

# Configure Projects, Groups, and Permissions for Managed Self-Service

Tableau Online and Tableau Server each provide an environment for easy open publishing and collaborative analysis of visualizations created in Tableau Desktop or web authoring. With that flexibility comes the challenge of making sure the *right* content is easy to find for the people who rely on it for their work. Likewise, making sure the access you allow doesn't create performance or management nightmares on the site.

To address these challenges, many administrators set up their Tableau sites for what we'll refer to as *managed self-service*. This is just a way of saying that the site allows areas of open collaboration and web editing, alongside areas in which access to data and reports is more controlled. As the site administrator, you put guidelines in place to help users figure out where to go for the type of work they need to do.

To get started with a managed self-service approach, the following sections discuss how you as the site administrator can meet the following objectives:

- Create projects on the Tableau Server or Tableau Online site to match the ways people need to work with content.
  - For example, some projects are open to all for collaboration; others are visible only to authorized publishers.
- Create user groups based on the type of access users need to the content.
- Create a clear and scalable permissions strategy.

**Note:** The information provided here is adapted and simplified from practices of existing Tableau Zen Masters and customers who have shared their experiences. Links to their talks are available at the [bottom of this page](#).

## Create a project team and adopt a permissions strategy

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Although changing the project structure on your site after your users are publishing to it is not impossible, it's difficult and can be daunting. So before you make any lasting decisions or take definitive actions on your Tableau site, we recommend that you recruit users from various segments of your Tableau population, to create a project team of people who have differing uses for Tableau content.

Your permissions strategy will help your environment scale as you add new Tableau users. Make sure it incorporates two important practices: manage permissions only for groups, and set permissions only at the project level. Setting permissions at the individual user level and on individual content resources becomes unmanageable quickly. If you need to deviate from this practice, make sure you document and communicate your strategy to other administrators and project leaders.

**Important:** We strongly recommend familiarizing yourself with Tableau's [Permissions](#) before proceeding.

## Steps to coordinate projects and groups

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To get projects and permissions (content) to work together with groups (people) in a managed self-service environment, you generally take the following steps:

1. [1. Plan your permissions](#){MCXref .xref}: Find common themes in the type of access users need. This helps determine projects and groups.
2. [2. Remove permissions that will cause ambiguities](#){MCXref .xref}
3. [3. Create groups](#){MCXref .xref}
4. [4. Assign permissions to the groups](#){MCXref .xref}
5. [5. Create projects and adjust permissions](#){MCXref .xref}
6. [6. Lock permissions in each project](#){MCXref .xref}

If you decide to follow the guidelines described here, you might want to [Automate working with groups and projects](#).

## 1. Plan your permissions

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Before you create groups and start assigning permissions, create a list of people who need access to content, and arrange them in groups according to what they'll want to do.

For example, someone who publishes or moves a data source to a *certified* content project would need different level of access than someone who only consumes published reports. (We use the term "certified" to mean "trusted" --- these are the data sources or reports that your Tableau community can trust to be a source of truth for your organization.)

Keep in mind also that you can set permissions differently for each project. So someone who is a data steward for the Ops department might not get the equivalent access to the Marketing content.

This exercise, done outside of the Tableau environment, can be the most challenging part of setting up a site.

### Use a closed permissions model for managed content

General models for setting permissions are *open* or *closed*. In an open model, users get a high level of access, and you explicitly deny capabilities. This model can work when your organization is very small, and everyone has a similar level of responsibility.

In a closed model, users get only the access they need to do their jobs. This is the model security professionals advocate, and the examples in this article will attempt to show.

## 2. Remove permissions that will cause ambiguities

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Every site has a [Default] project and an [All Users] group. Any user added to the site becomes a member of the All Users group automatically. The Default project works as a template for new projects in the site and cannot be deleted, but you can change the permissions. Creating groups and setting baseline permissions here helps you to know and manage exactly who gets what level of access for each new project.

In the managed self-service context, setting baseline permissions means *removing* the permissions from the [All Users] group, so that the permissions are enabled only on groups you create and have control over.

1. Select the [Content] tab to open the top-level projects on the site.
2. On the [Default] project's [Action] (...) menu, select [Permissions].
3. Next to the [All Users] group name, select [...], and then select [Edit].
4. For the tabs for [Project], [Workbooks], and [Data Sources], use the template drop down and select [None].
5. Select [Delete] to apply the changes.

## 3. Create groups

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You create groups to match what people need to do with a set of content. In this case "a set of content" refers to the workbooks and data sources in a project.

