Tableau Cloud
Manual Migration Guide

Contents

Tableau Cloud Manual Migration Guide

This guide explains how to manually migrate your Tableau Server deployment to Tableau Cloud. In a nutshell, this guide is useful for administrators who are running a Tableau Server with fewer than 100 users and who are comfortable with a fully manual, self-service migration process.

If you have a lot more users and your data requirements are more complex, you may benefit from working with professional services or an experienced migration partner to migrate to Tableau Cloud. Further down, this topic includes guidance on how to plan your migration.

But first, let's make sure you understand why moving to Tableau Cloud is probably the smart move for your organization.

Why migration can make sense

If you are running a single Tableau Server for a small group of users, then it's almost impossible not to save time and money by moving your operation to Tableau Cloud. The easy win for moving to Tableau Cloud is savings in time, which tends to be in short supply for most of us. And if you are a data scientist or analyst who has found themselves unexpectedly running a Tableau Server installation, migrate and get back to your data!

What about bigger organizations? If your organization exceeds 100 users, then you will also undoubtedly benefit from savings of cost and time at scale. Tableau Cloud is built to handle big organizations, but this guide isn't. If you're looking to migrate a bigger organization, check out Tableau Cloud Migration where you can learn more about working with professional services or an experienced migration partner.

For many organizations, Tableau Cloud will be faster and more reliable, with less bother than whatever you are doing now to keep your Tableau Server humming. You will never need to

face another major server upgrade, or even a maintenance release update, which, as you know, is really just an upgrade smuggled in under another name. Tableau Cloud is always running the latest release, with the most up-to-date features. Reliability and performance are baked into the service. After the migration process, your time with Tableau Cloud will be spent managing users and data. That's it. You won't be troubleshooting service errors or combing logs or restarting, and restarting.

Work with your account manager to figure out the costs for supporting your users. As you evaluate overall cost, remember that the single metric of per-user licensing expense does not provide an apples to apples comparison between SAAS and self-hosting a server. This comparison is especially impoverished if you are not including the time spent managing Tableau Server, and the capital cost of refreshing or leasing hardware. The annual cost of running a single server in the cloud can be more than $10,000 a year. And of course any analysis must include your staffing cost of maintenance, periodic updates, and troubleshooting.

Dive deeper

- For a quick and relevant evaluation of moving to Tableau Cloud, see the blog post, Should I Move My Analytics to Tableau Cloud?
- For more information about the advantages of moving from on-premises or self-hosted to Tableau Cloud, see GigaOm's research article, CxO Decision Brief: SaaS Business Intelligence Platforms.
- For a case-study detailing cost savings and performance improvement in the real world, see Splunk migration to Tableau Cloud eliminates server admin overhead and drives better dashboard performance.

When migration doesn't make sense

The following list describes scenarios where continuing to manage your own instance of Tableau Server instead of migrating can make sense. We're committed to continually improving Tableau Cloud and will update this list as we release new features to address these gaps. However, it is important that you verify that Tableau Cloud meets your requirements before you decide to migrate. Please be sure to validate your requirements before moving forward with a migration.

- Regulation and data residency: Your business operates in a space that must comply with a regulatory (such as FedRAMP, PCI, etc.) or data residency requirement that Tableau Cloud does not yet meet. Please review our list of current compliances and check back often to learn when new certifications become available.
- Data sources: Your organization relies on a data solution that does not work with Tableau Cloud, is not supported by Tableau Bridge, or is otherwise beyond the scope of your ownership to extract in a compatible way. Examples of such data sources include cube data sources, custom connectors, packaged Tableau connector (.taco) files, among others. The next topic, Plan Your Migration, walks through the different supported data sources and options available in Tableau Cloud. You can also download the free Tableau Cloud Migration Technical Readiness Assessment to see which data sources you're currently using and if they are supported on Tableau Cloud.
- Site capacity: If you have more than 1 terabyte of data, take a look at Advanced Management for Tableau Cloud. Otherwise, review Tableau Cloud Site Capacity to optimize any necessary consolidation. The Tableau Cloud Migration Technical Readiness Assessment can help you identify assets that will require consolidation.
- Authentication: If you require LDAP for an external identity store, Kerberos authentication, or Kerberos delegated authentication.
- Data management: Tableau Prep Flows are not supported by Tableau Bridge. If you require automated data updates with Tableau Prep Flows for data behind a private network, see How to Run Tableau Prep Conductor Flows with On-Premises Data in Tableau Cloud. Tableau Prep Flows using Python are also not supported by Tableau Bridge.

