

Tableau Documentation



Summary: Breaking the Endless Tableau Tutorial Loop

This video explains how to stop getting stuck in endless Tableau tutorials and start building real, job-ready Tableau skills through five actionable strategies:

1 Focus on the Core 20%

- Don't try to learn everything at once. Master the basics first: Tableau's interface, connecting data sources, building simple charts (bar, line, map), using filters, and understanding dimensions vs. measures.
- Practice by creating 3 basic charts using Tableau Public and the Superstore dataset.

2 Learn by Doing Projects

- Watching tutorials isn't enough — actively build your own projects. Pick a topic you enjoy (e.g., movies, sports) and answer real questions with data from sources like Kaggle.
- Example: For movies, visualize top directors, genre trends, or budget vs. box office.

3 Use Guided Learning Platforms

- Structured courses help speed up learning. The video recommends **DataCamp** for both beginners (Tableau Fundamentals) and those preparing for the Tableau Certified Data Analyst exam.
- DataCamp allows you to learn entirely in your browser, no local installation needed.

4 Join Community Challenges

- Improve by joining Tableau community events like **Makeover Monday**, **Workout Wednesday**, **Viz for Social Good**, **Sports Viz Sunday**, and **Iron Quest**.
- Download datasets, create visuals, share them, and learn by seeing how others approach the same challenge.

5 Practice Storytelling & Get Feedback

- Employers want people who can communicate insights, not just build charts.
- Turn charts into dashboards that tell clear, logical stories for your audience. Add titles, annotations, and test with someone unfamiliar with the topic.
- Set up a personal 30-day challenge:
 - Days 1–10: Create 1 chart daily.
 - Days 11–20: Build dashboards.
 - Days 21–30: Recreate visuals you admire from Tableau Public.
- Post your work on LinkedIn and get feedback to keep improving.

Key takeaway:

Stop passively watching tutorials — start actively practicing with real data, real questions, and community feedback. This is the fastest way to build practical Tableau skills that employers want.

What is Tableau?

Tableau is a leading data visualization software that helps users see and understand their data through interactive and shareable dashboards. It connects easily to data sources like Excel, SQL, Google Sheets, and cloud platforms.

Why Learn Tableau?

- Easy drag-and-drop interface (no coding required)
 - Widely used in analytics and business intelligence roles
 - Helps tell data stories effectively
 - Strong demand in job market (especially for Data Analysts, BI Developers, etc.)
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Key Features of Tableau

Feature	Description
Live & In-Memory Data	Connect to real-time or stored data
Interactive Dashboards	Visuals with filters, highlights, drill-downs
Data Blending	Combine data from different sources
Calculated Fields	Create new columns using custom formulas
Storytelling	Present data insights as a story
Mobile Compatibility	Dashboards adjust for mobile views
Tableau Public	Free version to practice and publish dashboards

Tableau Concepts You Should Know

Concept	Explanation
Worksheet	A single view that displays data as a graph
Dashboard	A collection of several views for comparative analysis
Story	A sequence of sheets that work together to convey insights
Dimensions	Categorical data (e.g., names, dates)
Measures	Numerical data (e.g., sales, profit)
Filters	Used to restrict the data shown in a view
Marks	Visual representation of data (bars, lines, shapes, etc.)

Tableau Tools

Tool	Use
Tableau Desktop	Create dashboards and reports
Tableau Public	Free version of Desktop

Tableau Server	Share dashboards in organization
Tableau Online	Cloud-hosted version of Server
Tableau prep	Data cleaning and preparation tool

Sure! Let's walk through a **real-world example** where different **Tableau tools** are used step-by-step based on a project requirement:



Requirement

A sales manager wants a dashboard to monitor monthly sales performance across regions, and this dashboard should be accessible to regional heads and executives from anywhere.



