

# Prophix Data Integration Process

This document explains how Prophix integrates customer ERP data into its system to inform its Corporate Performance Management software.

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*Version 1.0*

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# 1 The Data Integration Process

The data integration process entails collecting relevant Enterprise Resource Planning (ERP) data from the customer database and validating it to produce actionable insights in the Prophix Corporate Performance Management Software (CPM). With the correct ERP data, Prophix CPM can help the customer:

- Streamline their budgeting processes
- Create rolling and multi-year forecasts
- Analyze and review personnel impact
- Model and plan for sudden market and economic shifts
- Plan and manage their projects
- Monitor and manage their cash flow
- Automate repetitive processes
- Make informed business decisions based on complex data analyses
- And more...

The complete data integration process is visualized below:

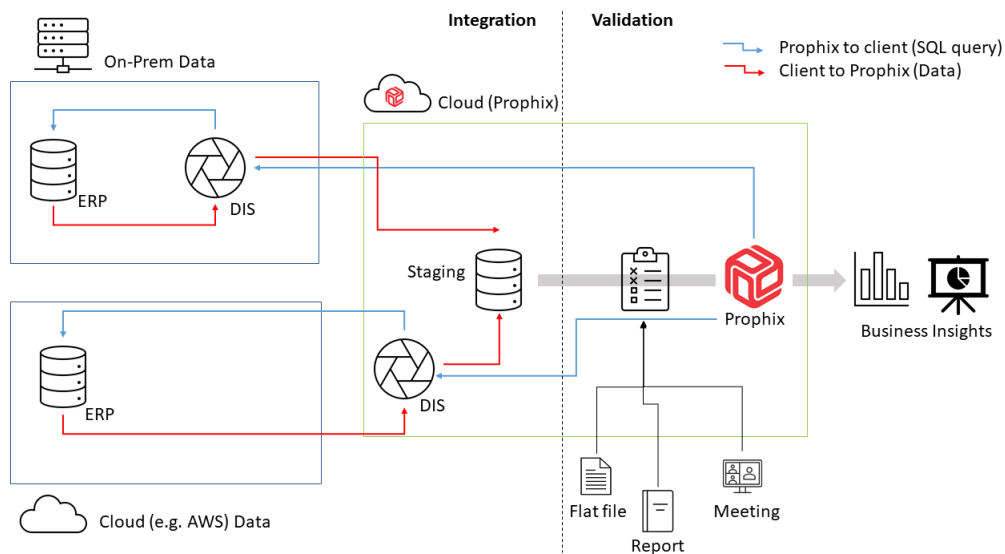


Figure 1: Visualization of the Data Integration Process



## 1.1 Steps of the Data Integration Process

### 1.1.1 Step 1: Prophix Queries the Data Integration Service (On-Prem and Cloud)

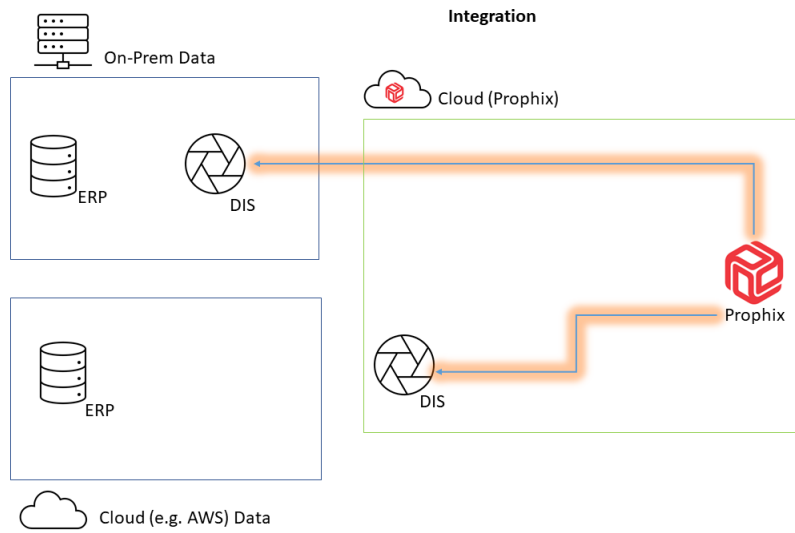


Figure 2: Querying the DIS (On-Prem and Cloud)

The data integration process begins when the Prophix data engineer sends a [SQL](#) query to a Data Integration Service ([DIS](#)). The [DIS](#) is essentially a broker application that can communicate with the customer's Enterprise Resource Planning ([ERP](#)) database and return [ERP](#) data to Prophix. Without the [DIS](#), [SQL](#) queries cannot reach the customer's [ERP](#) database.