Who should read this

This guide is written for the person or team of people who will be performing the migration to Tableau Cloud. The guide is designed for Tableau Server installations that have 100 users or less. This guide provides a step-wise, manual process to get your organization from Tableau Server to a fully-functional site in Tableau Cloud in a week or two.

After you migrate and create the core administrative functionality (identity/user, site configuration, authentication, data connection, etc) in Tableau Cloud, the bulk of content migration can be shared with the creators at your organization. A "creator" is a user who has a Creator role-based license. Depending on your goals, either you (the admin) or your creators

can migrate content. For this reason, we've created a chunk of migration-related content you can point your creators to. Users who migrate content need to have a Creators license and access to Tableau Desktop. If the creators will be migrating Tableau Prep flows, then they must also have Tableau Prep Builder installed.

Post-migration

In this guide we will do our best to cover as much of the Tableau Cloud platform as possible, but there are some features that administrators cannot set up on behalf of their end users. Users will need to make some updates to their content after a migration is complete. There are also some features that are better to recreate anew in Tableau Cloud with the benefit of using cloud-native functionality.

Feature differences in Tableau Cloud

As mentioned previously, running Tableau Cloud vs managing your own Tableau Server is much less labor intensive from an administrative perspective. You can find a summarized list of the feature differences in the Tableau Server help topic, *Technical Considerations for Migrating from Tableau Server to Tableau Cloud* (Windows | Linux). Below are a few of the most common items.

- In Tableau Cloud, as the administrator, you do not have direct access to the *Tableau Server Repository* (Windows | Linux). Instead, you can use Admin Insights to understand what's going on in your Tableau environment, including the current licensing state and performance.
- Guest access is not available on Tableau Cloud. Instead use Connected Applications to broaden access.
- While full custom font capability is not supported, a set of Google Fonts are available for use with published content.
- Tableau Cloud uses a tenant and site model for administration. Using Tableau Cloud Manager, you can create multiple sites on your tenant, similar to how you do on Tableau Server. By default, you can create up to 3 Tableau Cloud sites. This capacity increases depending on the Tableau edition you purchase—up to 10 sites with Enterprise and a maximum of 50 sites with Tableau+.

Run the Tableau Cloud Migration Technical Readiness Assessment to understand if there are any use cases which may need to be adapted before migrating to Tableau Cloud.

Tasks that need to be completed by end users

There are some features that administrators cannot set up on behalf of their end users or that require manual re-configuration. We've made a complete list available separately as an End-User Migration Checklist so that you can share it directly with your users, but these tasks include:

- Webhooks
- Embedding solutions updates
- Update REST API scripts
- Configuring Analytics Extensions

Version compatibility

As a general rule, our documentation is based on recent-to-current versions of Tableau Server, but because the process covered in this guide is not a programmatic or automated migration, we don't foresee issues with migrating from older versions of Tableau Server to Tableau Cloud. Strictly speaking, the process in this guide is more "port" than "migration" when it comes to administrative configurations.

Licensing

Tableau Cloud uses Role-Based Subscription licensing. Tableau Server supports Role-Based Subscription licensing and legacy pricing models. If you are on a different (earlier) licensing model, please contact your Tableau account team to convert your licensing to Role-Based Subscription.

Additional Support

After reading through this material you may decide that you'd prefer not to take on a manual migration yourself, and would rather leave it to an expert. If so, please reach out to one of our experienced migration partners to learn how they can help you accelerate a migration to Tableau Cloud.

Migration workflow

This guide is organized according to a step-wise process for migrating to Tableau Cloud:

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Plan Your Migration

You are in the Tableau Cloud Manual Migration Guide. This guide describes how to manually migrate Tableau Server deployments with fewer than 100 users to Tableau Cloud.

This topic walks you through two important planning tasks you should complete before migrating: your data connectivity strategy and establishing your authentication mechanism. You can find a summarized list of the feature differences in the Tableau Server help topic, *Technical Considerations for Migrating from Tableau Server to Tableau Cloud* (Windows | Linux). Run the Tableau Cloud Migration Technical Readiness Assessment to understand if there are any use cases which may need to be adapted before migrating to Tableau Cloud.

Learn about Tableau Cloud

If you are new to Tableau Cloud, we recommend that you learn more about the platform by signing up for a self-guided course online. These courses can serve as an introduction to Tableau Cloud and will give you some context as you plan your migration.

