Tableau Server 101
Tableau Server is a companion product to Tableau Desktop Professional Edition.

People using Tableau Desktop can create visual representations of data to answer simple to complex questions. These representations are called views. With Tableau Server, authors (super users) can then publish workbooks full of views so that others can see and interact with the data.

Tableau Server allows users to interact and edit the workbooks in the same way as one would using Tableau Desktop. However the user interface in Tableau Server is slightly different than the one for the desktop version.
How to Access Tableau Server

You must have an account on Tableau Server to both publish and browse. To request access to the University of Kentucky Tableau Server please complete the following form at go.uky.edu/GetTableau

Once your user account has been set up by an administrator you can access Tableau Server from a web browser using the following web address: https://analytics.uky.edu
Sign In

The Tableau Server username/password is based on your Link Blue ID.

After you type your username and password, click Sign In.

Remembering your Username

Selecting the Remember me checkbox on the Tableau Server Sign In page will automatically fill in your username every time you visit the server. This option makes it easier for you to quickly access your account. You will still need to type your password on each visit in order to sign in.

When Remember me is selected at sign-in, Tableau Server creates a username cookie to remember you when you return to the site from the same computer. To stop automatically filling in your username, clear your browser cookies.

Tableau Server always stores a session cookie when you sign in, whether or not you've also selected Remember me. For this reason, your browser must be configured to allow first-party cookies.
Projects - Each college/organizational unit is assigned a project folder.

The project folder contains the Tableau workbooks that have been created using the desktop version and published to Tableau Server.

Each authorized Tableau Server user should see a project folder for their college/organizational unit, the Open Labs folder, and the Student Reports folder.

The Open Labs project contains example worksheets created during the Open Labs.

The Student Reports folder contains examples of workbooks that have been approved for data accuracy. These reports can be copied into your main project folder to edit and enhance for your specific needs.
Workbooks are contained within a Project.

A Workbook is a collection of Views (also called worksheets/dashboards).

When publishing to Tableau Server, you can elect to display one or more of the Views in a Workbook (assuming you have more than 1 worksheet and/or dashboard). Any Views you select to display are put out on the Server and can be accessed by a specific URL from within your network.
Views are the worksheets/dashboards that are part of a Workbook. The example to the left shows all the views (99) contained within the 16 Workbooks that are part of the 2 Projects.

The example shows that Tableau Server can contain hundreds of Views. Tableau provides a few options to display, filter, and/or sort the Projects, Workbooks, and Views.

Filters - Multi-faceted search filters on the left hand side, help you find content on the server. For example, you can search first by publisher, then narrow your search further by using date.
If there are multiple pages, you can advance through the pages using the Next and Previous links at the bottom of the page. Alternatively, you can jump to a specific page by typing the page number into the text box and pressing Enter on your keyboard.

You can increase or decrease the number of items shown on each page by entering the number of items you want to see and pressing Enter.
As you browse Tableau Server you will notice that items are either displayed as thumbnails or in lists. Icons at the top of Workbooks and View pages let you specify whether contents should be displayed as lists or as thumbnails.

You can quickly toggle between these two states by clicking the list and thumbnail icons.
Depending on the type of items you are listing, you may be able to sort by the following categories: Name, Project, number of Sheets, the last Modified date, and Publisher. How you sort depends on whether you are looking at thumbnails or a text list. A sorted list is grouped by the selected category with titles showing the different groupings. For example, the view thumbnails below are sorted alphabetically in ascending order (A-Z), note that the sort arrow is pointing up.

Workbooks

Sort Thumbnails
In a text list, you can use the column heading to sort the list. Again the arrow indicates whether the items are sorted in ascending (up arrow) or descending (down arrow) order. Click the column heading you want to use to sort the list.

### Workbooks

<table>
<thead>
<tr>
<th>Name</th>
<th># Sheets</th>
<th>Size</th>
<th>Owner</th>
<th>Modified</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>CodeBook</td>
<td>2</td>
<td>222.1 KB</td>
<td>Rudick, Craig S</td>
<td>Dec 22, 2014 9:08 AM</td>
<td>Student Reports</td>
</tr>
<tr>
<td>Cohort Enrollment History</td>
<td>8</td>
<td>370.1 KB</td>
<td>Rudick, Craig S</td>
<td>Dec 22, 2014 8:58 AM</td>
<td>Student Reports</td>
</tr>
<tr>
<td>Institutional Enrollment</td>
<td>6</td>
<td>889.4 KB</td>
<td>Cruse, Mark D</td>
<td>Dec 19, 2014 1:16 PM</td>
<td>Student Reports</td>
</tr>
<tr>
<td>Course Enrollment Curves</td>
<td>3</td>
<td>1.9 MB</td>
<td>Rudick, Craig S</td>
<td>Nov 26, 2014 2:50 PM</td>
<td>Student Reports</td>
</tr>
<tr>
<td>Institutional Degrees Awarded</td>
<td>4</td>
<td>404.6 KB</td>
<td>Cruse, Mark D</td>
<td>Nov 15, 2014 10:58 AM</td>
<td>Student Reports</td>
</tr>
<tr>
<td>Institutional Retention Dashboard with Preliminary Data</td>
<td>6</td>
<td>1.6 MB</td>
<td>Rudick, Craig S</td>
<td>Oct 22, 2014 3:25 PM</td>
<td>Student Reports</td>
</tr>
</tbody>
</table>
You can mark any view or workbook to store it as one of your favorites so you can quickly find it in the future. Favorites are kept on the Favorites menu in the upper-right corner:

