

Tableau file types, extensions and different versions

1. Tableau Workbook (.twb)

This file type is probably the most common that you will see and create when working with Tableau. It is in XML format (try editing it in a text editor) and contains all the information on each sheet and dashboard that is contained within your workbook.

To create a .twb file, from Tableau Desktop, select File > Save

2. Tableau Packaged Workbook (.twbx)

Packaged Workbook however, combines the information in a workbook and bundles it with any local data—i.e. data that is not on a server. You can think of it as a zip file, and indeed if you rename the .twbx file as a .zip you can open it with windows to see the .twb and the corresponding data files.

To create a .twbx file, from Tableau Desktop, select File > Save As and then select the .twbx option from the dropdown menu at the bottom of the Save As dialogue box

3. Tableau Datasource (.tds)

When you connect to your data for the first time, you may have a little bit of data ‘modelling’ to do – setting the right data types, changing default aggregations, setting default colours, creating some custom calculated fields etc etc. You are giving Tableau information about the data you will be using – you are setting up its ‘metadata’. When you want to connect to this data again, you don’t want to really go through all this data modelling a second time so instead you can save your metadata as a .tds file (again, it is saved in XML format) and connect to your data though this file instead.

To create a .tds file, from Tableau Desktop, right click on your data source connection and select Add to Saved Data Sources. Alternatively you can publish the .tds to Tableau Server by right clicking and selecting Publish to Server instead.

4. Tableau Data Extract (.tde)

Tableau Data Extracts are highly optimized, highly compressed, subsets of your data stored in a columnar database file. When you connect to data using Tableau you can either connect ‘Live’ or you can extract the data into a .tde. Data extracts are used to radically improve performance, particularly when connecting to slow databases or slow files (e.g. CSVs), as well as enabling additional functionality (try doing a count distinct whilst connected live to Excel) and offline analysis.

To create a .tde file, when you first connect to data, chose the Import all data or the Import some data option. If you are already connected live, right click on your data source connection and select Extract Data.

5. Tableau Bookmark (.tbm)

This file is a bit like an export of one single worksheet, which you can then import into another workbook to save you recreating the view from scratch.

To create a .tbm file, click Window > Bookmark > Create Bookmark. To reuse a bookmark, click Window > [bookmark name]. Note that you cannot create a bookmark from a dashboard page

6. Tableau Map Source (.tms)

When plotting maps with Tableau, the software will connect to its mapping provider (Urban Mapping) to load the relevant map tiles in the background to plot your data points against. From the Map menu in Tableau Desktop, you have the option to add your own WMS server so that images from this source are loaded, rather than images from Urban Mapping. After you have added a new mapping source, you can share this set up with others by creating a distributing a Tableau Map Source file.

To create a .tms file, click on Map > Background Maps > WMS Servers and from the WMS Server Connections dialogue window, select Export. If you want this mapping source to always be available to your workbooks, add the .tms file to your Map sources directory within My Tableau Repository

7. Tableau Preferences (.tps)

The Tableau Preferences file can be used to create custom color palettes so that using consistent colors (e.g. your corporate color schemes) across all your workbooks is made easier. This file is kept in your My Tableau Repository directory and is held in XML format.

Tableau product

Server Part

Tableau Server

Tableau Server is a paid Server application which needs to be installed on a Windows or Linux server. This is used widely in the enterprise world. Usually there would be a dedicated admin team/person to take care of the memory, user management, data source management, folder management and other server related things.

Tableau Online

Tableau online is a paid server application too but it is already hosted by Tableau software and so no need to install on any windows server. It is better when you need the Tableau dashboards to be accessed from anywhere. It has almost all features of Tableau server but on the internet.

Tableau Public Server

Tableau Public server is a free server in the internet. This is the YouTube or BlogSpot in Tableau Data Visualization world. It is free and people post their ideas and visualization here. We call it the Visual blog. It has no user management or folder management options. You can hide your work though. It cannot have live data source but only extract. So many people publish their ideas and custom visualizations here. We could find the inspiration from here.

Developer Part

Tableau Desktop

Tableau Desktop is a paid desktop application. It is also called as Tableau Desktop Professional edition. This is where the developers create charts, formula, dashboards, actions and everything. It has 14 days trial too. The

dashboards we create here can be published to any Server listed above. It can be opened in Tableau reader. Read Tableau reader for more information.

Tableau Public Desktop

Tableau Public Desktop is a free desktop application. It is the developer place for Tableau Public server. It is free and has some limitations like cloud Save only, no live or database connection. They are widely used by learners, bloggers, public information related institution like media and etc.

Viewer Part

Tableau Reader

Tableau Reader is the free desktop application which can help us to view the Tableau dashboards created by Tableau Desktop. It supports only extract connection files. It can help new people to try Tableau by getting one license for Tableau Desktop and installing this free software on their end user's machine. It can open the dashboards, interact with them like filtering, tooltip and parameters. We cannot edit the formula or charts here.

Tableau Mobile

Tableau mobile is a mobile application. It is available in iOS and android. It can connect to Tableau server or Tableau online. It is just like Tableau Reader but for mobile. It can help to interact and view dashboards which are published to Tableau server or Tableau online.

