Tableau
Site Administrator Training
Tableau Site Administration at Princeton University

Course Overview

Tableau Server Sites

Site Security

Permission Hierarchy in Tableau

CeDAR’s Role in Server and Site Maintenance
Course Overview

The goal for this course is to educate Tableau Site Administrators of best policies for user and content management at Princeton University. We will teach the skills needed to best manage your sites when adding new or maintaining existing users and posting content on the Tableau Server.

Upon successful completion each participant will have a clear understanding of:
- The Princeton University Tableau Server
- Tableau Site security
- How security works on Tableau Server
- How site roles interact with site permissions
- How groups control access
- When to make data sources available on the server
- The Princeton University Tableau Public Server

Please note that there is no preferred server when using the Tableau server. You may use IE, chrome or safari depending upon your personal preference.
Tableau Server Sites

A Tableau Server Site is a space that allows for isolation of content, data and user groups from others on the same server. Server administrators may create new sites when a need arises to share material restricted for use by a specialized group. Only the server administrators may see all sites and perform server-wide maintenance.

Each site is a separate space on the server. Users are defined and permissions are set specific to each site. Unless a user has been defined directly on a site, he or she will not be able to access the site. Additionally all server content is published, accessed, managed and controlled based on the corresponding site permissions. All site content, data and user lists are isolated from those on other sites and users may only access one site at a time.

Each user may belong to more than one site with different roles and permissions on each site. For example you might be a Viewer on the Registrar site but an Interactor on the Graduate School site. Though defined on both sites, the resulting interactions with the content will be different on the two sites. When logging onto the server, each user will have the option to choose from all of the sites to which they have access. Similarly when logged onto the server if a user has access to more than one site, there is an option to select from eligible sites.
Site Security

Here at Princeton, security on each site will be maintained by a local departmental site administrator. This designee will be responsible for defining and maintaining the site users and user groups. Responsibility will also extend to managing content on the site.

The first consideration comes when defining users on your site. Each user is primarily defined with a site role and there are several roles from which to choose.

Each role affords certain capabilities so care should be taken when selecting the role for each user. The permissions associated with the roles are described in detail below.

- **Site Administrator**
  Anyone with the Site Administrator role will be able to perform all actions on their site. This includes creation and maintenance of users, groups, and content. Because the permissions for all are explicitly allowed, no group assignment will change their current setting.

- **Publisher**
  The Publisher site role neither explicitly grants nor denies permissions thus allowing the group permissions to largely dictate what a user with this site role will be allowed to do on the site. In order to publish content from Tableau desktop to Tableau server, it should be noted that a user must have either an administrator role, publisher role or one of the two (can publish) roles described below.

- **Interactor**
Similar to the Publisher role, the Interactor site role neither explicitly grants nor denies permissions. The assigned group will therefore determine permissions the user will experience while logged onto the Tableau server. The exception being that this role does not have publishing rights and a user with this role will not be able to publish from Tableau desktop to the respective server site.

- **Viewer**
The Viewer site role explicitly denies all of the Interact group and all but save from the Edit group permissions. As a result, the user is limited to permissions within the View group and save.

- **Unlicensed**
The Unlicensed site role explicitly denies all but view from the View group, all of the Interact group and all but save and download from the Edit group permissions. Each of these permissions must be specifically granted by an assigned group in order for any user with this site role to gain access.

- **Viewer (can publish)**
This Viewer (can publish) site role shares the same permissions as the Viewer role except that a user with this role may also publish content to the server from Tableau desktop.

- **Unlicensed (can publish)**
Similar to the above role, the Unlicensed (can publish) role shares the same permissions as the Unlicensed role. The only exception is that a user with this role may also publish content from Tableau desktop.

- **Guest**
While a user is not added as a Guest, this is a special role worth noting. This role must be activated at the server level. With its activation, published workbooks may be accessed by individuals who do not log into Tableau. Instead special permissions are allowed. The role explicitly denies the ability to add comments from the View group, share customized and connect from the Interact group, and all but download from the Edit group. All other permissions may be granted by placement in a group or through custom settings.

The next consideration in user setup is group membership. While permissions can be set for individual users, groups assist in the management of permissions. Once users have been assigned to a specific group, they will adopt the permissions of that group within the confines or context of their site role.

