Tableau Desktop, Server

Certification Training

IntelliPaat

Table of Contents

1. About the Program
2. About Intellipaat
3. Key Features
4. Career Support
5. Why take up this course?
6. Who should take up this course?
7. Program Curriculum
8. Project Work
9. Certification
10. Intellipaat Success Stories
11. Contact Us

About the Program

Our Tableau certification master's program will let you gain proficiency in Tableau Desktop and Tableau Server. You will work on real-world projects in Tableau Desktop and Server tools, dashboard, web interface, R connectivity, publishing, data aggregation, and blending.

About Intellipaat

Intellipaat is one of the leading e-learning training providers with more than 600,000 learners across 55+ countries. We are on a mission to democratize education as we believe that everyone has the right to quality education.

Our courses are delivered by subject matter experts from top MNCs, and our world-class pedagogy enables learners to quickly learn difficult topics in no time. Our 24/7 technical support and career services will help them jump-start their careers in their dream companies.

Key Features

54 HRS INSTRUCTOR-LED TRAINING

45 HRS SELF-PACED TRAINING

80 HRS REAL-TIME PROJECT WORK

LIFETIME ACCESS

24/7 TECHNICAL SUPPORT

INDUSTRY-RECOGNIZED CERTIFICATION

JOB ASSISTANCE THROUGH 80+ CORPORATE TIE-UPS

FLEXIBLE SCHEDULING

Career Support

SESSIONS WITH INDUSTRY MENTORS

Attend sessions from top industry experts and get guidance on how to boost your career growth

MOCK INTERVIEWS

Mock interviews to make you prepare for cracking interviews by top employers

GUARANTEED INTERVIEWS & JOB SUPPORT

Get interviewed by our 400+ hiring partners

RESUME PREPARATION

Get assistance in creating a world-class resume from our career services team

Why take up this course?

Tableau is by far the most popular Business Intelligence tool used by some of the biggest companies in the world today. This Tableau training will equip you with some of the most sought-after skills in the Tableau Desktop and Server domains. Taking up this training course will help you pursue a fantastic career by assuming top-notch jobs in the industry.

Who should take up this course?

- Business Intelligence and Reporting Professionals
- IT Developers, Testers, and Project Managers
- Data Scientists, Analysts, Statisticians, and Financial Professionals
- Those aspiring for a career in Business Intelligence

Program Curriculum

Tableau Desktop & Server Course Content

Tableau Course Content

INTRODUCTION TO DATA VISUALIZATION & THE POWER OF TABLEAU

- What is data visualization?
- Comparison and benefits against reading raw numbers
- Real use cases from various business domains
- Some quick and powerful examples using Tableau without going into the technical details of it
- Installing Tableau
- Tableau interface
- Connecting to DataSource
- Tableau data types
- Data preparation

ARCHITECTURE OF TABLEAU

- Installation of Tableau Desktop
- Architecture of Tableau
- Interface of Tableau (Layout, toolbars, data pane, analytics pane, etc.)
- How to start with Tableau
- The ways to share and export the work done in Tableau

Hands-on Exercise:

1. *Play with Tableau Desktop*
2. *Learn about the interface*
3. *Share and export existing works*

WORKING WITH METADATA & DATA BLENDING

- Connection to Excel
- Cubes and PDFs
- Management of metadata and extracts
- Data preparation
- Joins (left, right, inner, and outer) and union
- Dealing with null values, cross-database joining, data extraction, data blending, refresh extraction, incremental extraction, how to build extract, etc.

Hands-on Exercise:

1. *Connect to an Excel sheet to import data*
2. *Use metadata and extracts*
3. *Manage null values*
4. *Clean up the data before using*
5. *Perform join techniques*
6. *Execute data blending from multiple sources*

CREATION OF SETS

- Mark, highlight, sort, group, and use sets (creating and editing sets, IN/OUT, sets in hierarchies, etc.)
- Constant sets
- Computed sets, bins, etc.

Hands-on Exercise:

1. *Use marks to create and edit sets*
2. *Highlight the desired items*
3. *Make groups*

4. Apply sorting on results

5. Make hierarchies among the created sets

WORKING WITH FILTERS

- Filters (addition and removal)
- Filtering continuous dates, dimensions, and measures
- Interactive filters, marks card, and hierarchies
- How to create folders in Tableau
- Sorting in Tableau
- Types of sorting
- Filtering in Tableau
- Types of filters
- Filtering the order of operations

Hands-on Exercise:

1. Use the dataset by date/dimensions/measures to add a filter

2. Use an interactive filter to view the data

3. Customize/remove filters to view the result

ORGANIZING DATA & VISUAL ANALYTICS

- Using the Formatting pane to work with the menu, fonts, alignments, settings, and copy-paste
- Formatting data using labels and tooltips
- Editing axes and annotations
- K-means cluster analysis
- Trend and reference lines
- Visual analytics in Tableau
- Forecasting, confidence interval, reference lines, and bands

