100 XP

Introduction

2 minutes

Most organizations have multiple data stores, often with different structures and varying formats. They often have live, incoming streams of data, such as sensor data, that can be expensive to analyze. There's often a plethora of useful information available outside of organizations. This information could be combined with local data to add insights and enrich understanding. By combining all local data with useful external information, it's often possible to gain insights into the data that weren't previously possible. The process of combining all of the local data sources is known as data warehousing. The process of analyzing streaming data and data from the Internet is known as Big Data analytics. Azure Synapse Analytics combines data warehousing with Big Data analytics.

Suppose you're a data engineer working at Contoso, an organization with a large manufacturing operation. The organization has to gather and store information from a range of sources, such as real-time data monitoring the status of production line machinery, product quality control data, historical production logs, product volumes in stock, and raw materials inventory data. This information is critical to the operation of the organization. You've been asked to determine how best to store this information, so that it can be analyzed quickly, and queried easily.

Learning objectives

In this module, you will:

- Explore data warehousing concepts
- Explore Azure data services for modern data warehousing
- Explore modern data warehousing architecture and workload
- Explore Azure data services in the Azure portal

Next unit: Describe modern data warehousing

Continue