As part of your site setup, CeDAR will create default security groups including Site Administrator, Site Publisher, Site Interactor Full, Site Interactor Light, and Site Viewer where Site will reference your specific Tableau Server Site name. You can then assign members to and set permissions specifically for each group at the project level in order to regulate access to the contents.

Since permissions are set specifically for each project on the Tableau site, we have some recommendations for best practices.

- **Site Administrator**
The Site Administrator group should be used to grant full administrative permissions to the project. This includes the content as well as the data sources. When editing permissions for the Project, select the Project Leader designation. This will ensure that all permissions are assigned for all three permission categories (Project, Workbooks and Data Sources).

- **Site Publisher**
  The Site Publisher group should be used to grant permission to publish new workbooks and to access data sources housed on the server and used when creating new workbooks from Tableau desktop. The recommended settings are Project Publisher, Workbook Interactor and Data Source Connector as shown here.

- **Site Interactor Full**
  The Site Interactor Full group should be used for those who need to fully access your workbooks, edit visualizations, and access the detailed data used. The recommended settings are for Project Viewer, Workbook Interactor and Data Source None as shown below.
• **Site Interactor Light**
  The Site Interactor Light group should be used for those who will interact with your visualization but not edit them and with whom you do not want to share detailed data. The recommended settings are for Project Viewer, Workbook Interactor and Data Source None.

![Permission Settings for Site Interactor Light](image)

Reviewing the detail permissions for the Workbooks, remove the ability to Download Full Data and Web Edit as shown below. You’ll note that the Workbook role now becomes Custom.

![Permission Settings for Workbooks](image)

• **Site Viewer**
  The Site Viewer group is used to grant permissions to published workbooks only at a non-interactive level. There will be no ability to work with filters, make comments or change any settings on a view in this group. The recommended settings are for Project Viewer, Workbook Viewer and Data Source None as shown below.

![Permission Settings for Site Viewer](image)

In addition to these standard groups, you may find that you have the need to have secured projects with access limited only to select users. If this is the case, simply define a new group (e.g. Sensitive Information Group) and set permissions only to this new group.

There is also the ability to use Active Directory groups. The benefit of using these groups is that they can be set at the server level to be synchronized on a regular schedule (hourly, daily, weekly, monthly) at a designated time. If these groups are maintained regularly, the changes will be reflected in Tableau.
Through synchronization, either on demand or on a designated schedule, new members of the Active Directory group will automatically be added to the site with the minimum site role of the group and associated with the group on the site. Similarly, users who have been removed from the group and are not in any other group on the site will have their site role set to unlicensed. Once changed to this site role, as the site administrator you may easily identify those who no longer belong on the server site. By reassigning ownership of any content tied to the unlicensed users, they may be removed from the site altogether.

The third and final consideration in determining access to content and general permissions is ownership. Content owners always have full access to content they’ve published. The only exception to this rule is when permissions have been locked to the project. If that is the case, the content owners will not be able to edit the permissions.
Permission Hierarchy in Tableau

As outlined in the previous section a user’s site role, content permissions and ownership all affect access and actions on the Tableau server. In this section the focus is the permission hierarchy and how permissions work together when set at the individual and group level.

**Permission Hierarchy**

When evaluating permissions to content, the first check is for explicit deny followed by granted permissions. The primary check is also for the specified user followed by the user’s group. If no permission is granted either individually or to a group in which a user is a member, no access will exist. The essence of these rules is outline and shown below.

Has the capability been specifically denied for this user?  
Yes -> Denied  
No -> Has the capability been specifically allowed for this user?  
Yes -> Allowed  
No -> Is the user part of a group where the capability has been specifically denied?  
Yes -> Denied  
No -> Is the user part of a group where the capability has been specifically allowed?  
Yes -> Allowed  
No -> Denied

The below diagram illustrates this flow as well.
CeDAR’s Role in Server and Site Maintenance

Where does CeDAR fit in the Tableau world at Princeton? CeDAR will host and ensure the Tableau server is up to date with the latest major, minor and maintenance releases allowing for an appropriate amount of time for problem resolution. When you need a site on the Tableau server, CeDAR will create the site, add the site administrator and train the administrator on how to best maintain the site and its content. Lastly, CeDAR will provide Oracle connected data extracts for warehouse data as needed and identified. Through providing the platform and resources needed, our goal is to offer an environment where our users may thrive with their use of Tableau.
Managing Your Server Site

As a site administrator, there are some important components that you’ll need to manage. What they are and how they should be used.