When you create your groups, use descriptive names that make sense for your organization. For example, one possible set of groups might be as follows:

- **Project leaders.** You might also think of these as project-level administrators. Users who can perform all available capabilities on data sources, with the possible exception of setting permissions on them. People in this group can be site administrators, or users whose job it is to approve or certify data models or reports. To grant administrator capabilities at the project level, you can assign the [Project Leader] setting to users with the appropriate site roles. For more information, see [Set a project leader](#)

- **Analysts/Publishers.** This group is for users who can publish workbooks to production and other open projects, use web editing on some projects, and connect to data sources certified by the data stewards. This group is not allowed to set permissions on content or move it between projects.
- **Business Users.** This group is the most likely to include people who do not use Tableau Desktop, but use data to answer questions and make business decisions. They can view and interact with workbooks only in specific projects, and they can't publish, edit, save, or delete anything.
- **Administrators.** Depending on the size of your deployment, managing site or server administrators as a group helps you keep track of who has that level of access.

**Note:** Users with the Server Administrator or Site Administrator Creator site role have access to everything on the site, regardless of the groups you add them to.

If you have multiple Tableau roles per department, creating corresponding groups manually can be labor intensive. For alternatives, see [Automate working with groups and projects](#) later in this article.

**Learn more:** [Add Users to a Group](#)

#### 4. Assign permissions to the groups

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After you create groups, you can assign permissions in one of the following ways:

- In the Default project, apply a core set of permissions on each group that will stay more or less the same for all projects. You can then make minor adjustments in specific projects.
- Or
- Keep the Default project clean, and apply permissions only on projects you create.

For more information, see [Permission management](#).

For the example we're using, it makes more sense to set permissions templates in the Default project. You will want to explicitly deny some capabilities across the board, and then allow them on only a few projects where you want to allow more open access.

#### Create permission rules

1. While you have the Default project open, on the [Actions] menu (...), select [Permissions].
2. Create a permission rule for each group as follows: a. Click [+ Add Group/User Rule] and start typing to

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search for a group or user.
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- b. For each tab, choose an existing template from the drop-down or

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create a custom rule by clicking the capabilities.
i. Templates are predefined sets of capabilities that make
   setup easier.
ii. One click sets the capability to [Allowed], two
    clicks sets it to [Denied], and a third click
    clears the selection ([Unspecified]).
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- c. When finished, click Save.

3. [Lock permissions to the project](#).

Remember, a capability is only granted to a user if they are expressly allowed it. Leaving a capability as Unspecified will result in it being denied. For more information, see [Effective permissions](#).

#### Example

For the groups defined above, here is one way you might set default permissions.

Project tab

Workbooks tab

Data Sources tab

Project Leader group

[Set a project leader](#)

Analyst Publisher group

Publish template

Publish template

Publish template

Business User group

View template

Explore template

Set [Web Edit] and [Download Full Data] to [Unspecified]\*

Explore template

\* This assumes you want to allow web editing and downloading data only on select projects. You can allow those capabilities on specific projects or workbooks.

## 5. Create projects and adjust permissions

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After the Default project is set with your custom permissions template, you can create projects that allow the content use cases you identified. For each project, you can adjust the default permissions as appropriate.

### Example project structure

One way to structure projects could be to reflect the following use cases:

#### Workbooks shared for open collaboration on the server

Anyone in the department can publish to the open-collaboration project while their content is in development. Colleagues can collaborate using web editing on the server. Some people call this a sandbox, some call it staging, and so on. On this project you can allow web editing, saving, downloading, and so on.

Here you want not only to enable collaboration, but also to enable people who don't have Tableau Desktop to contribute and provide feedback.

#### Shared reports that cannot be edited

This could be a project that people who create workbooks and data sources (Analysts and Data Stewards) could publish to when they want to make content available to business users for viewing, with confidence that their work cannot be "borrowed" or modified.

For this type of project, you would deny all capabilities that allow editing or getting the data off of the server for reuse. You would allow viewing capabilities.

### Vetted data sources for Analysts to connect to

This would be where Data Stewards publish the data sources that are meet all of your data requirements and become the "source of truth" for your organization. Project leaders on this project can certify these data sources, so that they rank higher in search results and are included in recommended data sources.

You would allow authorized Analysts (that is, the Publishers group described earlier) to connect their workbooks to data sources in this project, but not download or edit them. You would deny the view capability to the Business Users group for this project, so those users would not even see this project.

### Inactive content

Another possibility is to segregate workbooks and data sources that the site's administrative views show haven't been used for a period of time. You could give content owners a time limit before their content is removed from the server.

Whether you do this or delete directly from the working projects is up to your organization. In an active environment, don't be afraid to be intentional about removing content that is not being used.