On the Favorites menu, views have icon and workbooks have icon. If you have a large number of favorites, you can use the scrollbar on the right to see all of them:
Add a Favorite

You can create a favorite from either the thumbnail or list view of the Workbooks and Views pages.

From the thumbnail view, create a favorite by hovering the cursor over a view or workbook and then selecting the Favorites star on the tooltip that appears:

From the list view, create a favorite by clicking the star next to the view or workbook you want to store as a favorite:
Opening a Workbook/View

Once you have located the workbook or view you wish to open, click on the workbook. In the following screen, click on a view of choice to open or any view will open the workbook and all the available views will be listed as tabs.
Navigating a View

1. The **Tableau logo** is a link to the Tableau Server home page.

2. The **workbook/view name**. The **star** to the left of the name is a link to toggle on the workbook/view as a favorite. The **Back link** will take you back to the views screen for the current workbook. The **Workbook link** will exit to the workbook screen.

3. The **Share** link presents the hyperlinks that can be copied into an email or embedded into a webpage to share the workbook/view. Anyone viewing a shared view must have an account on Tableau Server and permission to access the view.

4. **Remember my changes** - You may have a view you make the same changes to every time you open it. For example, you may apply a certain filter to only include data relevant to you, or you may sort a view differently than how it was published. You may also want to keep different versions of the same view—for example, one with two filters selected, and another with only one selected.

5. The **Edit** menu option opens the view in Tableau editor.
Navigating a View - center buttons

**Export** - This button exports the view as an Image or PDF. Alternatively, you can export the data as a Crosstab or a comma separated value file (Data) to view in Excel.

**Revert All** - If at anytime you want to restore the filters to how they were when the view was published, use the Revert All button. If you have implemented the Remember my changes option the view will be returned to those settings.

**Pause Updates** - As you interact with the view on the server, it will sometimes have to send a query to the data source to update the data in the view. If you are working with a dense view with a lot of data, a very large data source, or many filters the automatic update may take a long time. To avoid waiting for each update while you make several changes you can click Pause Automatic Updates on the toolbar. When you Resume Automatic Updates using the same toolbar button you only have to wait for a single query to the data source.

**Refresh Data** - If the data source is changed, such as new fields have been added or data values and field names have been modified, the view will reflect those changes the next time you load the page. However, you may need to manually update the view using the Refresh Data button on the toolbar. When you refresh the data, you clear any cache that may exist and retrieve the latest data from the data source. This option is different than the Pause Automatic Updates option, which still may load the view based on cached data. Depending on the size of your data source and the view, refreshing the data may take longer than other queries that operate on cached data.
Navigating a View - right side buttons

Subscribe - A subscription is a regularly scheduled email delivery of a Tableau Server view or workbook to subscribed users. When subscribers click the snapshot of the view or workbook in their email, it opens on Tableau Server.

Workbooks can be downloaded using the Download link. The downloaded workbook can be opened with a version of Tableau Desktop.
You may have a view you make the same changes to every time you open it. For example, you may apply a certain filter to only include data relevant to you, or you may sort a view differently than how it was published. You may also want to keep different versions of the same view—for example, one with two filters selected, and another with only one selected.

As you filter, sort, and interact with a view, a gray dot appears next to the Remember my changes option below the name of the view. The dot indicates that changes have been made. Use the Remember my changes menu to save your changes as a custom view.
Any custom views that you or others create will always be related to the original view. As the original view is updated or republished, customized versions of the view are also updated.

Click **Remember my changes**, then type a name for your custom view and click **Remember**.
Remember my changes

To make your custom view the one you see by default when you first open the view, select **Change default to <custom view name>**. The word (**Default**) displays to the right of the custom view’s name, indicating that this version of the view is your default.
Selecting the Edit option for the Enrollment by College Demo in Open Labs opens the Tableau Server editor.
The web authoring environment is similar to Tableau Desktop. The **Data window** appears on the left side, showing the names of the data sources included in the workbook, and the fields, parameters, and sets included in the active data source.