Users
Groups
Content
Schedules
Tasks
Site Status
Users

In order to access any content on your site, a user must first be defined. Additionally specific roles and group associations are assigned that regulate the details of what each person may see and do. As the site administrator, you will be responsible for maintaining this access.

Adding New Users

When adding users to a Tableau Server Site, you have several options. You may add users individually using their Active Directory ID (e.g. NetID), as a group using Active Directory Groups, or import a list of users using a csv file.

Active Directory Users

The first method for adding users to a site is to import them from Active Directory by entering their usernames. You can enter any number of users separating each with semicolons. Each will be assigned the site role you have selected for the import.
If you are unsure which role to choose when defining users, you can place your mouse over the icon next to the site role drop down. This will display a summary of the capabilities inherent in each role. The most common roles are described in a bit more detail along with examples of when each should be considered below.
Site Roles
When choosing the appropriate site role for new users, consider the functions each person will need to perform. There are four main roles from which you will choose when defining your users – Site Administrator, Publisher, Interactor, and Viewer. Using the following guidelines will ensure you are able to properly grant or restrict permissions within the site.

The **Site Administrator** role should be used only if a person needs to administer the site activities such as defining new users, maintaining existing users, and creating new projects. If this role has been given to a user, you cannot restrict access within the site. Any administrator will be able to perform these activities and will have access to all projects and content on the site. Therefore it really is reserved for true administrators.

The second option, the **Publisher** role, should be used only if you have users who will be posting content to your site. If someone has a desktop license and has created visualizations that you would like to include, they must have the Publisher role. With this role, there is still a good deal of flexibility in setup. You can restrict access to specific projects and activities within those projects based upon group membership.

The third option, the **Interactor** role, will likely be the most widely used as this role has the most flexibility. There are no permissions (except the ability to publish) implicitly denied by the role. Therefore once a user has been defined on the site, the group permissions can really define the user’s access and interact ability as needed.

The fourth and final option, the **Viewer** role, allows access but by definition limits activity the user may take. With the Viewer role, the permission to interact or save a view is implicitly denied. As a result no matter what other group permissions may be assigned, a user with this role will never be able to do anything but view site content within projects where access has been granted. This includes the ability to use any filters. Therefore, this role will likely not be as widely used as the Interactor role.

Once you have entered the usernames (netid) and selected the site role, click **Import Users**. Tableau will give you confirmation or will indicate if there was an error adding any of the users.

![User “abc” was not found in Active Directory](image)

![User “Data Warehouse and Integration (dwi)” has been added to the site.](image)

**Active Directory Group**
The second way to add users to a site is by adding the Active Directory Group to the server site. This can be beneficial if you have an existing, regularly maintained Active Directory group. All users from the group will be imported to your server site and assigned the minimum site role you have selected for the group. Therefore, it is important that you ensure the group is up to date.
When you start typing the Active Directory Group name, Tableau will automatically offer suggestions for matching Active Directory groups.

Once you’ve selected a group to be imported, you will be asked to select the site role to be assigned to the members of the group being imported.
There is one exception to the site role selection for the group. If a member of the group is already defined on the server site with a different site role, their role will only be changed to the selected role if it is one with greater permissions than their existing role. For example two users are currently defined on Site A, Zoe as a Viewer and Ziggy as a Publisher. You as the administrator decide to import Active Directory group X in which both Zoe and Ziggy are members. You select a minimum site role of Interactor. Upon completion of the import, Zoe will be an Interactor but Ziggy will remain a Publisher.

Import from File

The third and final way to define users on a site is to import a user list from a comma-separated value (CSV) file. If this method is chosen, it is important that the file be set up in the format Tableau is expecting. There should be no header row as Tableau Server assumes every row represents a new user. The file may contain the following fields. If there is more than one field included, they must be in the order designated below.