The location of the [DIS](#) depends on that of the customer:

- If the customer has a physical location, the [DIS](#) will be [on-prem](#).
- If the customer is an online business, the [DIS](#) will be on a [cloud](#) system hosted by Prophix.



### 1.1.2 Step 2: Data Integration Service Issues Request for Enterprise Resource Planning Data

Whether **on-prem** or stored in a **cloud** system, the Data Integration Service (**DIS**), upon receiving a **SQL** query from Prophix, will issue a request to the customer Enterprise Resource Planning (**ERP**) database.

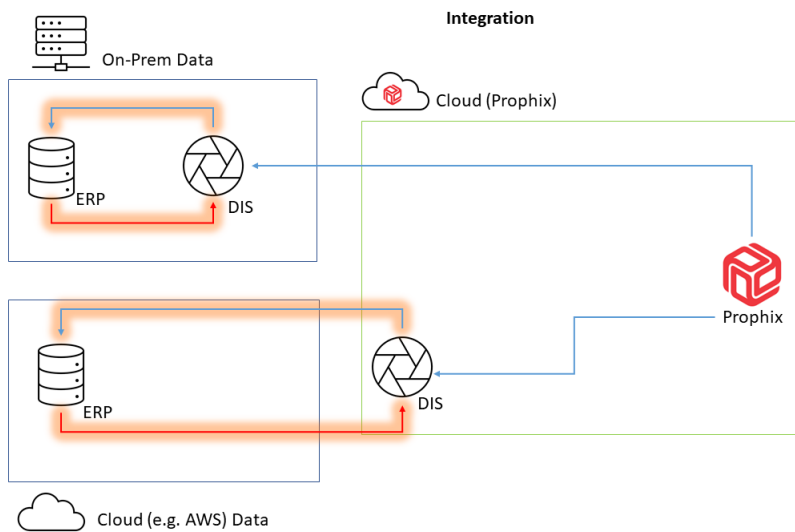


Figure 3: Issuing Request for ERP Data

The issued request will collect all relevant data points from the customer **ERP** database. Requested **ERP** modules may include:

- Sales
- Production
- Distribution
- Accounting
- Human Resources
- And more...

Once the requested **ERP** data has been called up, the **DIS** will load it to the **Staging Environment**.



### 1.1.3 Step 3: Enterprise Resource Planning Data Enters the Staging Environment

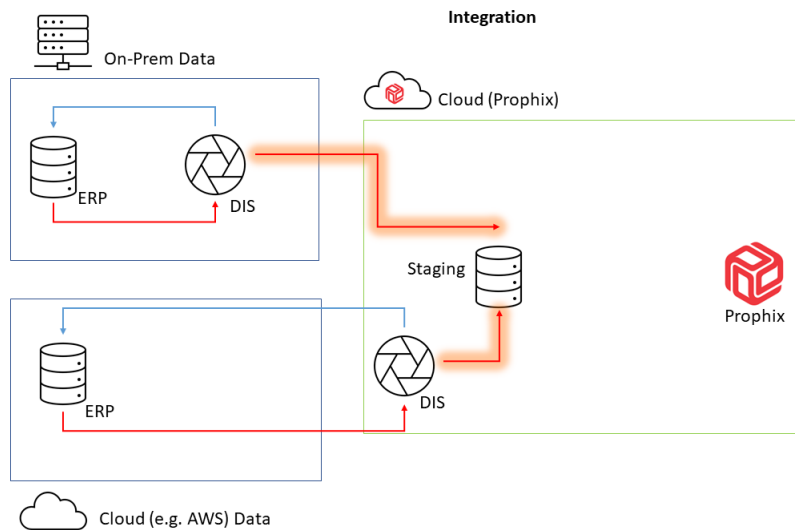


Figure 4: ERP Data Entering Staging Process

The requested Enterprise Resource Planning ([ERP](#)) data from the customer database is loaded by the Data Integration Service ([DIS](#)) into the Prophix [Staging Environment](#) before it can access Prophix.

The [Staging Environment](#) is a MySQL-based database. Having the data go through the [Staging Environment](#) is necessary for quality control and for satisfying security conditions.



