

# **Tableau Prep**

Course #: TAB-100 Duration: 2 days

## **Prerequisites**

Participants should have a basic understanding of data concepts such as tables, fields, and data types. Familiarity with Tableau Desktop is helpful but not required. No prior experience with Tableau Prep is necessary.

#### **Details**

This course is designed for data analysts, business intelligence professionals, and anyone responsible for cleaning, shaping, or preparing data for analysis. It is ideal for Tableau users looking to expand their skillset into data preparation or teams seeking to streamline and automate their data workflows.

This comprehensive, hands-on course introduces participants to Tableau's powerful data preparation tool—Tableau Prep. Through structured modules and real-world scenarios, learners will explore how to connect to diverse data sources, clean and reshape data, combine datasets using joins and unions, and output prepared data for analysis. The course walks through the Tableau Prep interface, from working with input steps and applying smart cleaning operations to creating calculated fields and organizing complex flows. Whether you are new to data preparation or looking to optimize your existing workflows, this course equips you with the practical skills to efficiently transform raw data into ready-to-analyze datasets.

## **Software Needed**

Tableau Prep

## **Outline**

#### **Exploring Tableau Prep**

- Understanding Tableau Products
- Tableau User Roles
- What is Tableau Prep?
- The Start Page
- Opening an Existing Flow
- Tableau Prep Workspace
- Visual Dictionary
- Basic Steps of Data Preparation

#### **Connecting to Data**

- Connecting to Data
- Types of Data Sources
- Adding a Connection
- Initial SQL
- Accessing Data in PDFs
- The Input Pane
- The Data Interpreter
- Key for the Data Interpreter
- Editing or Removing a Connection
- Replacing a Data Connection
- Starting a New Flow
- Saving a Flow

#### The Input Step

- What is the Input Step?
- Input Step Cleaning
  - Hiding Fields
  - Removing Unwanted Fields
  - Filtering
  - · Renaming Fields
  - · Changing Data Types
- Including Row Numbers
- Changes Tab
- Settings Tab
- Data Sample Tab
- Sampling Methods
- Tables Tab
- Union Multiple Tables
- Understanding Linked Keys and Joining Data
- Refreshing Data

## **Examining the Data**

- Understanding Steps
- Step Types
- Adding or Inserting Steps
- Adding a Clean Step
- The Profile Pane
- The Toolbar
- Size and Value Details
- Nulls, Outliers, and Unexpected Values
- Distribution of Values or Unique Values
- Searching for Fields and Values
- Editing, Sorting, and Filtering Values
- Reordering Fields (Moving Profile Cards)

- Highlighting
- Changing Data Types
- Using and Adding Data Roles
- Basics of Data Preparatiion

#### Cleaning (Clean Step)

- Adding a Clean Step
- Using Smart Recommendations
- Applying Cleaning Operations
- Cleaning Options
- Quick Cleaning Operations: Strings
- Quick Cleaning Operations: Dates
- Viewing Your Changes
- Order of Operations
- Renaming Fields in Bulk
- Merging Fields
- Grouping Values
- Mapping Multiple Values to a Single Selected Field
- Creating a Group by Selecting Multiple Values
- Adding Values Not in the Group
- Using Fuzzy Match
- Pausing Updates

## **Integration (Join and Union Steps)**

- Combining Data
- Union
- Join
- Join Types
- Joining Tables
- Common Join Issues

#### Transformation

- Filtering Methods
- The Aggregate Step
- Aggregating or Grouping Data
- The Pivot Step and Calculated Fields
- Pivoting Data
  - o The Pivot Step
  - Pivoting Columns to Rows
  - Pivoting Rows to Columns
- Calculated Fields
  - Calculating Level of Detail
  - Using Calculation Editor and Visual Calculation Editor
  - Calculating Rank or Row Number
  - Ranking Information
  - · Creating a Rank Calculation

- o Tile Calculations
- Using Multi-Row Calculations
- New Rows Step
- Using Parameters in Flows
  - o Creating a Parameter
  - o Using a Parameter

# The Output Step

- Saving or Packaging Flows
- Viewing Flow Output in Tableau Desktop
- Understanding .hyper
- The Output Step
- Creating Extracts
- Saving to External Databases
- Creating Published Data Sources
- Refreshing Data
- Reusable Flow Steps

# Organizing the Flow

- Reorganizing the Flow Layout
- Moving Steps
- Grouping Steps
- Removing Steps
- Adding Descriptions to Flow Steps and Change Entries
- Using Flow Navigator