Data Preparation Part

Tableau Prep builder

Tableau Prep builder is a new product of Tableau. It helps developers to cleanse, blend and wrangle the raw data. It is a mini ETL (Extraction, Transformation and Loading) tool which can connect to different database, join the data, transformation over the data and save the file as output. It can be automated and help developers to avoid redundant manual data manipulation.

Versions	Year	Feature Added
10.0	August 15, 2016	Leveraging site SAML (Security Assertion Markup Language) on Tableau server based on a user now became possible. New administrative views gave insight into the licensing and usage of Tableau Desktop .
10.1	November 1, 2016	Geocoding is a very important feature introduced. It essentially means that IATA and ICAO codes are now recognized by Tableau and airports could now be mapped easily. Analysis of continuous fields was taken to another level by facilitating drill-up . This could help createdynamic and out-of-the-box visualizations.
10.2	February 28, 2017	It brought useful improvements to the Marks card . Now, all the pills could be viewed at a glance without requiring scrolling. In the context of graphs, now separate legends could now be created for individual measures .
10.3	May 31, 2017	<ul style="list-style-type: none">· Data could be loaded faster on workbooks from Tableau server. This was due to the automatic pre-caching of queries.□ Tableau Bridge facilitated connecting live on-premises data from Tableau Online thus making users employ cloud functionality.

10.4	September 25, 2017	<ul style="list-style-type: none"> <input type="checkbox"/> Now, analysts in a team using Tableau could collaborate and discuss upon analysis, certain specific points using the tool. This was facilitated by real-time conversations functionality offered by the tool. <input type="checkbox"/> Tableau started supporting Okta Mobile Connect, increasing the scope of Tableau-based mobile analytics making it more versatile. <input type="checkbox"/> Data virtualization now became possible facilitated by the Denodo connector. This facility opened new doors for analysis with virtualized data.
10.5	January 10, 2018	<ul style="list-style-type: none"> <input type="checkbox"/> A feature by the name of Hyper is Tableau's attraction in this version. An in-memory data engine technology, it made operations pertaining to complex data sets faster. <input type="checkbox"/> Power trend lines a very crucial data analysis tool when working with any type of data is an important feature of this version. <input type="checkbox"/> It facilitated developers and users to create nested projects. Using the functionality, projects could be nested based on permission levels set as per the requirement. This enabled us to have a systematic structure for having projects. <input type="checkbox"/> Tableau server could now be used over the Linux operating system. Features of both Tableau, as well as Linux, could now be leveraged for analysis.
2018.1	April 24, 2018	<ul style="list-style-type: none"> <input type="checkbox"/> Step and Jump Lines a very important concept in the analysis was introduced. The tool offers high-value insights and visualizing depicts a trend. <input type="checkbox"/> A very powerful concept brought was establishing the connection from SQL server to spatial data. This opened a new avenue for deeper analysis, as custom SQL could now be leveraged to derive deeper insights from spatial data. <input type="checkbox"/> Clustering was made advanced by the addition of a clustering functionality. The functionality overcame earlier static character of saved clusters which now changed as the data refreshed.
2018.2	July 30, 2018	<ul style="list-style-type: none"> <input type="checkbox"/> Joining datasets based on location element, when it happens to be the only common amongst them, now became possible. This proved useful in the context of spatial data. <input type="checkbox"/> Nested sorting as an advanced option in sorting is a powerful analysis feature offered here. <input type="checkbox"/> Mobile-friendly dashboards could now be built easily. This turned out to be useful for business users, who could now build the dashboards using automatic table layouts in just a few seconds. <input type="checkbox"/> A very important feature is ISO-8601 standard weeks. The feature could be now used with calendar-based calculations and visualizations and thus made the analysis more standard. <input type="checkbox"/> When working with a log axis in advanced calculations, negative values could now be shown on a log scaled axis.
2018.3	October 29, 2018	<ul style="list-style-type: none"> <input type="checkbox"/> A very powerful tool incorporated in this version was heatmap. Heatmap is a special type of visualizing data that combines the features of scatterplot along with color combinations based on variable values. <input type="checkbox"/> Dynamic actions now became possible. So, visualizations could be changed in real-time just by selecting or clicking over a portion of the map. Further, navigation between the sheets became much easier. <input type="checkbox"/> Connectivity with R now became more secure. This was facilitated by SSL/TLS secured connection for integration or RServer with Tableau.
2019.1	March 26, 2019	<ul style="list-style-type: none"> <input type="checkbox"/> This version offered a natural language-based functionality which is "Ask Data". Using Ask Data, insights can be produced from data by asking questions. <input type="checkbox"/> The mixed content type is the feature that allows viewing data sources and workbooks on the same page. <input type="checkbox"/> Exporting the insights to PowerPoint is facilitated to build highly interactive and insightful presentations.

