

Introduction to Azure Data Factory

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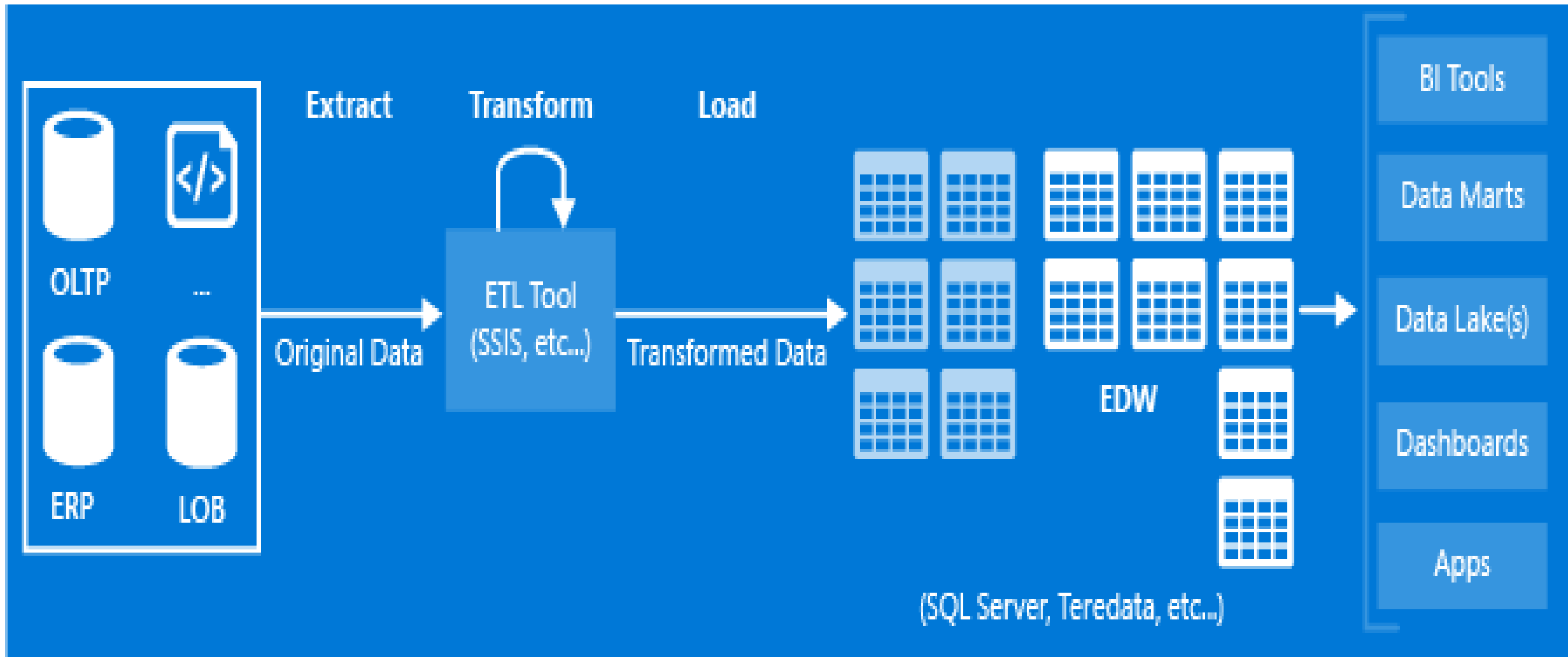


