

# What is Data Acquisition – Data Warehousing

## What is Data Acquisition?

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**Data Acquisition** is the process of extracting the relevant business information, transforming data into a required business format and loading into the target system. A *data acquisition* defines Data extraction, Data Transformation and Data Loading.

Data Acquisition can be performed by two types of [ETL \(Extract, Transform, Load\)](#) types. They are

- **Code based ETL** : ETL applications which can be developed using programming languages like SQL, PL/SQL etc are code based ETL.
  - **Example** : – BASE SAS, SAS ACCESS etc.
- **GUI based ETL** : ETL applications which are developed using graphical user interface, point and click techniques are known as GUI based ETL applications.
  - **Example** :- Data stage, AB Initio, Informatica, ODI (Oracle Data Integration), data services, data manager, SSIS (SQL Server Integration Services).

## What is Data Extraction?

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Data Extraction is the process of reading the data from various types of source systems. The following are the different types of source used to define data extraction.

- ERP Sources.
  - [SAP](#).
  - ORACLE applications.
  - JD Edwards.
  - People Soft.
- File Sources.
  - XML Files.
  - Flat files.
- Relational Sources.
  - Oracle.
  - SQL server.
  - DB2.
  - Sybase.
- Legacy sources.
  - Main frames.
  - As 400.
  - Cobal files.

## What is Data Transformation?

Data transformation is the process of transforming data and cleansing the data into the required business format. In this Data transformation stage, the following are the activities that take place.

- Data Cleansing.
- Data Scrubbing.
- Data Aggregation.
- Data Merging.

## What is Data Cleansing?

Data cleansing is the process of filtering the rows that contain null values, removes duplicate rows and removing blank (or) white spaces, it is also known as Data "Sanitization".

## What is Data Scrubbing?

Data scrubbing is the process of diverting new attributes or columns which are not available in source system.

## What is Data aggregation?

Data aggregation is the process of calculation the summaries from detailed data.

## What is Data merging?

Data merging is the process of Integrating the data from multiple OLTP source systems. Data merging operation can be done in two ways :

### **Horizontal merging**

It is the process of merging the records horizontally using Joins. Where Joins combines the fields from multiple data sources based on one or more fields.

### **Vertical merging**

It is the process of merging the records vertically when the two sources are having same metadata (Union). Union combines similar source definitions into a single result set.

## What is Data Loading?

Data loading is the process of inserting the data into a target systems. Data loading can be done in two types.

### **Initial load or full Load**

Initial load is the process of inserting source data rows into empty target table. At initial load, all the source data gets loaded into target.

### **Incremental load or Delta load**

Incremental load is the process of inserting only new records after Initial load happens.

#### **Informatica Introduction**

- ◆ [Informatica Tutorial - Home](#)
- ◆ [What is Informatica?](#)
- ◆ [Informatica - Architecture.](#)
- ◆ [Informatica - PowerCenter Repository Service](#)
- ◆ [Informatica - What is PowerCenter Integration Service?](#)
- ◆ [What is PowerCenter Repository Manager](#)
- ◆ [What is informatica PowerCenter Designer?](#)
- ◆ [Informatica - Data Transformation Manager \(DTM\)](#)
- ◆ [Informatica - DTM Threads](#)
- ◆ [Informatica - Load Balancing](#)
- ◆ [Different ETL tools in Informatica](#)
- ◆ [What is Mapping architect for Visio?](#)
- ◆ [Informatica - PowerCenter 10.0.1 Installation Step by Step](#)
- ◆ [Informatica - Creating Integration Service](#)
- ◆ [Creating Informatica Repository Service](#)
- ◆ [Configuring Client Domain in Informatica](#)
- ◆ [Learn how to create ODBC connections in Informatica](#)
- ◆ [Creating Source Analyzer in Informatica](#)
- ◆ [Creating Target designer in Informatica](#)

- ◆ [Create Users and Folders in Informatica](#)
- ◆ [Setting up Target Database in Informatica](#)
- ◆ [Learn and Create Workflows in Informatica](#)
- ◆ [Learn and Create Mapping in Informatica](#)
- ◆ [Learn and Create a session in Informatica](#)
- ◆ [Informatica PowerCenter Repository Backup / Restore steps](#)

## **Informatica Transformations**

- ◆ [Introduction to Informatica transformations](#)
- ◆ [Aggregator Transformation](#)
- ◆ [Filter Transformation](#)
- ◆ [Lookup Transformation](#)
- ◆ [Rank Transformation](#)
- ◆ [Router Transformation](#)
- ◆ [Update Strategy Transformation](#)
- ◆ [Joiner Transformation](#)
- ◆ [Expression Transformation](#)
- ◆ [Source Qualifier Transformation](#)
- ◆ [Sorter Transformation](#)
- ◆ [Union Transformation](#)
- ◆ [Normalizer Transformation](#)
- ◆ [SQL Transformation](#)
- ◆ [Sequence Transformation](#)
- ◆ [Stored Transformation](#)
- ◆ [Transaction Control Transformation](#)
- ◆ [XML Generator Transformation](#)
- ◆ [XML Parser Transformation](#)