#### 1.1.4 Step 4: Prophix Validates the Enterprise Resource Planning Data

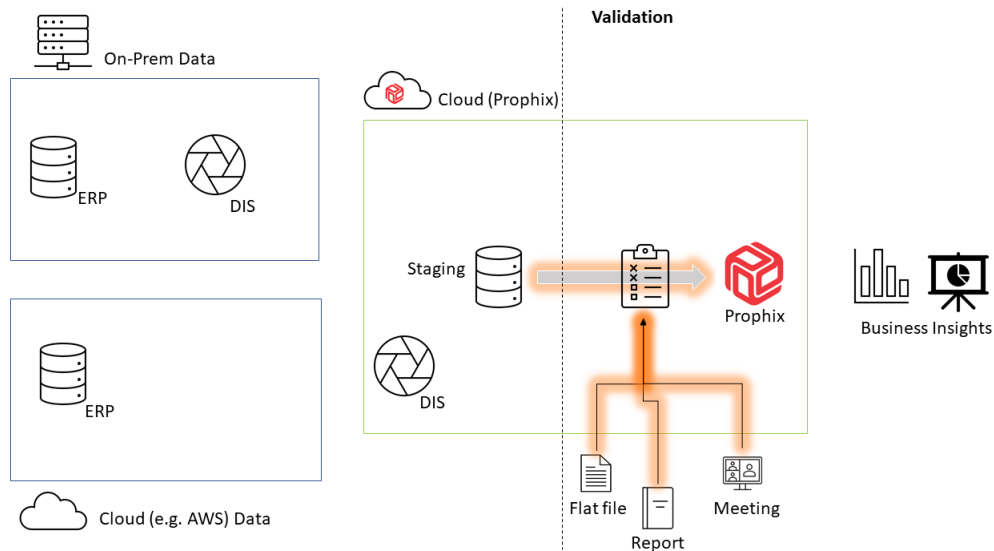


Figure 5: Validating ERP Data

The validation process entails making sure the requested Enterprise Resource Planning (ERP) data is useful and accurate. This is done by comparing the requested ERP data with live sample ERP data from the customer. If both datasets match, then the requested ERP data is valid.

The validation process can proceed in three ways:

- The customer uploads a flat file containing live sample data directly to Prophix, which is then compared with requested ERP data
- Prophix consultant helps the customer compile a data report, which is then compared with requested ERP data
- Prophix sets up an online meeting to compare live ERP data with requested ERP data

A one-time validation is sufficient to ensure all subsequent requested data from the customer is also valid, allowing the data integration process to be automated.





### 1.1.5 Step 5: Prophix Loads Validated Enterprise Resource Planning Data to Corporate Performance Management Software

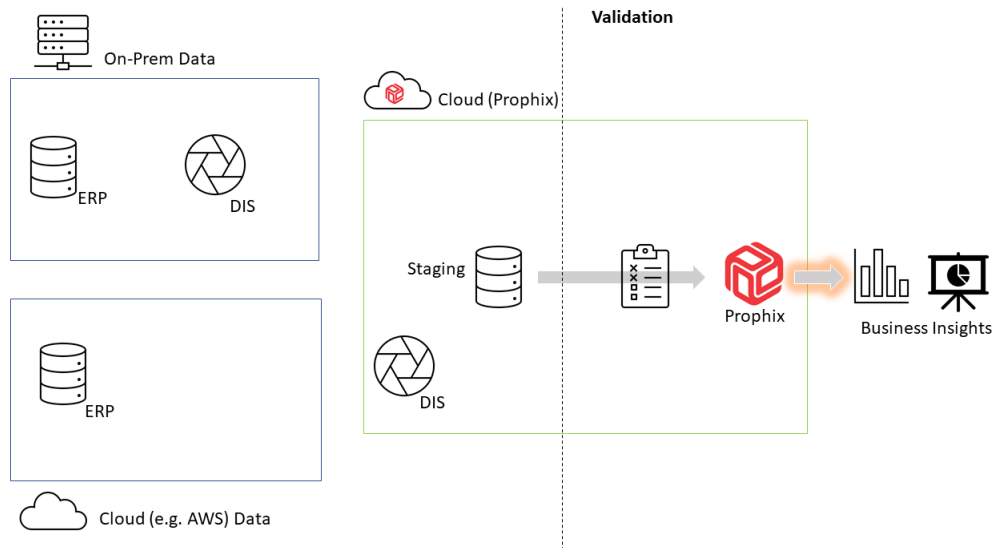


Figure 6: Loading ERP Data to the CPM

Once the requested Enterprise Resource Planning (ERP) data has been validated, subsequent ERP data from the customer can be used by the Prophix Corporate Performance Management (CPM) software to produce business insights.