How Tableau Tools Help

Tool	Use in the Requirement	Example
Tableau Prep	Clean and prepare raw sales data from Excel, databases, or cloud sources	Combine multiple regional sales files, remove nulls, and create a unified dataset
Tableau Desktop	Create the sales performance dashboard with charts, KPIs, and filters	Build a dashboard showing total sales, top products, and trends with interactive filters
Tableau Server	Share the dashboard securely within the company (on-premise)	Upload the dashboard to internal server for regional managers to view and interact with it
Tableau Online	Make the dashboard accessible via the cloud (no internal server needed)	Regional heads traveling can access the dashboard on tablets or laptops via Tableau Online

Tableau Public	(If internal sharing is not needed) Share the dashboard publicly for awareness or training	Publish a sample version of the dashboard for sales training or public portfolio showcase
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Summary Flow:

1. **Prepare Data** → in **Tableau Prep**
 2. **Build Dashboard** → in **Tableau Desktop**
 3. **Share Securely** → via **Tableau Server** (internal) or **Tableau Online** (cloud)
 4. **Public Version** (optional) → via **Tableau Public**
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Tableau Tools as Different Platforms/Applications

Tool	Platform Type	How You Use It
Tableau Desktop	Installed desktop application	You install it on your computer (Windows or Mac) to create dashboards and reports. Most development work is done here.
Tableau Public	Installed desktop app + website	It's a free version of Tableau Desktop. You can download the desktop app and publish dashboards on TableauPublic.com (visible to everyone).
Tableau Server	On-premise web application	Hosted by your organization on its own servers. You access it via a web browser to share dashboards securely within the organization.
Tableau Online	Cloud-based web application	Hosted by Tableau (Salesforce) in the cloud. You access it via browser like Tableau Server but no need to manage your own servers .
Tableau Prep	Desktop + Web (Prep Conductor)	Used to clean and prepare data . The main tool is a desktop application (Tableau Prep Builder), and workflows can be automated via Server/Online.

Summary:

Tool	Application Type	Access Method
Tableau Desktop	Desktop app	Installed on your PC/Mac
Tableau Public	Desktop + Web	App + public website
Tableau Server	Web (on-prem)	Web browser (hosted internally)
Tableau Online	Web (cloud-hosted)	Web browser (hosted by Tableau)
Tableau Prep	Desktop app	Installed on your PC/Mac; automation needs Server/Online

Would you like a visual comparison or installation guide for any of these tools?

You said:

Regional heads traveling ?

ChatGPT said:

Great question! When I mentioned “**regional heads traveling**”, I meant:

Regional managers or executives who are not in the office and may need to access the dashboard while on the go, such as:

- While visiting different branch offices or stores
 - Attending meetings in different cities
 - Traveling for business (domestic or international)
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Why This Matters:

- These users **don't have access to internal servers or company networks** while traveling.
 - They need a way to **securely access dashboards via the internet**, without depending on a desktop setup or VPN.
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Tableau Tool for This Use Case:

Tool	Why it fits
Tableau Online	It's cloud-hosted and accessible from anywhere via a browser – laptop, tablet, or even mobile. No VPN or office network needed.
Tableau Server (Not ideal while traveling)	Requires access to the organization's internal network or VPN. Less flexible for users on the move.

Example:

Let's say:

A regional head is flying to Bangalore to visit a manufacturing unit. On the way, they open Tableau Online on their iPad and check the latest sales and production KPIs via a dashboard.

What You Can Do with Tableau

- Create bar charts, pie charts, maps, line charts, scatter plots
 - Build interactive dashboards with filters and actions
 - Analyze trends, forecasts, and patterns
 - Connect to live data from databases
 - Share your dashboards online or via PDF
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Step-by-Step: How to Start with Tableau

1. **Install Tableau Public** (Free) from: <https://public.tableau.com/>
2. **Get Sample Data** – Excel files, CSVs, Superstore Dataset

3. **Open Tableau** and connect to your data source
 4. **Drag Dimensions & Measures** into rows/columns
 5. **Create a chart** – e.g., bar, line, pie, map
 6. **Add filters, colors, and labels**
 7. **Build dashboards** using multiple sheets
 8. **Publish to Tableau Public**
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Recommended Learning Resources

- Tableau Official Training
 - [Free Course on Coursera: Data Visualization with Tableau](#)
 - [YouTube: Tableau Tim / Alex the Analyst]
 - Practice Projects: Superstore Sales, COVID-19 Analysis, Sales by Region
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Sample Practice Project

