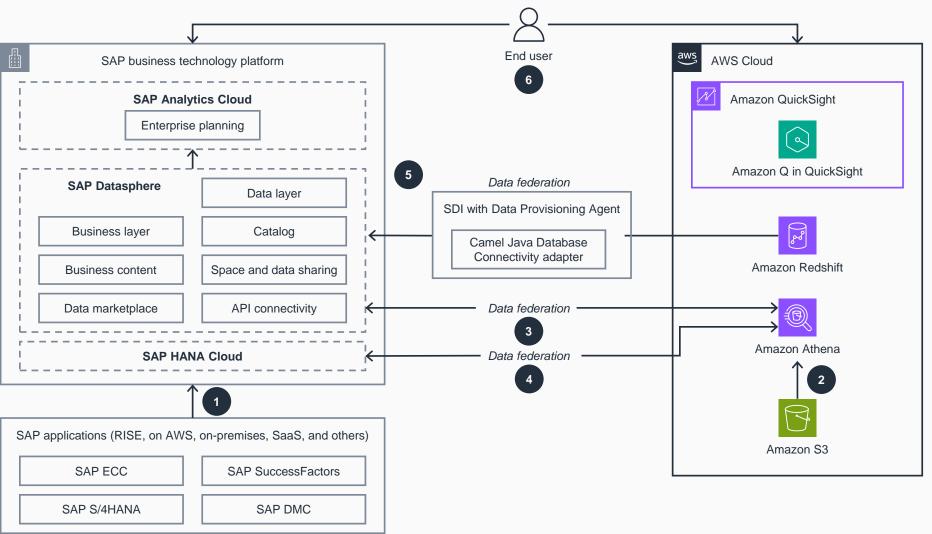
Guidance for Data Federation between SAP and AWS

This architecture diagram shows how to federate data between SAP and AWS cloud analytics services, enabling you to establish a data mesh architecture.



- Data from SAP S/4HANA, SAP SuccessFactors, SAP Digital Manufacturing Cloud (DMC), and other SAP systems are replicated or virtualized into SAP Datasphere. A business semantic layer is created in SAP Datasphere.
- Data from commercial off-the-shelf applications, like Salesforce and Adobe Marketing Cloud, or full-stack applications and Internet of Things (IoT) devices is extracted, loaded into Amazon Simple Storage Service (Amazon S3), and transformed through Amazon Athena as tables and views.
- Data in **Athena** is accessed from SAP Datasphere through data federation from SAP Datasphere connections. Your users can also access SAP Datasphere tables and views from **Athena** by querying SAP HANA using an **Athena** Federated Query.
- Data from **Athena** can be federated to the SAP HANA Cloud by configuring **Athena** as a remote source using the Smart Data Access **Athena** adapter. The **Athena** Federated Query connection can also be used to read data from a stand-alone SAP HANA Cloud environment.
- Data federation from Amazon Redshift into SAP
 Datasphere is possible with SAP HANA Smart Data
 Integration (SDI) or the SAP Data Provisioning
 Agent. Install and configure this agent to federate
 Amazon Redshift data into SAP Datasphere.
 Amazon Redshift data can also be federated
 through the Athena Federated Query data source
 connector.
- Your users can access the storyboards in SAP Analytics Cloud using SAP and non-SAP data from SAP Datasphere. Similarly, you can use **Amazon Q** in **QuickSight** to visualize SAP and non-SAP data using data federation.