## 1.2 Summary Table

See below for a summary of the Prophix Data Integration Process.

Data Integration Process	
Steps	Description
1. DIS Query	Prophix queries the DIS (on-prem or cloud) using SQL to collect relevant ERP data from the customer database.
2. ERP Request	Upon receiving the SQL query, the DIS (on-prem or cloud) communicates with the customer database to extract relevant ERP data.
3. Staging	ERP data called by the DIS (on-prem or cloud) enters the Staging Environment, where it will be checked for quality and safety.
4. Validation	Trusted ERP data is tested for validity using live sample ERP data from the customer. This process may require consultant or customer involvement.
5. CPM Loading	Trusted and validated ERP data is loaded in the Prophix CPM, ready to inform business insights.



## 2 Glossary

### 2.1 Cloud

The cloud refers to computing services that run or are accessed online—not through a local computer.

Prophix uses a cloud-based Data Integration Service ([DIS](#)) when the customer does not have a physical location (i.e., the customer is an online business).

### 2.2 Data Integration Service

A DIS can move large volumes of data across systems while allowing the data to be transformed for a variety of purposes.

Prophix uses an [on-prem](#) or [cloud](#)-based DIS to request customer Enterprise Resourcing Planning ([ERP](#)) data and to transport it from the extraction site to the [Staging Environment](#).

### 2.3 Enterprise Resource Planning

ERP refers to day-to-day business activities and processes such as accounting, procurement, production, sales, and human resources. A holistic view of a company's ERP data can be indicative of its wellbeing.

The Prophix Corporate Performance Management (CPM) software relies on trusted and valid customer ERP data to produce business insights.



## 2.4 On-Premise

On-prem refers to computing services that run or accessed through a local computer.

Prophix uses a on-prem Data Integration Service ([DIS](#)) when the customer has a physically accessible location (i.e., a brick and mortar office).

## 2.5 SQL

SQL stands for Structured Query Language and is used to access and manipulate databases.

Prophix send a SQL query to a Data Integration Service ([DIS](#)) ([on-prem](#) or [cloud](#)) as the first step of its data integration process. Upon receiving the query, the [DIS](#) communicates with the customer's Enterprise Resource Planning ([ERP](#)) database to extract relevant [ERP](#) data.

## 2.6 Staging Environment

A staging environment is a secure space that mirrors the production or live environment. It is ideal for real-world testing, allowing bugs and errors to be cleared up before the product reaches consumers.

In the context of the Prophix Data Integration Process, the Staging Environment serves as quality control and an extra layer of security for incoming customer [ERP](#) data.



## 3 Frequently Asked Questions

### 3.1 To What Extent Is the Customer Involved in the Data Integration Process?

The customer is generally only involved in the validation process. The customer may have to send flat files containing live Enterprise Resource Planning ([ERP](#)) data to Prophix to compare with the [ERP](#) data requested by the Data Integration Service ([DIS](#)).

### 3.2 Why Not Have the Customer Upload their ERP Data Directly to Prophix?

The customer should only upload a sample of their Enterprise Resource Planning ([ERP](#)) data directly to Prophix once—during the validation process. Manual upload cannot efficiently transport the customer’s entire [ERP](#) database to Prophix like a Data Integration Service ([DIS](#)) request can. Whereas the customer would have to upload new [ERP](#) data every time, a [DIS](#) can fully automate the data integration process.

### 3.3 What If the Customer Cannot Send Any ERP Data to Complete the Data Validation Process?

In the event the customer cannot send a sample of their Enterprise Resource Planning ([ERP](#)) data to compare with the [ERP](#) data requested by the Data Integration Service ([DIS](#)), they can work with Prophix consultants to compile a data report or request an online meeting with Prophix.

### 3.4 How Many Times Is Data Validation Done?

Validating the customer Enterprise Resource Planning ([ERP](#)) data requested by the Data Integration Service ([DIS](#)) should only be done once. This is sufficient to ensure that all subsequent [ERP](#) data from the customer is valid.