2019.2	May 21, 2019	<ul style="list-style-type: none"> <input type="checkbox"/> Amongst the new features, the most notable pertains to parameters. These parameters can be made dynamic that governs calculations and filters thus driving the visualization accordingly. <input type="checkbox"/> A vector map is another exciting feature. The feature offers sharp and smoother map-based visualizations.
2019.3	September 2019	<ul style="list-style-type: none"> <input type="checkbox"/> One of its special features is the Tableau Catalog. The catalog allows you to have a complete view of how the data is connected with the analytics. This is important as analytics created offers insights into what section of the data is important to a particular user. <input type="checkbox"/> This version has a Tableau Server Management Add-on. This feature essentially allows execution at a greater scale facilitating increased manageability. It incorporates performance monitoring and content management features also. <input type="checkbox"/> It offers analytics based on statistically significance, leveraging powerful concepts like AI in order to get deeper insights and arrive at the right results.
2019.4	October 2019	<p>View recommendations: View recommendations are personalized suggestions that instantly connect you to relevant data and content on your site. Powered by machine learning, these recommendations match preferences between users, surfacing content that others like you have found interesting or useful, including what's most popular and recent.</p> <p>Table improvements Now you can create tables with up to 50 columns with the ability to scroll horizontally. For flat tables, sort entire columns by dimensions and discrete measures across multiple panes.</p>
2020.1	February 2020	<p>Dynamic parameters Say goodbye to republishing workbooks with parameters every time the underlying data changes. Set your parameter once, and Tableau will automatically update the parameter's list of values every time someone opens the workbook.</p> <p>Viz animations Viz animations help you see and understand your changing data. It's easy to track the logical steps behind data's evolution and tell powerful data stories. Sorting, filtering, adding fields, and other actions will now smoothly animate your visualizations. Choose whether to turn Viz Animations on or off, and decide how you'd best like to apply animations to your new workbooks.</p> <p>Buffer calculations Buffer calculations allow you to visualize the distance around point locations. Give Tableau three parameters—location, distance, and a unit of measure—and a buffer, or boundary is instantly created.</p>
2020.2	May 2020	<p>Relationships Combining data just got easier and more powerful. By visually creating logical relationships between tables, Tableau will only query the data relevant to your analysis at the right level of detail.</p> <p>Metrics Metrics are a simple way to get a curated and consistent view of your most important KPIs. Create a metric from nearly any Tableau dashboard with a single click and view your metrics across multiple dashboards in one spot - either on the web or the Tableau Mobile app</p> <p>Set control The set control allows users to dynamically change the members of a set using a familiar, quick filter-like interface. End users can change set membership with both a single and multi-select dropdown, and the set control automatically refreshes its domain so that the data stays fresh.</p>
2020.3	August 2020	<p>Write to external databases in Tableau Prep Store your prepped data from Prep Builder in a central location that can be leveraged throughout your organization. Govern and scale the investments you've</p>

		<p>made in your databases by providing a visual and direct field mapping experience to ensure your prepped data ends up where it should be.</p> <p>Grant license on sign in</p> <p>We're making it easier to optimize your organization's seat investment, extending the value of Tableau to more users. Site admins can now designate members—specific individuals, teams and departments, or even your entire organization—to be automatically granted a site role (Viewer, Explorer, Creator) upon their first time logging in to their Tableau Online or Tableau Server account.</p>
2020.4	December 2020	<p>Tableau Prep Builder in the browser</p> <p>Tableau Prep Builder in the browser allows you to prep your data from wherever you have access to a browser, bringing the data prep process into one integrated platform on the web. No need to manage individual desktops, IT admins can now upgrade the server to get everyone in the organization on the latest version.</p> <p>Multiple marks layer support for maps</p> <p>Enhance your geospatial analysis with multiple marks layer support for maps. You can now add unlimited marks layers from a single data source to your map visualizations, bringing multiple spatial layers and context together for better understanding and analysis. This release also brings Redshift spatial support, offline map support in Tableau Server, and spatial support in Tableau Prep.</p> <p>Resource Monitoring Tool for Tableau Server on Linux</p> <p>Previously available for Windows only, Resource Monitoring Tool now provides agent-based monitoring of your Tableau Server on Linux deployment as part of the Server Management Add-on. Proactively monitor and troubleshoot server health with improved visibility into hardware and software performance.</p>
2021.1	March 2021	<p>Einstein Discovery in Tableau</p> <p>Einstein Discovery in Tableau brings trusted, intuitive predictions and recommendations from Einstein Discovery to every Tableau user across your organization. Get smarter, guided decisions for every team with cutting-edge, augmented analytics in a no-code required, rapid iteration environment.</p> <p>Quick LODs</p> <p>Create Level of Detail expressions more easily. Use context menus or drag-and-drop a measure onto a dimension to automatically create a Level of Detail expression with the default aggregation.</p> <p>Unified notification experience</p> <p>Manage all of your notifications in the newly redesigned notification center within Tableau Server and Online. This dedicated space shows your shares, comments, extracts, and prep flows all in one place, consolidating all of the important changes across your organization. You can also control where you receive these notifications via preferences—directly in Tableau, email notifications, or both—helping you to never miss an important alert to take action</p>