- Username – this is the Netid and must match against Active Directory. This is the only required field.
Tableau Site Administration

- **Password** – since we use Active Directory, any value supplied would be ignored. However a column needs to be included and left empty if any of the remaining fields are included in the file.
- **Full Name (display name)** – is used to identify the user on the server. Since we’re using Active Directory, this information will be ignored but a blank column should be included if any remaining fields are part of the file.
- **License level (Interactor, Viewer, or Unlicensed)** – this setting determines the role for a non-administrator user.
- **Administrator level (Site, or None)** – this setting determines whether the user is imported as an administrator.
- **Publisher permissions (yes/true/1 or no/false/0)** – this setting determines whether the user has publisher permissions.
- **Email address** – this is part of the information used to identify a user on the server.

Below is an example of what a CSV file might look like.

areporter, , ,Viewer,None,no,areporter@princeton.edu
bvisual, , ,Interactor,Site,yes,bvisual@princeton.edu
lotsainfo, , ,Interactor,None,yes,lotsainfo@princeton.edu
addanew, , ,Interactor,None,no,addanew@princeton.edu

After importing this file, the results would show:
areporter created as a Viewer on the site.
bvisual created as Site Administrator.
lotsainfo created as a Publisher.
addanew created as an Interactor.

For further details or assistance if you decide to use this last method, please contact CeDAR.

**User Actions**

Once users have been defined on a site, there are a few actions that may be performed on each user. These include editing group membership, changing the site role, removing the user from the site, and editing specific user settings.
Group Membership

The first of these actions is to edit a user’s group associations. A user may be a member of one or more site defined groups and is always a member of the All Users group. Since the groups will be used to control permissions to the content posted on the site, it’s important to ensure the correct group has been selected. To change the setting, simply click on the check mark next to the user or users, select Group Membership…, either add or remove the check mark next to the group as needed, and click Save to keep your changes.
**Site Role**

The second action you may take is to change a user’s site role. When a user is first defined on a site a role is assigned. You may find in time that you need to adjust this setting. If this is the case, first select the user or users, select **Site Role...**, select the new site role, and click **Change Site Role** to keep your changes.

![Site Role](image)

**Remove**

The third user option is **Remove**. If in time you find that a user should no longer have access to your site, you may remove that user (with exception of server administrators). To do this first select the user or users you would like removed from the site, select **Remove...**, and click **Remove** to finalize the action.

As noted earlier, if the user owns any content on the site you’ll first need to reassign the content prior to removing the user. If not, the user’s role will be changed to unlicensed preventing the user from accessing the site but the user will not be removed. You can complete the removal of the user once the ownership has been resolved.

![Remove](image)

Finally and very rarely, you may find that you need to change certain user settings. If you click on the user’s name within the user listing, you can then access the user’s settings. Here you may change the
email address, language preference (e.g. English, German, French, etc.), and locale (e.g. English (United States), English (United Kingdom), etc.).
Groups

Groups provide an easy way to coordinate setting permissions on the Tableau server. By adding users to a group, you can set the permissions once for all group members rather than having to add and adjust settings for each user one at a time.

When creating your site, CeDAR will define default groups on your site to be used for the basic site permissions including Site Administrator, Site Interactor Full, Site Interactor Light, Site Publisher, and Site Viewer. As the administrator, you should add each of your site users to the relevant group and set permissions for your content using the defined groups. Additionally if you find a need to secure content to a subset of your site users, you should create a new group or groups to include only the appropriate users and set permissions accordingly.

Adding Groups

There are two options for adding new groups to a Tableau server site, Local Group and Active Directory Group.

**Local Group**

Adding a Local Group creates a new group of a name you choose on the server site. Since the group will be used to set permissions for your content, it’s a good idea to choose a name relevant to the purpose of the group.
Active Directory Group
The second method for adding a group to the Tableau server site is to import the group from Active Directory. This is actually the same function described in the User section, and the result is twofold. The Active Directory group will be defined on the Tableau server site. In addition all users within the Active Directory group will be added as site users with the selected minimum site role and as members of the group.

When you start typing the name of the Active Directory group, Tableau will search for matches and will offer suggestions for eligible matches. The list will narrow with each letter to return only matching results.

Once you’ve selected the group you want to import, you will be asked to select the minimum site role. Once selected, click **Import** to complete the process.
Upon completion of an import, you will receive a confirmation message indicating that the group has been added, the number of members added to the site, and site roles updated.

