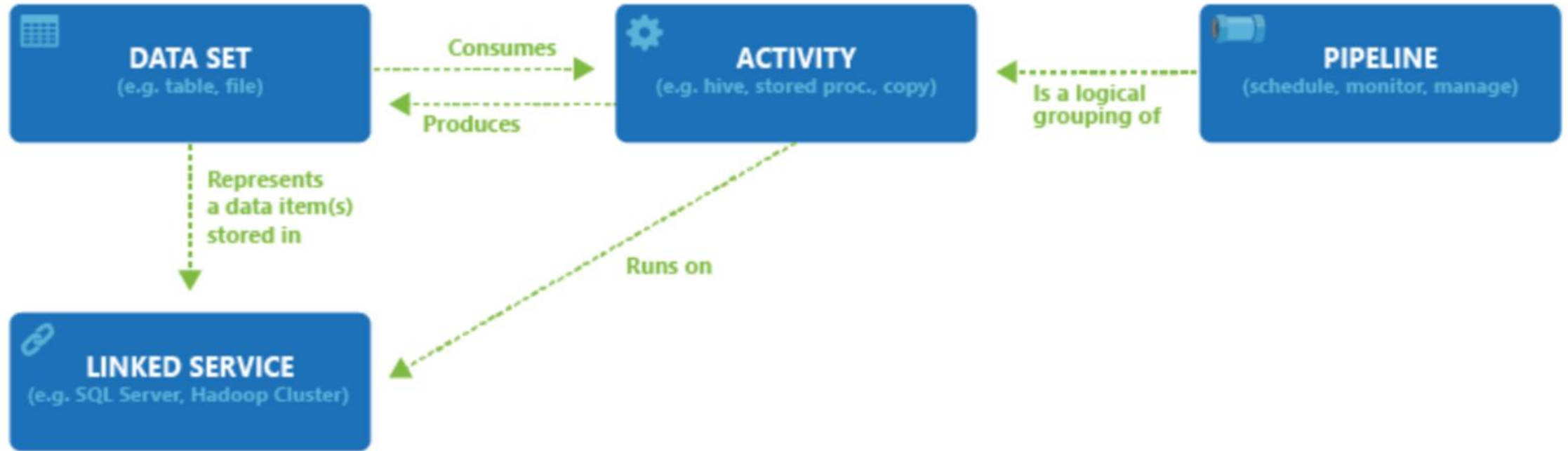
Top Concepts in ADF

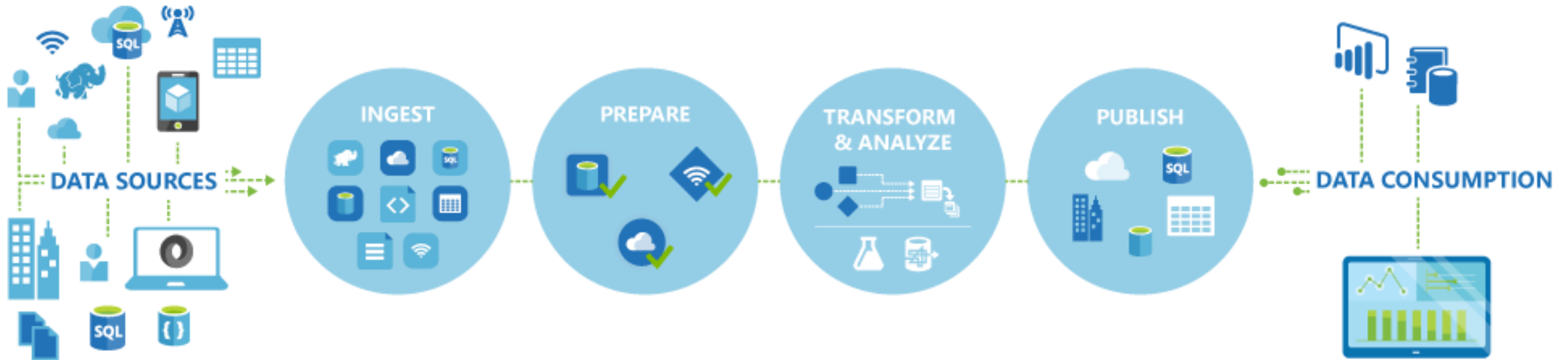Piplines

Activities

Datasets

Linked Services

Data Flows

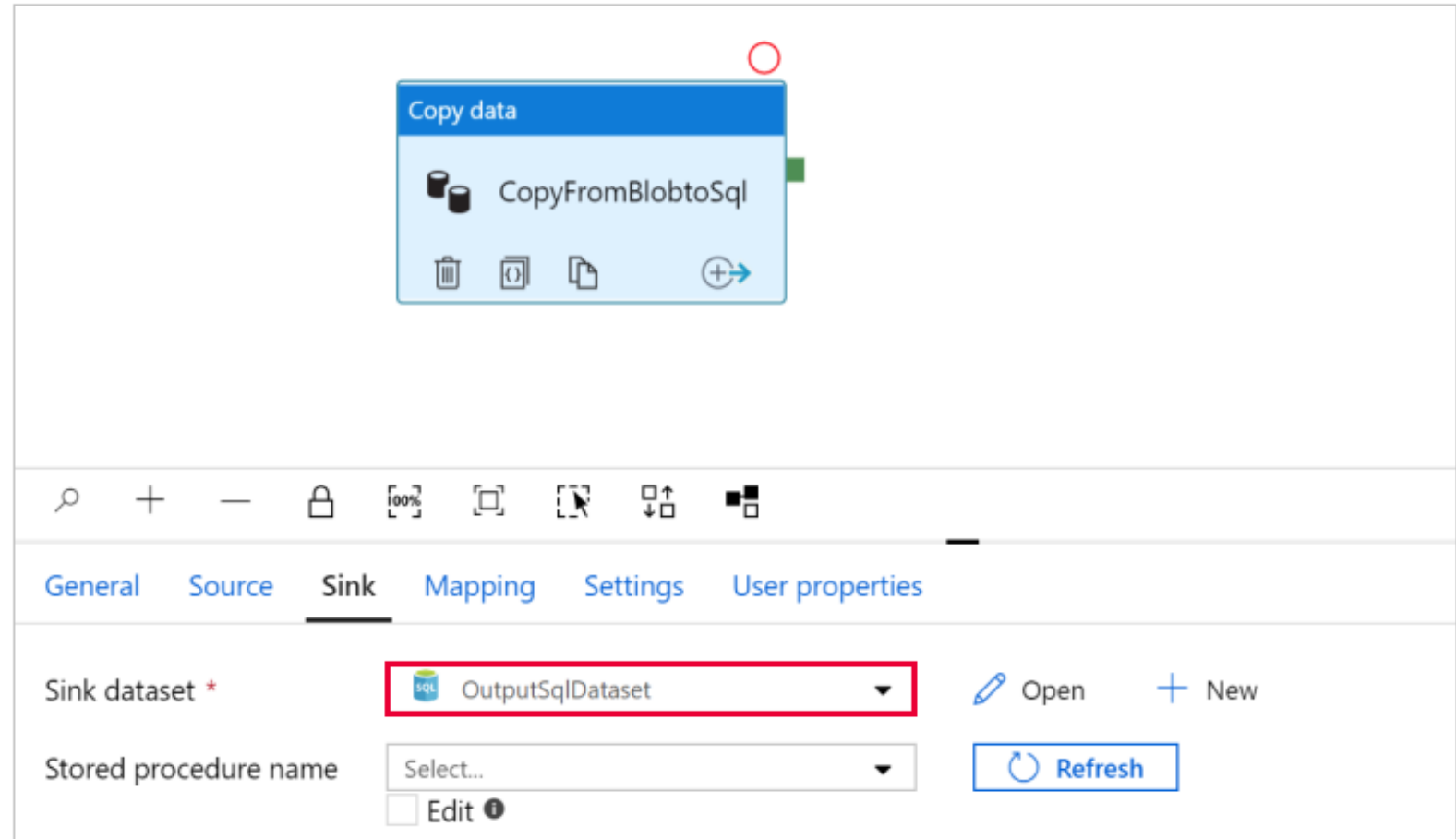Integration Runtimes

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Relationship between ADF components

DATA SET (e.g. table, file)

ACTIVITY (e.g. hive, stored proc., copy)

PIPELINE (schedule, monitor, manage)