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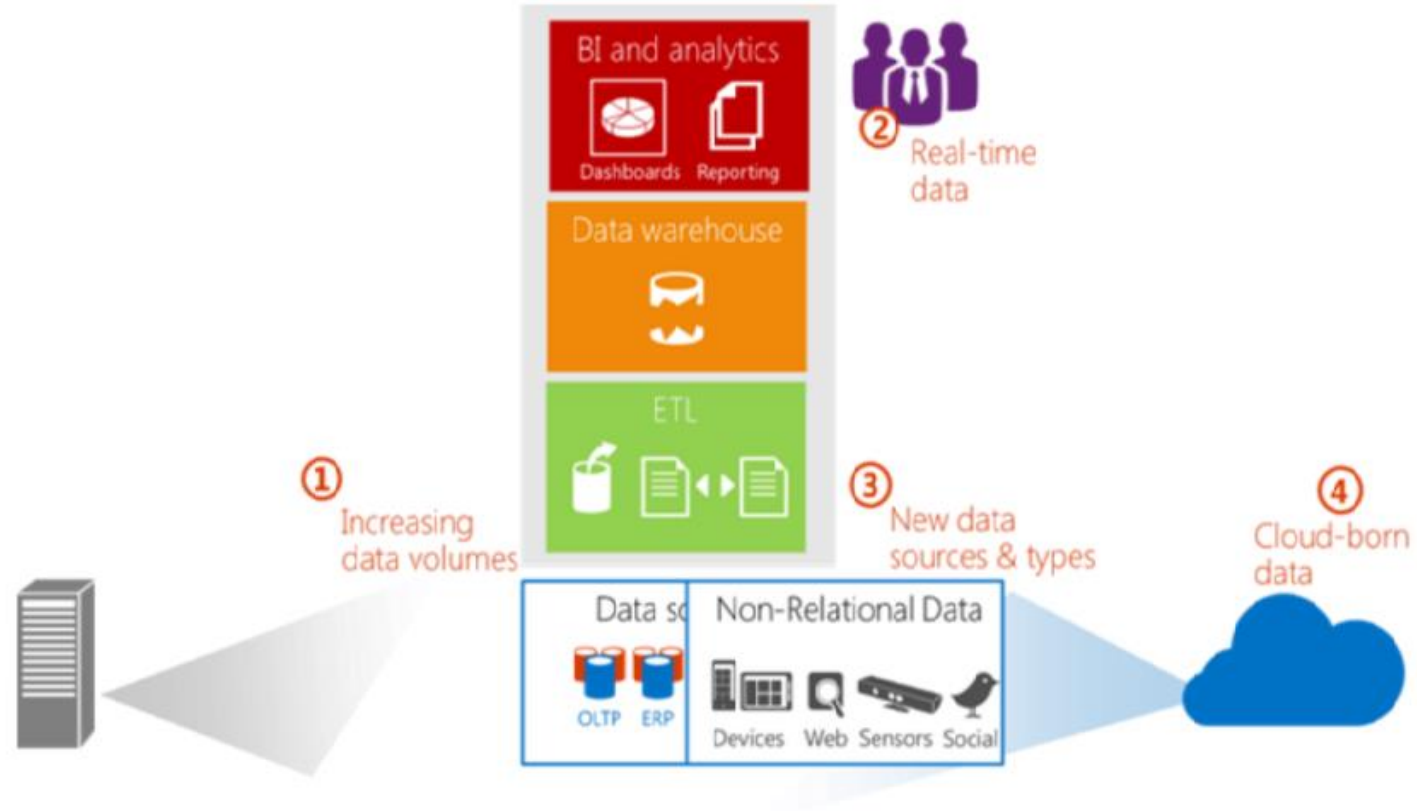
Advanced Data Integration in a Modern Day Data Warehouse

- Why a more modern DW Platform is needed?
- How does data move and integrate in the Modern Day Data Warehouse?
- How do we take data and make sure it gets where it needs to go?
- How does the cloud work with the Modern Day Data Warehouse?
- How do we integrate new types of data and what does that mean?