Once added, your groups will be displayed on the Groups home page. In the list, the Domain will indicate the group’s origination. You will quickly be able to see which groups were defined locally vs. which groups were sourced from Active Directory. There will also be a count of the number of group members. Finally, Active Directory Groups will also show the defined minimum site role for the group.
Group Actions
Once added, there are several actions that may be performed on Groups. Some options differ depending on whether a group is locally defined or imported from Active Directory. However for all groups, you may review the membership by clicking on the group name.

If a group has been locally defined, your options are limited to Rename and Delete.

**Rename**

Rename means just that, changing the current name of the group.

Enter a new name for the group "Site Interactor Full".

Site Interactor Full

[Cancel] [Rename]
**Delete**

Delete is the same whether a locally defined or Active Directory group so will be described together after the actions unique to Active Directory Groups.

If a group has been imported from Active Directory, the options are to Synchronize, set the Minimum Site Role, and Delete.

![Example screenshot of group management options](image)

**Synchronize**

The Synchronize option for Active Directory groups will update the group with the membership details from Active Directory. This may be performed on demand at any time by selecting the group name and choosing the Synchronize option.

![Synchronize dialog box](image)

Specifically synchronizing the group will add new members, remove anyone who is no longer a member of the group from the group, and update the minimum site role for group members if the new role has greater permissions than their previous site role.

Your server administrator may also choose to have Active Directory groups synchronized on a regular schedule (e.g. daily, weekly, monthly). Since this is a server-wide setting, it is not something that can be changed for your individual site. When scheduled synchronization runs, the result is the same as when you synchronize on demand.

The second option for Active Directory groups is to change the Minimum Site Role. This changes the role for new users added to the group and will affect current group users during the synchronization process if the new role has greater permissions than the role previously assigned.
Please note, that making this change will not automatically change the role of users in the group already defined on the site. You must synchronize the group to have the new role potentially affect existing group members. Additionally once a person has been defined on the site if you want to narrow permissions, you will need to make this change to the site role directly against the user’s profile.

**Delete**

One final action for Group maintenance that can be taken for both locally defined and Active Directory groups is **Delete**.

Deleting a group simply removes the group definition from the Server site. This does not remove the group’s members. In order to remove the members, you will need to intentionally remove them from the user listing.

**Group Details**

There is only final activity on the Group home page. You can review each group’s details and member listing. To do this, click on the group name. This will bring you to a list of all users within the group.
For all groups, you can add new users to the group. Clicking on **Add Users**, you will see a list of all users defined on the site with those currently in the group indicated with a checkmark. Simply select the users you want to add and **Add Users**.

<table>
<thead>
<tr>
<th>Display name</th>
<th>Username</th>
<th>Site role</th>
<th>Last signed in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognos Virtual View Manager</td>
<td>informix</td>
<td>Interactor</td>
<td>Jan 29, 2016, 1:36 PM</td>
</tr>
</tbody>
</table>
Additionally within the group member listing you can select each user or a group of users by clicking on the checkbox next to the user name. Actions available include editing **Group Membership**, **Site Role**, and **Remove** for all selected users. Remove is different in this context in that it refers only to removal from the current group.
If you are working with a locally defined group, you will also have the option to **Rename** the group on this view.

Similarly, Active Directory Groups give the option to **Synchronize**.
Content

The main purpose of the Tableau Server Site is to provide a platform on which you can share your Tableau visualizations to a directed audience in a manner you have defined. To this end, understanding how you can organize your content is essential.

Projects

A Project is an organizational tool or compartment in which any content, workbook or data source, will reside. Projects are defined on the server in contrast to server content which is created in Tableau desktop and published to the server.

Default Project

When a new site is created, Tableau automatically creates a default project. You cannot rename or delete this project but can change the permissions, description, or the owner.
Since the permissions of this default project will be copied to any new project created, it is important to consider the initial setup. CeDAR will deliver each new site with standard default permissions set for each group in your default project.

**Adding Projects**

**New Project** allows for the creation of new Projects on the site.
In order to create a new project a name is required. An optional description may also be included and formatted with specialized options including bold, italics and underline. You may also include external web links.

Once desired details are included, clicking **Create** adds the new project.
Project Actions

Once created there are several actions that may be taken against a Project including setting Permissions, Renaming, Changing the Description, Changing the Owner, and Deleting the Project. Each of these actions either changes who has access to perform actions against the project itself or the content housed within the projects or assists in providing the best information about the content for optimal access.