If you are familiar with administering Tableau Server today, you'll find that many of your tasks are largely the same in Tableau Cloud. With the move to Tableau Cloud though, tasks related to deploying and managing the software will be handled by Tableau as a managed service. You can leave the upgrades to us. Head to the blog post, Should I Move My Analytics to Tableau Cloud? for more details. With Tableau Cloud, you will be able to focus more of your energy on ensuring smooth data connectivity, equipping users with best practices and developing an analytics community. For more details about what managing a Tableau Cloud site involves, as well as a bunch of resources to get you started as an administrator, visit the Tableau Cloud Site Admin page.

Planning your data strategy for Tableau Cloud

Tableau Cloud can connect to dozens of data sources, but it's essential that you develop a data connectivity plan before you begin a migration. In this section we'll walk you through the best way to do that, and we'll describe the two ways Tableau Cloud connects to data.

The goal at this point is to validate that you can support your current data requirements after your migration to Tableau Cloud.

Cleaning house: Does your content give you joy?

Before you begin to evaluate the various data types and how you'll migrate all of your data sources, workbooks, and projects into Tableau Cloud, we recommend that you use this migration as an opportunity to do some house cleaning. Most organizations running Tableau Server for more than a year or two collect some amount of stale content: workbooks, data sources, projects and flows. We recommend taking these steps before you migrate:

- You can use the *Stale Content* (Windows | Linux) admin view in Tableau Server to identify content that is no longer in use. It doesn't usually make sense to move ancient, archived content to Tableau Cloud. Let it go!
- Like most organizations who have been running Tableau Server for a while, your content hierarchy and permission structure has probably "evolved" organically and probably a bit messily. As you plan the migration, develop a strategy that will optimize project, group, and permissions structures in your new Tableau Cloud site.
- If you are a Tableau Data Management customer, use the tools to manage data cleaning, combining, and processing for the pending move.

Optimize dashboard performance

When it comes to performance, a good rule of thumb is that if your dashboards are slow on Tableau Server, they'll likely be slow on Tableau Cloud as well. Before you migrate, address any dashboard performance issues using the steps in Optimize Workbook Performance. Making adjustments before migrating ensures you enjoy the same improved performance on Tableau Cloud.

Make a list and create a data source strategy

After you clean up existing content, it's time to take inventory of your data sources. The goal of this exercise is to determine how you will support users in your organization with the data sources that they are currently using.

For each data source:

- Cross check it with the Tableau Cloud connector table in the following section. If it's supported, you've got a direct path forward. If it's not in the table...
- Cross check it with Connectivity with Bridge, to determine if your data type is supported by Tableau Bridge.
- If the data source is a static file, Tableau Cloud supports uploading Excel or text-based data sources (.xlsx, .csv, .tsv) directly from the browser or Tableau Desktop. The maximum file size you can upload is 1 GB. More likely, your users are connecting to these types of files in a shared, common directory. If this is the case, you can upload these files to a public cloud space such as Google Drive, Dropbox, or OneDrive, for example. Or you can use Bridge. You (or your users) can then configure Tableau Cloud to connect to these spaces for a live data connection.
- Run the Tableau Cloud Migration Technical Readiness Assessment to understand if there are any use cases which may need to be adapted before migrating to Tableau Cloud.

Supported Tableau Cloud connectors

The following connectors are supported in Tableau Cloud

Alibaba AnalyticsDB for MySQL‡	Dropbox*‡	OData‡
	Esri Connector‡	OneDrive*‡
Alibaba Data Lake Analytics‡	Exasol‡	Oracle‡
Amazon Athena‡	Google BigQuery*‡	Pivotal Greenplum Database‡
Amazon Aurora for MySQL‡	Google Cloud SQL	
Amazon EMR Hadoop Hive‡	(MySQL compatible)‡§	PostgreSQL‡

Amazon Redshift‡	Google Drive‡	Presto‡
Apache Drill‡	Hortonworks Hadoop Hive	Qubole Presto‡
Azure Data Lake Storage Gen2‡	Impala‡	Salesforce‡
Azure Synapse Analytics (SQL Server compatible)	Kyvos‡	SAP HANA (for virtual connections only)‡
	MariaDB‡	
Box‡	Microsoft Azure SQL Database‡	SharePoint Lists‡
Cloudera Hadoop‡		SingleStore (formerly MemSQL)‡
Databricks‡	Microsoft Azure Synapse Analytics‡	Snowflake‡
Datorama by Salesforce‡	Microsoft SQL Server‡	Spark SQL‡
Denodo‡	MongoDB BI Connector‡	Teradata**‡
Dremio by Dremio‡	MySQL‡	Vertica‡

*For more information about using OAuth 2.0 standard for Google BigQuery, OneDrive, and Dropbox connections in Tableau Cloud, see OAuth Connections.