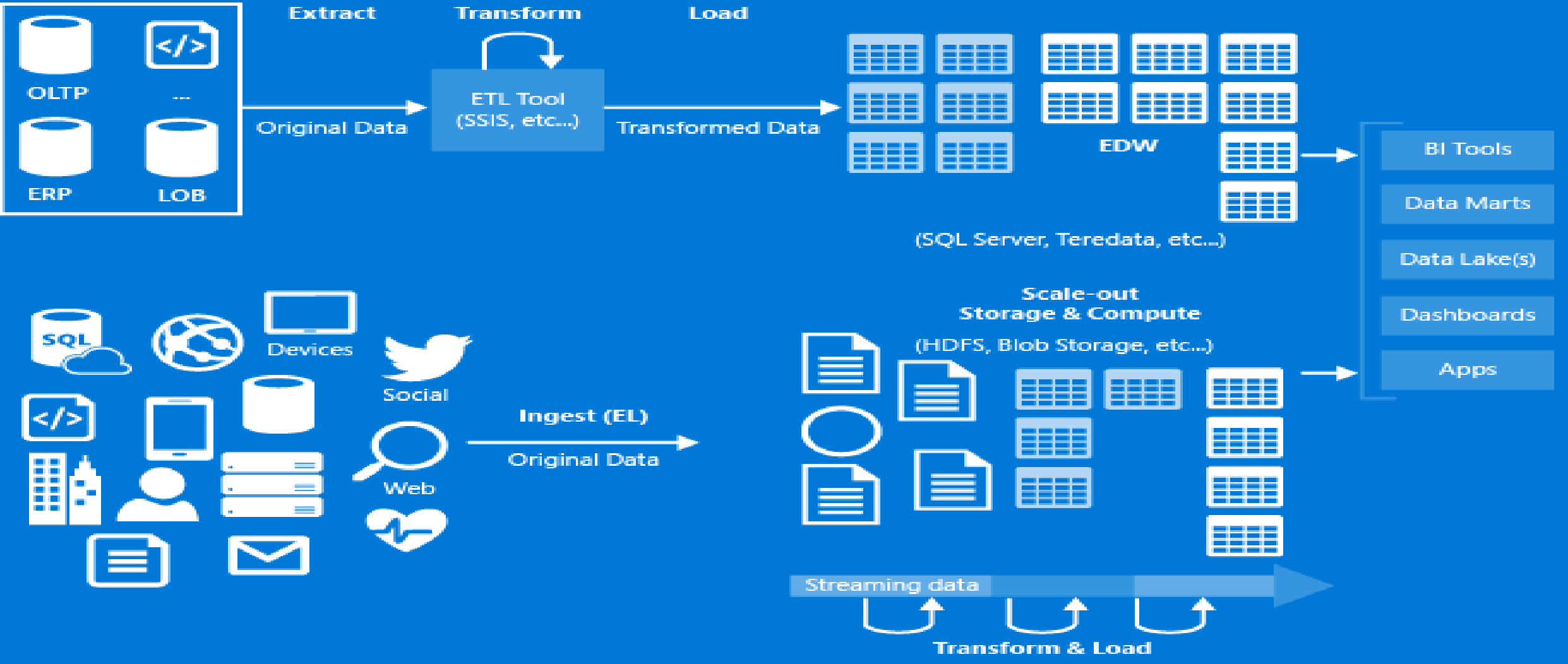
Traditional Data Integration



Challenges to the New Data Integrator



Today's Data Landscape



Azure Data Factory Overview



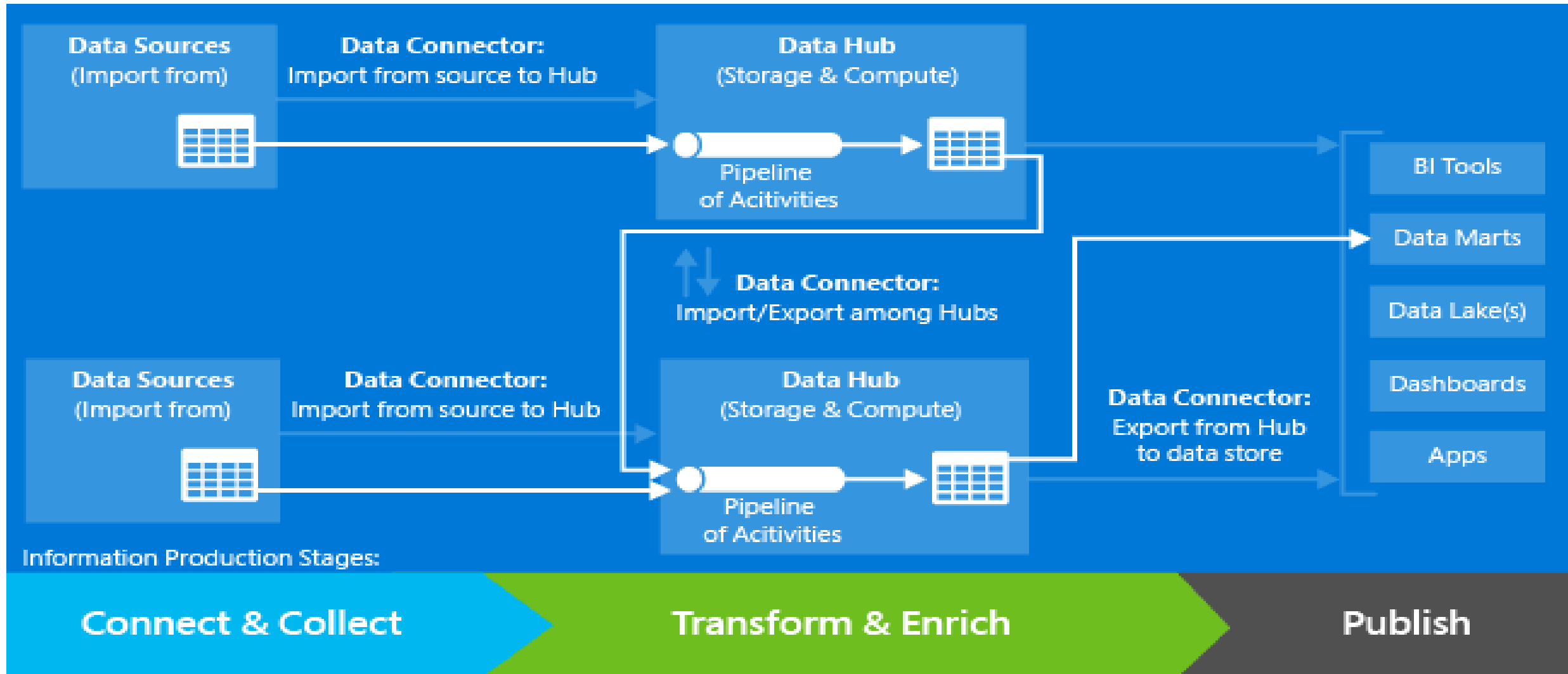
Azure Data Factory Composition

- Data Storage
- Data Processing
- Data Movement

Azure Data Factory – What Can it do?