Hands-on Exercise:

1. *Apply labels and tooltips to graphs, annotations, etc. and edit axes' attributes*
2. *Set the reference line*
3. *Perform k-means cluster analysis on the given dataset*

WORKING WITH MAPPING

- Working on coordinate points
- Plotting longitude and latitude
- Editing unrecognized locations
- Customizing geocoding, polygon maps, and WMS: web mapping services
- Working on the background image and adding an image
- Plotting points on images and generating coordinates from them
- Map visualization, custom territories, map box, and WMS map
- How to create map projects in Tableau
- Creating dual axes maps and editing locations

Hands-on Exercise:

1. *Plot longitude and latitude on a geo map*
2. *Edit locations on the geo map*
3. *Custom geocoding*
4. *Use images of the map and plot points*
5. *Find coordinates*
6. *Create a polygon map*
7. *Use WMS*

WORKING WITH CALCULATIONS & EXPRESSIONS

- Calculation syntax and functions in Tableau
- Various types of calculations, including table, string, date, aggregate, logic, and number
- LOD expressions, including concept and syntax
- Aggregation and replication with LOD expressions

- Nested LOD expressions
- Levels of details: Fixed level, lower level, and higher level
- Quick table calculations
- The creation of calculated fields
- Predefined calculations
- How to validate

WORKING WITH PARAMETERS

- Creating parameters
- Parameters in calculations
- Using parameters with filters
- Column selection parameters
- Chart selection parameters
- How to use parameters in the filter session
- How to use parameters in calculated fields
- How to use parameters in the reference line

Hands-on Exercise:

1. *Creating new parameters to apply on a filter*
2. *Passing parameters to filters to select columns*
3. *Passing parameters to filters to select charts*

CHARTS & GRAPHS

- Dual axes graphs
- Histograms
- Single and dual axes
- Box plot

- Charts: Motion, Pareto, funnel, pie, bar, line, bubble, bullet, scatter, and waterfall charts
- Maps: Tree and heat maps
- Market basket analysis (MBA)
- Using Show me
- Text table and highlighted table

Hands-on Exercise:

1. Plot a histogram, tree map, heat map, funnel chart, and more using the given dataset
2. Perform market basket analysis (MBA) on the same dataset

DASHBOARDS & STORIES

- Building and formatting a dashboard using size, objects, views, filters, and legends
- Best practices for making creative and interactive dashboards using the actions
- Creating stories, including the intro of story points
- Creating and updating the story points
- Adding catchy visuals in stories
- Adding annotations with descriptions, dashboards and stories
- What is dashboard?
- Highlight actions, URL actions, and filter actions
- Selecting and clearing values
- Best practices to create dashboards
- Dashboard examples and using Tableau workspace and Tableau interface
- Tableau joins
- Types of joins
- Tableau field types

- Saving and publishing the data source
- Live vs extract connection
- Various file types

Hands-on Exercise:

1. Create a Tableau dashboard view, include legends, objects, and filters
2. Make the dashboard interactive
3. Use visual effects, annotations, and descriptions to create and edit a story

TABLEAU PREP

- Introduction to Tableau Prep
- How Tableau Prep helps quickly combine join, shape, and clean data for analysis
- Creation of smart examples with Tableau Prep
- Getting deeper insights into the data with great visual experience
- Making data preparation simpler and accessible
- Integrating Tableau Prep with the Tableau analytical workflow
- Understanding the seamless process from data preparation to analysis with Tableau Prep

INTEGRATION OF TABLEAU WITH R & HADOOP

- Introduction to R language
- Applications and use cases of R
- Deploying R on the Tableau platform
- Learning R functions in Tableau
- The integration of Tableau with Hadoop

Hands-on Exercise:

1. Deploy R on Tableau
2. Create a line graph using R interface
3. Connect Tableau with Hadoop to extract data

Tableau Server Course Content

INTRODUCTION TO TABLEAU & TABLEAU DESKTOP

Understanding Tableau, basics of Business Intelligence, Business Analytics with Tableau, and an introduction to Tableau Desktop where all reports, formats, and dashboards are created

INSTALLATION & CONFIGURATION OF TABLEAU SERVER

Installation of Tableau Server, steps in the configuration of Tableau Server, and the common issues and troubleshooting them

DASHBOARDS & SERVER SETTINGS

Accessing Tableau Dashboard using Tableau Server, setting up roles, schedules, tasks, settings, and status for various users using the Tableau Server platform

DASHBOARD SCHEDULING

Scheduling a Tableau Dashboard for report creation and sending

USER ACCESS: RULES & PERMISSIONS

Granting various permissions and setting up rules for various users depending on their roles, such as Developers, Administrators, Architects, and other personnel, providing the right access and information

