

This course will provide delegates with the skills to use Azure Data Factory to create the necessary ETL (Extract, Transform and Load) processes to extract data from various sources and use it to populate a data warehouse.
The processes created within Azure Data Factory will be highly parameterised in order to make them as flexible, efficient and as reusable as possible. This will help to limit the number of processes required to load the data warehouse.

# On completion, delegates will be able to:

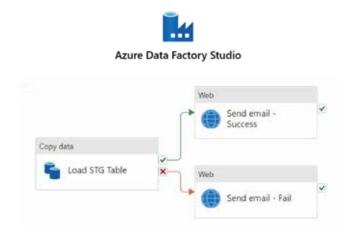
- Create linked services and datasets within Azure Data Factory to access various data sources.
- Create Azure Data Factory pipelines that will perform the required ETL processes.
- Incorporate delta extract and slowly-changing dimension processing.
- Setup orchestration pipelines to run the individual pipelines in the correct order and with the correct dependencies.
- Use an Azure Logic App and Key Vault within the pipelines.
- Monitor the execution of the various pipelines to manage their outcomes.

#### Who should attend?

IT professionals who will be using Azure Data Factory in order to populate a data warehouse.

#### **Prerequisites**

A basic understanding of data warehouse design and the ETL processes required to load the warehouse.



# **Course Duration**

2 days

### **Practical work**

Practical sessions are used within the course to reinforce the topics covered. These allow delegates to have direct hands-on practice when using Azure Data Factory.

## **Related and follow-on courses**

- Data Warehouse Standards
- Azure Data Warehouse Resources



### **Course Content**

See below

#### **Course Content**

- Introduction to Azure Data Factory.
- Setup linked services and datasets.
- Pipelines to Load Dimension from a Flat File.
  - Create parameterised pipelines to load data from flat files held in an Azure data lake, transform the data and load it into a dimension table contained within the data warehouse.
- Amend the pipelines for UPSERTs.
- Pipelines to Load Dimentions from a DB Table.
  - Create or run parameterised pipelines to load data from tables held in an Azure SQL Database, transform and load the data into a data warehouse dimension table.
- Trigger a pipeline to run immediately or use a scheduled trigger.

- Incorporate Delta extract and slowly-changing dimension processing.
- Create Orchestration pipelines to sequence the running of several pipelines in the correct order and with the correct dependencies.
- Incorporate an Azure Logic App in order to send an email upon a pipeline's success or failure.
- Use a secret contained within an Azure Key Vault to access an Azure SQL Database.
- Monitor the execution of the pipelines in order to determine whether or not they were successful.
- Pipelines to Load Fact from a DB Table.
  - Create or run parameterised pipelines to load data from Azure SQL Database tables, transform and load the data into a data warehouse fact table.

### **Acuma Education**

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