Placing the mouse over the project, three dots will be displayed on the upper right corner of the project. Clicking on these will display the Project actions.

Permissions

The first action, Permissions, controls who will be able to view and access content within the project. As they are quite complex, the next section of this document is devoted entirely to explaining the intricacies involved.

Rename and Edit Description

The second and third actions, Rename and Edit Description, allow for the customization of the Project display. These options are available to Administrators and users with Project Leader permissions against the Project. The name should be succinct yet applicable to the project contents and the description can provide more detail for the report consumers.

Rename changes the name or title of the project.
The description is changed by navigating to the project details. To do this click on the project to select it. Then click on Details.

Once viewing the Details, choose Edit Description. Note: additional options exist within project details including Change Owner or Delete Project.

From Edit Description, the same options exist as did on project creation to customize the display. You can add links and specialized font including bold, italics and underline.
Change Owner
The fourth project action is **Change Owner**. With this option, you may change the project ownership to any other administrator defined on the server site.

Delete
The fifth and final action is **Delete**. Taking this action will remove the project and any contents within the project from the server site.
Managing Permissions

Permissions control what site users can do and see so a clear understanding of these is essential in the management of a site. On Tableau server, these are set by administrators or users with the project leader role at the Project or content level including Data Source, Workbook, or View. In order to simplify management and avoid potential errors, the recommendation is to retain control at the project level by locking the permissions to the project. This essentially applies the permissions set for the project to all of its contents.

Locking Permissions to the Project
Clicking on the lock in the upper right corner of the Permissions window opens the Content Permissions dialog box.
Changing the selection and clicking **Save** will change this selection and update the lock image to appear closed.
Once permissions are locked to the project, workbook publishers will no longer have the ability to set unique permissions.

**Setting Permissions**

Permissions are applied to specified users or groups. By default, the group All Users is always defined and cannot be removed. Additional groups or users are added by clicking on the + Add a user or group rule link.

This will open a selection window where the list of available site groups or users is presented.

Once the group or user has been selected, the specific permissions must be set. By default, the setting is for None.
If permissions have been defined to a group, clicking on the group name will display all of the group members in the lower pane of the Permissions window.

In addition to adding new users and groups, available Permissions maintenance options include Edit and Delete. Through Edit, you may either change the selected role to another Tableau defined category or manually update specific permissions selections resulting in a custom setting. Delete allows you to remove the user or group permissions altogether.

Permissions Details
When defining permissions at the Project level, they are grouped into three categories: Project, Workbooks, and Data Sources. Clicking on the double arrows and expanding each section will show the permissions for the respective category. Additionally permissions specific to each user or group member, if permissions have been defined to a group, are displayed in the lower pane of the permissions window.

**Project Permissions**
The project level permissions control the ability to view and possibly edit content within the project. There are three project permissions available within this category. These include:
- **View** – allows users to see the project when logged into the server.
- **Save** – allows users to save content, workbooks and data sources, to the project.
- **Project Leader** – allows users to edit permissions, project details, and maintain content within the project.
If a user doesn’t have any of these permissions, they won’t be able to see the project at all. If the higher level project does not positively grant access, permissions to the contents are not evaluated and make no difference. Project permissions are therefore important when granting access to projects on your site.

**Tableau Packaged Project Roles**

Within Project Permissions, Tableau offers several default roles from which to select for each user or group. These include:

- **Viewer** – includes only the view permission.
- **Publisher** – includes both the view and save permissions.
- **Project Leader** – this is a special permission that grants all rights within the project.
- **None** – removes all permissions but doesn’t specifically deny any.
- **Denied** – specifically denies all permissions including view, save and project leader.

**Workbook Permissions**

Workbook level permissions control activities against the content, workbooks and views, within the project. These are further broken down into three categories including View, Interact and Edit. Within each category and in the order defined, these permissions allow users to:

**View**

- **View** – view the content on the server.
- **Download Image/PDF** – download each view as an image.
- **Download Summary Data** – view the aggregated data based on selections in the view and to download the data as a text file.
- **View Comments** – view comments associated with views in a workbook.
- **Add Comments** – add comments to views in a workbook.