DASHBOARD OPERATIONS

Working with the Tableau Dashboard and sharing it with other developers, migrating the dashboard, and performing various operations on it

WEB SERVER INTERFACE, SITES, PROJECTS, & USERS

Working with Tableau Server and working on a project with a web server interface to be accessible to all users

CREATING PROJECTS, SITES, SITE USERS, & PUBLISHING WORKBOOKS

Deploying the necessary steps for the creation of various projects, sites and users working on the Tableau platform, publishing workbooks under projects, and performing maintenance activities

SERVER RECONFIGURATION

Re-configuring Tableau Server as per new requirements and introducing various Tableau Server processes needed

INTERACTIVE SERVER DASHBOARDS

Deploying interactive features on Tableau Dashboard, publishing the dashboard to the Tableau Server, and working on it for interactive capabilities

DASHBOARD NAVIGATION ON THE SERVER

Navigating through the dashboard using Tableau Server and understanding Tableau Web Server features and interfaces

PERMISSIONS ON WORKBOOKS, PROJECTS, & USER GROUPS

Ensuring that the work is getting done right by applying permissions on workbooks and projects and creating user groups

CUSTOMIZED VIEWS

Customization on Tableau for frequently used options by choosing the 'Remember My Changes' option for creating custom views

DATA SOURCES & PUBLISHING

Understanding of Tableau Data Sources, publishing Data Sources from Tableau Desktop using Tableau Server for getting data online, and deploying permissions on Data Source

ADMIN VIEWS

Introduction to Standard Admin views, creating Custom Admin views, and deploying Tableau Server Standard Admin views

CONCEPT OF EXTRACTS & SCHEDULES

Extracting data from Data Sources to publish data from Tableau Desktop to Tableau Server, deploying schedules on data extracts, and refreshing extracts for the updated Data Sources

REFRESH EXTRACTS FROM TABLEAU SERVER

Getting the latest data onto Tableau Server using the Refresh Extract option from Tableau Server

SERVER MAINTENANCE

Alert scheduling and data connections, maintaining Tableau Server, scheduling alerts, understanding what are Data Connections and their benefits, etc.

SERVER CUSTOMIZATION

Customizing Tableau Server and updating the name and logo specifications on the server

TABLEAU TCP-IP

Various ports and ways to change the default ports in Tableau Server

SERVER AUTHORIZATION & AUTHENTICATION

Ensuring Server efficiency and integrity through the deployment of right Tableau Server authorization and authentication and understanding Tableau Server Security

VARIOUS SECURITY FEATURES

Understanding the different aspects of Tableau Server Security and implementing them, ensuring the right authorization and authentication, various levels of security such as user filters, data security, network security, server proxy setup, and impersonating SQL Server

TABLEAU PARAMETERS & VIEWS

List of parameters, understanding Tableau parameters, working with embedded parameters, deploying Tableau views on websites, and Tableau JavaScript API

SERVER PERFORMANCE

Monitoring Tableau Server performance and analyzing and recording the various aspects to improve Server performance

SERVER SCALABILITY

Scaling Tableau Server performance up or down depending on the specific requirements

CONFIGURING FOR FAIL-OVER & HIGH AVAILABILITY

Ensuring that Tableau Server availability is always high and that the fail-over system is always in place

TABCMD UTILITY

Overview of the tabcmd command line utility and its usefulness

TABADMIN UTILITY

Introduction to the tabadmin command line utility and its usage

TROUBLESHOOTING IN TABLEAU

Troubleshooting various issues using VizQ, Data Sources, and License

DATABASE MAINTENANCE & LOGS

Reading log files, identifying problems, and performing database maintenance

Projects Covered

Tableau Desktop, Server Projects

What are the projects included in this Tableau certification training?

Project 1: Analyzing Global COVID-19 Data with Interactive Tableau Dashboard

Domain: Healthcare and COVID-19

Problem statement: Analyzing, understanding, and comparing COVID-19 cases across different countries

Description: In this project, you will be working on two datasets having country-wise information, which include the number of confirmed cases, death cases, new cases, and the number of deaths per day. Datasets are to be related, joined, or blended with each other to proceed with this dashboard. You will apply filters, parameters, actions, and calculations wherever necessary to get the desired results, according to the problem statements. Depending on factors such as the fields used to visualize, number of values in each field, and the problem statement, appropriate charts and graphs are to be used. The final dashboard should be interactive, allowing users to interact and analyze the data as per their requirements.