Title: Superstore Sales Dashboard

Goal: Analyze sales performance by region and category

Data: Use Tableau's built-in "Sample - Superstore" dataset

Visuals:

- Sales by Region (Map)
 - Sales & Profit by Category (Bar chart)
 - Filter by Date and Customer Segment
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We have Tableau VM created on gcp where tableau server is installed and used IP address to make the organizational below domain -

<https://tableau.sterliteapps.com/#/home>

VM - [tableau-server](#)

When i click on external ip it gives error -

Your connection is not private

Attackers might be trying to steal your information from **35.200.189.61** (for example, passwords, messages, or credit cards). Learn more about this warning

net::ERR_CERT_COMMON_NAME_INVALID

You're asking an excellent and very real-world question. Here's a clear explanation of what's going on, and how you can understand how your organization set up the **enterprise Tableau Server** using the **Google Cloud VM (Compute Engine)** and made it accessible via a domain like:

<https://tableau.sterliteapps.com>



Let's Break It Down



1. Why You Get This Error on External IP

When you click the **External IP (like 35.200.189.61)** of your VM and get:

Your connection is not private – ERR_CERT_COMMON_NAME_INVALID

It means:

- The SSL certificate is issued for **tableau.sterliteapps.com**, not for the IP **35.200.189.61**.
- That's expected: **certificates work for domain names**, not raw IPs.

Access the server using the domain (<https://tableau.sterliteapps.com>) — it will work securely **only if SSL is configured properly**.



2. What Likely Happened Internally (Setup Overview)

Your organization likely followed these steps to create the enterprise Tableau Server setup:

Step	What Was Done	Where
1.	Created a GCE VM with Linux/Windows	Google Cloud
2.	Installed Tableau Server on it using <code>.exe</code> or <code>.rpm</code> installer	Inside the VM
3.	Configured a static external IP	Google Cloud
4.	Mapped domain <code>tableau.sterliteapps.com</code> to that IP using DNS	DNS provider
5.	Installed an SSL certificate (Let's Encrypt or paid)	VM: <code>/etc/ssl/</code> or in TSM settings
6.	Opened required ports (<code>80, 443, 8850+</code>) in firewall rules	Google Cloud firewall
7.	Enabled Tableau licensing, authentication (LDAP/SSO)	Tableau Server configuration

3. What You Can Check (If You Have Access)

If you have **SSH or RDP access to the VM**, or are working with DevOps/Infra teams, here's what you can explore:

- ◆ **OS Type:**

- Run: `uname -a` (Linux) or check version (Windows Server)

- ◆ **Installed Tableau Path (Linux):**

- Usually in `/opt/tableau/tableau_server/`

Check config with:

```
bash
CopyEdit
tsm status -v
```

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- ◆ **Tableau Configuration:**

- Run: `tsm configuration get -k` for keys
- View services: `tsm status`
- Port config, SSL certs, repo, etc.

◆ **SSL/Cert Files:**

- Check in `/etc/ssl/` or Tableau's cert config
- May use `fullchain.pem`, `key.pem`, etc.

◆ **Application Logs & Assets:**

Location	Purpose
<code>/var/opt/tableau/tableau_server/data/tabsvc/logs/</code>	Service logs
<code>/var/opt/tableau/</code>	Extracts, storage
<code>/opt/tableau/tableau_server/packages/</code>	Installed packages

💡 **4. Things Deployed on the VM:**

Typically on the **Tableau Server VM**, you'll find:

Component	Description
Tableau Server	Core app (viz engine, repo, gateway, etc.)
TSM (Tableau Services Manager)	Admin tool to configure/monitor
PostgreSQL Repo (internal)	Stores metadata, workbook info
User data storage	Extracts, published dashboards
SSL certs	For HTTPS setup

Scheduled tasks	Extract refreshes, subscriptions
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5. If You Want to Learn as a New Joiner

Here's what you can do to explore further:

Basic Checks:

- Ask infra team: "Where is Tableau Server installed? Can I view server settings or TSM?"
- Ask for read-only access or a demo of the deployment.
- Try logging into <https://tableau.sterliteapps.com> as a **Tableau Server Admin** or **Explorer** to see workbooks, projects, etc.