LINKED SERVICE (e.g. SQL Server, Hadoop Cluster)

Consumes

Produces

Is a logical grouping of

Represents a data item(s) stored in
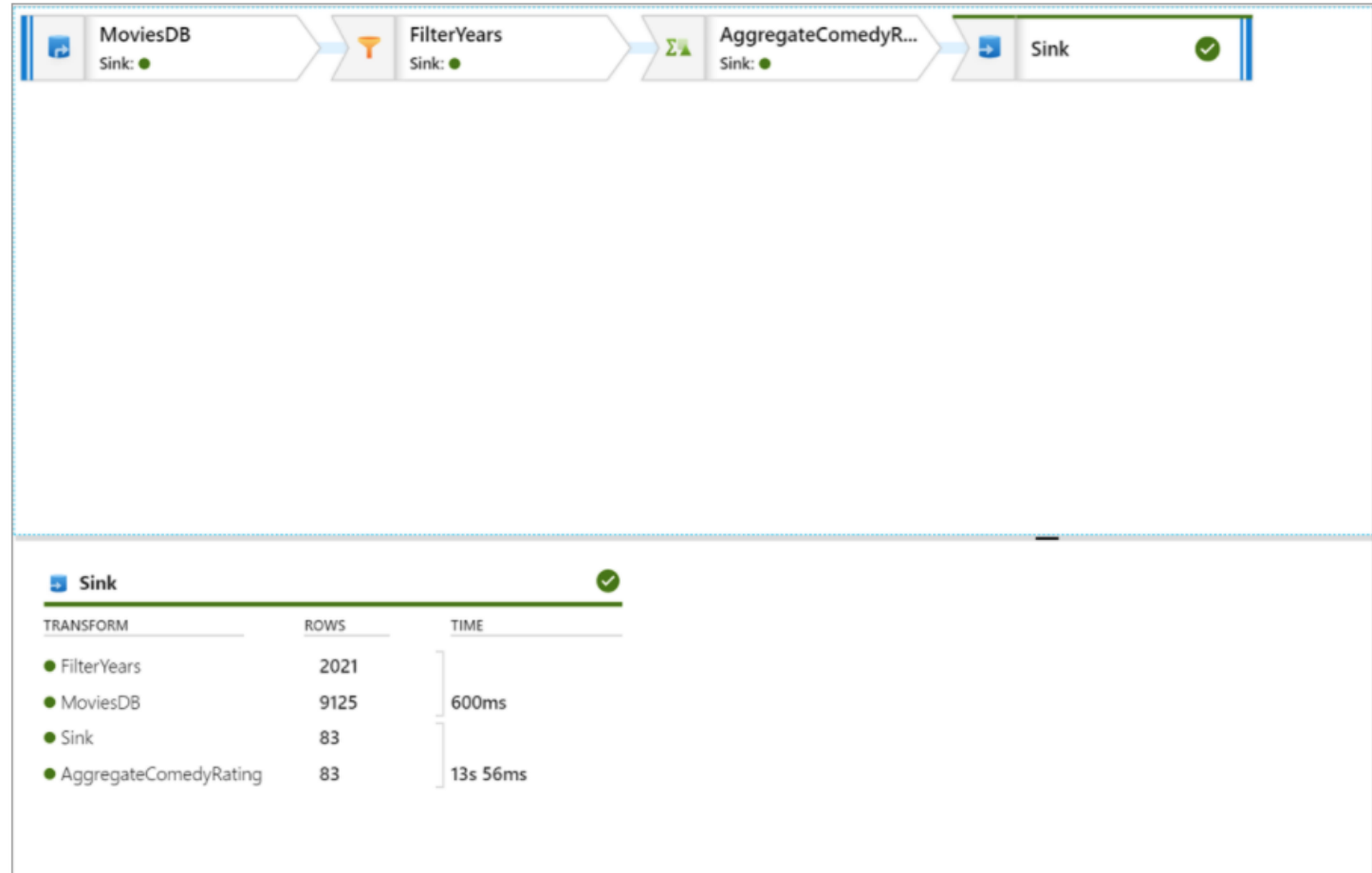
Runs on

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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	Piplines and Activities	Linked Services	Datasets
Pipline execution	Monitoring	Triggers	Data flows

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