Highlights:

- Cleansing and combining datasets
- Using top filters and parameters that work in a dynamic way
- Showing results in both log and default axes
- Enhancing visualizations using available features and mark cards
- Creating an insightful and interactive dashboard
- Including drop-down menus and filters in the final dashboard to make it interactive

Project 2: Tableau Dashboard for Analyzing the UK Bank Customer Data

Domain: Bank customer data

Problem statement: Understanding region-wise customer details from the UK bank dataset provided

Description: In this project, you will be working on this bank data that has the region-wise customer details with their respective job classifications, gender-age details, and their balances maintained in the bank. You will be creating pie charts, donut pie charts, asymmetric drill downs, and motion charts for an insightful visualization. A day-wise forecast on balance is to be calculated using exponential smoothing, a built-in forecasting tool in Tableau. Final dashboard should be interactive with filters and highlighters used.

Highlights:

- Cleansing data, if necessary, using the data interpreter
- Creating asymmetric drill downs using set actions
- Creating histograms for analyzing the distribution of a measure
- Using LOD expressions to perform calculations in most granular levels
- Using highlighters to color specific marks of interest
- Using global filters and parameters for interactivity

Project 3: Tableau Dashboard for Analyzing Financial Data

Domain: Retail and Finance

Problem statement: Analyzing the country-wise product data to understand the key performance indicators, such as sales and profit, to improvise the performance and sales of products

Description: In this project, you will be analyzing the country-wise sales and profit for products in each segments. World maps are to be used for an interactive analysis with detailed tool tips. Country maps are displayed using interactive filters. Motion charts and customized shapes are used for enhancing visualizations. Annotations and drop lines are inserted wherever necessary. Phone and tablet layouts are added for enabling mobility of dashboards after publishing. Analyzing the outliers for each country is a major problem statement in this project.

Highlights:

- Creating maps using geographic data type fields
- Using single value list parameters for interactive analysis
- Using URL actions to direct users to required web pages
- Creating box plots to identify the outliers in the data

Project 4: Tableau Dashboard for Understanding the Agricultural Data

Domain: Agriculture

Problem statement: Agricultural area, yield, and production-wise analysis per state

Description: In this project, you will have to analyze and understand data corresponding to a few states of India. Various seasonal crop categories and respective crop details under each category are provided for detailed analysis. Interactive drill-down tree maps are to be used for insightful visualizations. Ranking crops based on their yield value per year, seasonal pie charts with production details, and district-wise charts are a few of the requirements and problem statements of this project.

Highlights:

- Cleansing data before building dashboards
- Building drill-down tree maps using set actions
- Using parameters and actions for interactivity
- Creating hierarchies manually for drill downs
- Using worksheets as filters

What projects will be included in this Tableau Server training?

Project 1: Deploying Tableau Server

Domain: Financial services

Problem statement: How to deploy Tableau Server for multiple projects and data sources without causing any degradation of performance

Description: This is a financial services project that involves working with Tableau Server and understanding all the administrator tasks, such as scheduling the server, working with the scores of workbooks and multiple data sources, and governing the content while ensuring self-service analytics to the users.

Highlights:

- Tableau Server configuration
- Rules and permissions for user access
- Accessing the Tableau Web Server interface

Project 2: Tableau Server Automation

Domain: Retail

Problem statement: How to automate Tableau Server tasks that are repetitive in nature

Description: This project involves working with Tableau Server in the retail domain and automating the tasks through the use of command-line utilities, REST APIs, and JavaScript APIs. You will learn to automate content access to users, manage users, groups, and sites, set up permissions, and more.

Highlights:

- Tableau Data Extract command-line utility
- Automating with REST API and JavaScript API
- Calling the REST API using Tableau Server Client Library

Certification

After the completion of the course, you will get a certificate from Intellipaat.

Success Stories

Kevin K Wada

Thank you very much for your top-class service. A special mention should be made for your patience in listening to my queries and giving me a solution, which was exactly what I was looking for. I am giving you a 10 on 10!

Sampson Basoah

The Intellipaat team helped me in selecting the perfect course that suits my profile. The whole course was practically oriented, and the trainers were always ready to answer any question. I found this course to be impactful. Thank you.

Ashwani Kumar

Everything was so well explained. I liked the format and the materials. By far, the best online training I have ever attended. I have never seen such amazing trainers with excellent knowledge and answering capabilities.

Sugandha Sinha

Intellipaat's course instructors were excellent and well-versed with their concepts. The support team solved all my queries within the promised 24 hours. They explained all topics and concepts well, and the course material was updated and included videos, exercises, etc. I would highly recommend Intellipaat to those who wish to excel in the IT field.

CONTACT US

INTELLIPAAT SOFTWARE SOLUTIONS PVT. LTD.

Bangalore

AMR Tech Park 3, Ground Floor, Tower B,
Hongasandra Village, Bommanahalli,
Hosur Road, Bangalore – 560068

USA

1219 E. Hillsdale Blvd. Suite 205,
Foster City, CA 94404

If you have any further queries or just want to have a conversation with us, then do call us.

IND: +91-7022374614 | US: 1-800-216-8930