Likewise, in the main area, a **toolbar** appears across the top, **Marks card and Pages and Filters shelves** to the left of the view, and **Columns and Rows shelves** above the view. Any **sheet tabs** included in the workbook appear at the bottom of the view.

When you open a view for editing, you can edit the other views in the same workbook, but not dashboards or stories. You can also select the New Sheet tab to begin creating a new view.
While editing a view in Tableau Server, you can save or discard changes at any time, using the links above the view area.

When you save your work, even though you entered the authoring environment from a single view, the complete workbook is saved, including other views you may or may not have edited.

- **Save** overwrites the original workbook. Please do not use this option unless you are the original publisher of the workbook.
- **Save As** creates a new workbook in the same project.
- If you want to keep both the original version of a view and your edited version, use **Save As** to create a new workbook.
- If you select **Show sheets as tabs**, the workbook permissions override the permissions on individual views within the workbook, until the workbook is saved again without tabs.
- **Revert** discards edits and returns to the last saved version of the workbook.
- **Done** exits the authoring environment. If you have unsaved changes, you are prompted to save them. Please do not save unless you are the original publisher or have permission to alter the workbook.
At the top of the Data window is the available data sources for the workbook. If you are editing an existing workbook, there may be multiple data sources. Select a data source to see the dimensions and measures for that data source.

All data sources contain fields. These fields appear below the list of data sources in the Data window. Dimensions and measures always appear, other field types appear if they are present in the data source.

- **Dimensions** are fields that contain discrete qualitative data. Examples of dimensions include dates, student names, and class names.
- **Measures** are fields that contain numerical data that can be aggregated. Examples of measures include grade value, credit hours, and number of students.
- **Parameters** are dynamic values that can replace constant values in calculations, filters, and reference lines. Parameters may be present in workbooks that you edit, but you cannot create parameters.

To build visualizations, you drag fields from the Data window to the Rows and Columns shelves, the Marks card, or one of the other available shelves. For a demonstration, see Create a Workbook and Build a View.
Columns and Rows Shelves

Drag fields to the Columns shelf to create the columns of a table, or to the Rows shelf to create the rows of a table. You can drag multiple fields to either shelf as in the example above. To remove a field from the Columns or Row shelf, drag the field of the shelf or right click on the field and then select Remove.

Discrete values (typically, dimensions) are displayed in blue on the Columns and Row shelves; continuous values (typically, measures) are displayed in green.
When you are editing a view, you can use the toolbar at the top of the view to perform common actions.

**Undo/Redo**
Undo and redo an action or series of actions. You can undo or redo almost any type of change in the view by selecting these toolbar buttons.

**Pause Updates**
When you place a field on a shelf, Tableau generates the view by querying the data source. If updates seem slow when editing the view, you can pause updates while making a series of edits, then turn them on again.

**Swap**
This moves the fields on the Rows shelf to the Columns shelf and vice-versa. Most used with view types that are based on x- and y-axes.
Totals
You can automatically compute grand totals and subtotals for the data in a view. Select Totals to see four options:

- **Show Column Grand Totals** - Adds a row showing totals for all columns in the view.
- **Show Row Grand Totals** - Adds a column showing totals for all rows in the view.
- **Add All Subtotals** - Inserts subtotal rows and columns in the view, if you have multiple dimensions in a column or row.
- **Remove All Subtotals** - Removes subtotal rows or columns.

Show/Hide Labels
Select to show or hide marks labels in the view.

View Size
Use the options under View Size to change the proportions of your view within the browser window, and go back and forth between seeing details and seeing the whole picture. The Cell Size commands have different effects depending on the type of visualization.

Worksheet
Contains options for making changes at the worksheet level. Create worksheets, modify sheet names, clear sheet formatting, or clear the entire sheet.
Export

Use the options under Export to capture parts of your view for use in other applications.

**Image**: Displays the view, dashboard, or story as an image in a new browser tab.

**Data**: Displays the data from the view in a new browser window with two tabs: **Summary**, showing aggregated data for the fields shown in the view, and **Underlying**, showing underlying data for the selected marks in the visualization. If the new window does not open, you may need to disable your browser's popup blocker.

**Crosstabs**: Saves the underlying data for the selected marks in the visualization to a CSV (comma-separated values) file which can then be opened in Microsoft Excel.

**PDF**: Opens the current view as a PDF in a new browser window. From there you can save it to a file. If the new window does not open, you may need to disable your browser's popup blocker.

Show Me

Opens a control that shows a range of visualization types that you can use in Tableau. When you display the Show Me list, Tableau uses the data in the current view to determine which visualization types to make available for you to select. Among the available types, it draws a different color outline around the one that it determines is the best match for your data.

You can also hover over a visualization type to see what field types are required to make that visualization type available.
Questions?