### Source for workbook templates

This is a project that people can download from but not publish or save to, where authorized publishers or project leaders make template workbooks available. Templates that have your organization's approved fonts, colors, images, and even data connections built in can save authors a lot of time and keep your reports looking consistent.

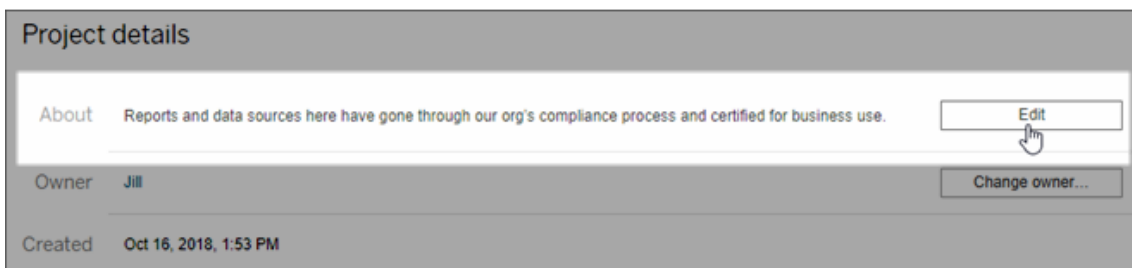
### Help project leaders manage content and users find it

- Devise a scalable project-naming scheme that makes sense in your organization.

For example, basic structure might be <Department> - <ContentUse>; such as **Ops - Production**.

- Use the project's [Description] field.

The description you enter when you create a project appears when you hover the pointer over the project thumbnail, as well as on the [Project details] page.



## 6. Lock permissions in each project

After you refine the capabilities for each group in a project, you can lock the project's permissions, either for the project itself or all projects in the hierarchy. Do this on the Default project, too.

To configure the **Content Permissions**:

1. You must be logged into the site as an administrator, project owner, or project leader
2. Open the permissions dialog box for a project
3. Click the Content Permissions **Edit** link in the upper left and select the desired option in the Content Permissions dialog box

Locking permissions prevents publishers from setting permissions explicitly as part of the publishing process in Tableau Desktop. Instead, content inherits permissions set on the project it's published to, and only administrators and project leaders can set permissions.

For more information, see [Lock content permissions](#).

### **Automate working with groups and projects**

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Creating multiple groups and projects and setting permissions manually can get a little tedious. To automate these processes, as well as make them repeatable for future updates, you can perform these tasks using [REST API](#)[\[\(Link opens in a new window\)\]](#) commands.

You can use [tabcmd](#) commands for tasks such as adding or deleting a single project or group and adding users, but not for setting permissions.

### **Next steps**

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Besides projects, groups, and permissions, other data governance themes include:

#### **User education**

Help *all* of your Tableau users become good data stewards. The most successful Tableau organizations create Tableau user groups, have regular training sessions, and so on.

For a common approach to orienting users to the site, see [Dashboard-based Custom Portals](#).

For publishing and data certification tips, see the following topics:

- [Use Certification to Help Users Find Trusted Data](#)[{MCXref .xref}](#)
- [Prepare for Publishing a Workbook](#)[\[\(Link opens in a new window\)\]](#) (links to Tableau Help)
- [Best Practices for Published Data Sources](#)[\[\(Link opens in a new window\)\]](#) (links to Tableau Help)

#### **Optimize extract refresh and subscription activity**

If you use Tableau Server, create policies for extract refresh and subscription schedules, to avoid them dominating the site's resources. The TC customer presentations by Wells Fargo and Sprint address this subject in detail. In addition, see the topics under [Performance Tuning](#).

If you use Tableau Online, see the following topics to become familiar with the ways people can refresh extracts:

- [Keep Data Fresh](#)
- [Use Tableau Bridge to Expand Data Freshness Options](#)

#### **Monitoring**

Use administrative views to keep an eye on the site's performance and content use.

[Administrative Views](#)

### **Learn how Tableau and some of our customers address governance and self-service**

The following list contains links to data governance and Center of Excellence (COE) presentations given at the Tableau Conference over recent years. Even if Tableau versions have evolved, the principles remain the same. You can explore the playlists for other videos related to COE, managing Tableau at scale.

[Creating a Centre of Excellence in Tableau](#)[\(Link opens in a new window\)](#) (TC Europe 2018)

[Server Admins: Don't Fear Web Authoring](#)[\(Link opens in a new window\)](#) (Sprint, TC16)

[The Past, Present, & Future at Charles Schwab](#)[\(Link opens in a new window\)](#) (TC 17)

[Content Strategies in Tableau](#)[\(Link opens in a new window\)](#) (TC 17)