- Easily work with diverse data storage and processing systems
- Transform data into trusted information
- Monitor data pipelines in one place
- Get rich insights from transformed data.

Application Model



Azure Data Factory Core Concepts

- Data Factory – Fully Managed Service
- Linked Service – Link data stores & Compute Services
- Data Set – Named view of data
- Pipeline – Processes Data

Data Factory Concepts



Data Set
(Collection of files, DB table, etc)



Activity: a processing step
(Hadoop job, custom code, ML model, etc)



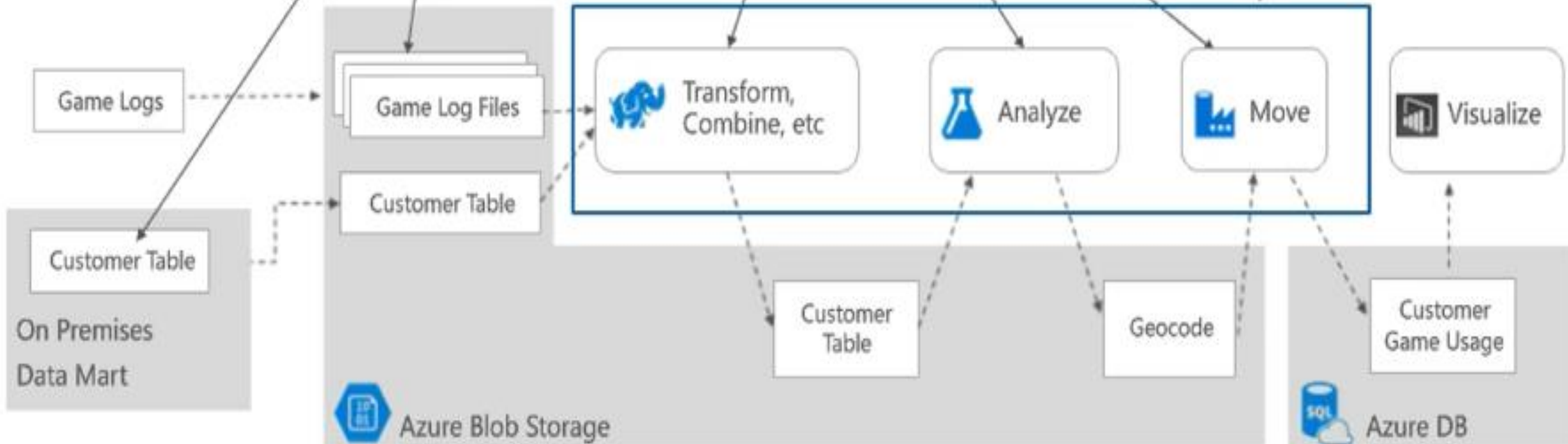
Pipeline: a sequence of activities (logical group)

Data Sources

Ingest

Transform & Analyze

Publish



Azure Data Factory Terminology

- Activity – Data Processing Step in a Pipeline
- Data Hub – A Container For Data Storage & Compute Services
- Slice – Logical Time Based Partition of Data Produced
- Data Management Gateway – Software that Connects On-Premises Data Sources to Cloud Services for Consumption.

Data Factory Demo

Review Prerequisites

Step 1: Create Azure Data Factory

Step 2: Create Linked Services

Step 3: Create Input and Output Tables

Step 4: Create and run a pipeline

Step 5: Monitor data sets and pipeline

Review More Advanced Data Factory Solution

The Modern Data Warehouse -Today & Future

- Deploy a modern data warehouse as a foundation for leveraging big data.
- Make sense of multi-structured data for new and unique business insights.
- Implement advanced forms of analytics to enable discovery analytics for big data.
- Empower the business to operate in near real time by delivering data faster.
- Integrate multiple platforms into a unified data warehouse architecture.
- Demand high performance and scalability of all components of a data warehouse.

Resources

Introduction to Azure Data Factory Service

- [Introduction to Azure Data Factory Service](#)
- [Getting Started with Azure Data Factory](#)
- [About Execution Policies](#)

Video

- [Azure Data Factory Overview](#)

SQL Server Blog

- [The Ins and Outs of Azure Data Factory – Orchestration and Management of Diverse Data](#)

JSON Scripting Reference

- [Data Factory JSON Scripting Reference](#)

Azure Storage Explorer Download (CodePlex)

- [Azure Storage Explorer 6 Preview 3](#)

Azure PowerShell

- [How to Install and Configure Azure PowerShell](#)
- [Introducing Power Shell ISE](#)

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