**Interact**

- **Filter** – work with filters in the view, keep only filters, and exclude data.
- **Download Full Data** – view raw data behind each row in a view based on selections in the view and download the data as a text file.
- **Share Customized** – make customizations to views available for others to see.
- **Web Edit** – edit views in workbooks.
**Edit**

- **Save** – overwrite the resource on the server. This applies both to re-publishing from Tableau desktop and making edits on the Tableau server.
- **Download Workbook/Save As** – download a workbook from the server or save a workbook as a new workbook on the server.
- **Move** – move workbooks between projects to which access is allowed.
- **Delete** – delete the content from the server.
- **Set Permissions** – specify permissions for the content.

### Tableau Packaged Workbook Roles

<table>
<thead>
<tr>
<th>User / Group</th>
<th>Project</th>
<th>Workbooks</th>
<th>View</th>
<th>Interact</th>
<th>Edit</th>
<th>Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Users (3)</td>
<td></td>
<td>None</td>
<td>Custom</td>
<td></td>
<td></td>
<td>Managed by the owner</td>
</tr>
</tbody>
</table>

Within Workbook Permissions, Tableau offers several default roles from which to select for each user or group. These include:

- **Viewer** – includes all permissions in the View group but none in the Interact or Edit groups.
- **Interactor** – includes all permissions in both the View and Interact groups but none in the Edit group.
- **Editor** – includes all permissions in all three groups.
- **None** – removes all but doesn’t specifically deny any permissions in all three groups.
- **Denied** – specifically denies all permissions in all three groups.

If none of these meets your needs, you also have the option to manually override or set the permissions by clicking on the box below each permission indicator. This will change the role to **Custom**.

### Data Source Permissions

Data Source permissions control activities against the data sources, within the project. These are subdivided into two categories, Use and Edit. Within each category and in the order defined, these permissions allow users to:

**Use**

- **View** – view the content on the server.
- **Connect** – connect to the data source.

**Edit**

- **Save** – overwrite the resource on the server. This applies both to re-publishing from Tableau desktop and making edits on the Tableau server.
- **Download Data Source** – download the data source from the server.
• **Delete** – delete the content from the server.
• **Project Leader** – set permissions for the data source.

**Tableau Packaged Data Source Roles**

Within Data Source Permissions, Tableau offers several default roles from which to select for each user or group. These include:

- **Connector** – includes only the permissions in the Use group, View and Connect.
- **Editor** – includes all permissions against the data source from both the Use and Edit groups. This includes View, Connect, Save, Download, and Delete.
- **None** – removes all but doesn’t specifically deny any permissions from either group.
- **Denied** – specifically denies all permissions in both groups.

If none of these meets your needs, you also have the option to manually override or set the permissions by clicking on the box below each permission indicator. This will change the role to **Custom**.

**Setting Permissions for Individual Content**

If the permissions have not been locked to the Project, permissions may be set at the individual workbook, view or data source level. This can be done either when publishing or directly on the server. The result of this level of permission setting is that content may be made available to selective users within a project. However as mentioned when introducing permissions, in order to avoid errors and to simplify maintenance it is advisable to retain control at the project level.

If you feel that this is something that needs to be done for your individual site, please contact CeDAR for further details and assistance.
Schedules

Schedules are created by the Tableau Server Administrator and may be designated as either Extract Refresh or Subscription with a frequency that can be designated to as Hourly, Daily, Weekly, or Monthly.

Extract Refresh schedules may be selected for either data sources or workbooks and Subscriptions may be selected for view delivery.
Site administrators may select and run one or more jobs.

<table>
<thead>
<tr>
<th>Schedule Name</th>
<th>Frequency</th>
<th>Task Type</th>
<th>Tasks</th>
<th>Execution</th>
<th>Next Run At</th>
</tr>
</thead>
<tbody>
<tr>
<td>End of the month</td>
<td>Monthly</td>
<td>Extract Refresh</td>
<td>0</td>
<td>Parallel</td>
<td>Mar 31, 2016, 11:00 PM</td>
</tr>
<tr>
<td>Monday morning</td>
<td>Weekly</td>
<td>Subscription</td>
<td></td>
<td>Parallel</td>
<td>Mar 14, 2016, 6:00 AM</td>
</tr>
<tr>
<td>Saturday night</td>
<td>Weekly</td>
<td>Extract Refresh</td>
<td>0</td>
<td>Parallel</td>
<td>Mar 12, 2016, 11:00 PM</td>
</tr>
<tr>
<td>Weekday early mornings</td>
<td>Weekly</td>
<td>Extract Refresh</td>
<td>0</td>
<td>Parallel</td>
<td>Mar 11, 2016, 4:00 AM</td>
</tr>
<tr>
<td>Weekday mornings</td>
<td>Weekly</td>
<td>Subscription</td>
<td></td>
<td>Parallel</td>
<td>Mar 11, 2016, 6:00 AM</td>
</tr>
</tbody>
</table>

The ability also exists to run a single job at a time.