Learn These Tableau Server Concepts:

- TSM (Tableau Services Manager)
- Gateway, Repository, VizQL server
- Site vs Project vs Workbook
- User roles (Viewer, Explorer, Creator)
- Scheduled extract refreshes

1. TSM (Tableau Services Manager)

- **What it is:**
TSM is the **administrative interface** for Tableau Server. It allows you to configure, manage, and monitor your Tableau Server deployment.
- **What it can do:**
 - Add or remove server nodes
 - Configure SSL, ports, and security
 - Start/stop server processes
 - Automate backups and maintenance
- **Used by:** Server administrators

- **Accessed via:** Web interface, CLI (`tsm` command), or REST API
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2. Gateway, Repository, VizQL Server (Core Tableau Server Components)

Component	Purpose
Gateway	It's like a traffic controller . Handles incoming requests (HTTP/HTTPS) from users and directs them to the right internal process.
Repository (PostgreSQL / pgsql)	Stores metadata: users, workbooks, permissions, schedules. This is the " brain " of Tableau Server.
VizQL Server	Converts user actions (like clicking a dashboard) into SQL queries, sends them to the database, and renders the visuals . This is the " visual engine ".

3. Site vs Project vs Workbook (Content Hierarchy)

Level	Description
Site	A completely isolated area for users/content (used by big orgs with multiple departments or clients). Separate users and content.
Project	Like a folder within a Site. Used to organize content (e.g., by department, team, or function).
Workbook	Contains dashboards, worksheets, and stories. This is the actual visualization file shared with users.

4. User Roles

Role	Capabilities
Viewer	Can only view dashboards , no editing or downloading
Explorer	Can interact , filter, drill down, and even create/edit dashboards (but not connect to new data)
Creator	Full access: create dashboards, connect to data sources, publish content

Think of them as:

Viewer = Read-only

Explorer = Power user

Creator = Developer/Analyst

✓ 5. Scheduled Extract Refreshes

- **What:** Automatically refreshes data in published Tableau **extracts** (TDE/Hyper files) on a **schedule**.
 - **Why:** Keeps dashboards updated without manual effort.
 - **How:**
 - Set up via Tableau Server or Tableau Cloud
 - Requires Data Management capabilities
 - Can send email alerts on failure
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◀ Summary (In Your Words)

“Our enterprise Tableau app is hosted on a Compute Engine VM in Google Cloud. The domain tableau.sterliteapps.com points to the VM’s IP, and Tableau Server is installed there. The domain uses SSL, so direct IP access shows a browser security error. I’m trying to understand the server’s structure, cert setup, and deployment flow so I can troubleshoot and support it better.”

✓ Your Tableau setup:

- Hosted on a VM (Compute Engine) in Google Cloud (GCP)
 - You've mapped it to a domain: <https://tableau.sterliteapps.com>
 - You're managing its installation, SSL certs, and infrastructure
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So, your Tableau is:

Tableau Server (NOT Tableau Online)

Why it's Tableau Server:

Feature	Your Setup
Installed on your own VM	<input checked="" type="checkbox"/> Yes (on GCP)
Custom domain (sterliteapps.com)	<input checked="" type="checkbox"/> Yes
You maintain infra, certs, updates	<input checked="" type="checkbox"/> Yes (via your team or DevOps)
Private/internal network or DB access	<input checked="" type="checkbox"/> Likely (enterprise setup)
Managed by Salesforce/Tableau?	 No — you manage it

Tableau Online would be:

- Hosted **entirely by Tableau/Salesforce** on their servers
- Accessed via a URL like <https://<your-site>.online.tableau.com>

- No VM, no IP, no SSL config from your side
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Final Answer:

Your setup (tableau.sterliteapps.com hosted on a GCP VM) is a **self-hosted Tableau Server deployment** — specifically on **cloud infrastructure (GCP)**, but still considered **Tableau Server**.

Let me know if you want a **visual diagram of this deployment flow** or tips to **manage your Tableau Server VM efficiently!**