<table>
<thead>
<tr>
<th>Schedule Name</th>
<th>Frequency</th>
<th>Task Type</th>
<th>Tasks</th>
<th>Execution</th>
<th>Next Run At</th>
</tr>
</thead>
<tbody>
<tr>
<td>End of the month</td>
<td>Monthly</td>
<td>Extract Refresh</td>
<td>0</td>
<td>Parallel</td>
<td>Mar 31, 2016, 11:00 PM</td>
</tr>
<tr>
<td>Monday morning</td>
<td>Run Now...</td>
<td>Subscription</td>
<td></td>
<td>Parallel</td>
<td>Mar 14, 2016, 6:00 AM</td>
</tr>
<tr>
<td>Saturday night</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mar 12, 2016, 11:00 PM</td>
</tr>
<tr>
<td>Weekday early mornings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mar 11, 2016, 4:00 AM</td>
</tr>
<tr>
<td>Weekday mornings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mar 11, 2016, 6:00 AM</td>
</tr>
</tbody>
</table>
Tasks
The Task menu is a place where the site administrator may review and update scheduled activities including Extract Refreshes and Subscriptions.

Extract Refreshes

<table>
<thead>
<tr>
<th>Content</th>
<th>Users</th>
<th>Groups</th>
<th>Schedules</th>
<th>Tasks</th>
<th>Status</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extract Refreshes</td>
<td>0</td>
<td>Subscriptions</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 0 selected

<table>
<thead>
<tr>
<th>Extract Refreshes</th>
<th>Subscriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workbook/Data Source</td>
<td>Refresh type</td>
</tr>
<tr>
<td>Schedule</td>
<td></td>
</tr>
</tbody>
</table>

No extract refreshes

Subscriptions

<table>
<thead>
<tr>
<th>Content</th>
<th>Users</th>
<th>Groups</th>
<th>Schedules</th>
<th>Tasks</th>
<th>Status</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extract Refreshes</td>
<td>0</td>
<td>Subscriptions</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 0 selected

<table>
<thead>
<tr>
<th>Extract Refreshes</th>
<th>Subscriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>User</td>
<td>Has a subscription to</td>
</tr>
<tr>
<td>Schedule</td>
<td>Last update</td>
</tr>
</tbody>
</table>

No subscriptions

Selections may be run, updated or deleted.

- Actions
  - Run Now...
  - Change Schedule...
  - Change Priority...
  - Delete...
Site Status

Each Tableau server site contains nine visualizations that facilitate analysis of site activity. Based on review of these reports, it’s easy to identify both popular content and potential issues. The specific areas of focus include traffic, actions, background tasks, load times and space usage. The specific reports are shown below.

<table>
<thead>
<tr>
<th>Views</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic to Views</td>
<td>View count, viewers, and viewer behavior for published views.</td>
</tr>
<tr>
<td>Traffic to Data Sources</td>
<td>Data source usage, users, and user behavior for published data sources.</td>
</tr>
<tr>
<td>Actions by All Users</td>
<td>Actions for all users.</td>
</tr>
<tr>
<td>Actions by Specific User</td>
<td>Actions for a specific user, including items used.</td>
</tr>
<tr>
<td>Actions by Recent Users</td>
<td>Recent actions by users, including last action time and idle time.</td>
</tr>
<tr>
<td>Background Tasks for Extracts</td>
<td>Completed and pending extract task details.</td>
</tr>
<tr>
<td>Background Tasks for Non Extracts</td>
<td>Completed and pending background task details (non-extract).</td>
</tr>
<tr>
<td>Stats for Load Times</td>
<td>View load times and performance history.</td>
</tr>
<tr>
<td>Stats for Space Usage</td>
<td>Space used by published workbooks and data sources, including extracts and live connections.</td>
</tr>
</tbody>
</table>