**Teradata web authoring currently doesn't support query banding functionality. See Teradata for details.

‡Supports virtual connections if you have Data Management. See About Virtual Connections and Data Policies in the Tableau Cloud help for details.

§Tableau Cloud doesn't support SSL using Google Cloud SQL.

User accounts and authentication

The second essential planning step is to identify the authentication mechanism you would like to use for Tableau Cloud users.

The default user account on Tableau Cloud is called TableauID. TableauID requires multi-factor authentication (MFA) to ensure secure access to Tableau Cloud. See About multi-factor authentication and Tableau Cloud in the Tableau Cloud documentation.

If your organization uses an identity provider (IdP) to enable authentication, you can probably use that for Tableau Cloud. We support Salesforce authentication and Google OpenID natively. You can also configure SAML for Azure, Okta, OneLogin, AD FS, PingOne, or any IdP that supports standard SAML 2.0 authentication.

Before you proceed, review the Tableau Cloud Authentication options to develop a plan.

If your organization manages identities with Azure AD, Okta, or OneLogin, then you can also automatically provision users and groups in Tableau Cloud. See Automate User Provisioning and Group Synchronization through an External Identity Provider.

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Create and Configure a Tableau Cloud Site

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The migration process that is described in this guide starts by working with your account manager to transition your Tableau licenses from Server to Cloud. If you would like to test out Tableau Cloud prior to your migration, you're also welcome to trial Tableau Cloud at any time.

Step 1: Work with a Tableau Account Manager to transition licensing

The first step in your migration is to work with your Account Manager to transition your licensing from Server to Cloud. After this is done, you have 60 days of access to both products. Most customers with 100 users or less complete this migration process within a week, so there should be ample time to access both products as you transition. You can work with your Account Manager if more time is required.

Step 2: Create additional Tableau Cloud sites

If you've created multiple sites on Tableau Server, you may want to create equivalent sites on Tableau Cloud using Tableau Cloud Manager. As a cloud administrator, you can add sites to separate content environments, manage users and licenses, and control permissions. The number of Tableau Cloud sites you can create depends on the Tableau edition you purchased.

After creating additional sites, continue with the remaining steps in this topic for each site.

Step 3: Specify an authentication method

The default authentication method will be Username and Password (TableauID). Multi-Factor Authentication is required for TableauID users to ensure secure access to Tableau Cloud. We also support many industry standards Single Sign On options. For more information see Authentication to determine which authentication method makes the most sense for your organization.

Step 4: Familiarize yourself with the site

Walk through the site settings and ensure that they are configured appropriately for your organization's needs.

Step 5: Configure data connectivity

The way Tableau Cloud connects to data differs based on where the data are stored. Each method may require different preparation and is laid out below. If you're not sure which option is right for you, please reach out to your account manager.

Publicly available cloud data

Publicly available cloud data includes Google Drive, Dropbox, OneDrive, and Snowflake, for example.

If the connection is a database, you may need to enable Tableau Cloud to query it. To enable connectivity, see Authorize Access to Cloud Data Published to Tableau Cloud.

For flat files like Excel and .csv files: we recommend saving these files in a cloud store like Google Drive, Dropbox, or OneDrive. You can then enable direct connectivity to the data from Tableau Cloud. If that is not an option, you will need to configure Tableau Bridge to maintain connectivity to flat files saved locally.

On-Premises, local files, or private cloud data

Local files, private cloud data, and on-premises data might be SQL Server, Oracle, or local Excel files for example.

If you have Private data requirements, you will need to install and configure Tableau Bridge. Tableau Bridge provides secure communication between Tableau Cloud and data behind fire-walls. Install Bridge behind your firewall on a separate computer that has access to your data. See About the Bridge Client.

Optional: For local files (Excel, CSV, etc), you can save them in a cloud store like Google Drive, Dropbox, Onebox instead of using Tableau Bridge.

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Migrate Virtual Connections

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If your organization relies on virtual connections in Tableau Server, you must migrate those before proceeding. If you do not have virtual connections configured for Tableau Server, skip this procedure.

Migrating virtual connections from Tableau Server to Tableau Cloud is a manual process. You must recreate the virtual connection (or the published data source and virtual connection) on your Tableau Cloud site, replace the data source in each workbook with the new virtual connection, and then copy/paste any calculation formulas from the original workbook data source to the updated one.

Step 1: Recreate and test the virtual connection on Tableau Cloud

See Create a Virtual Connection.

Step 2: Recreate published data sources built with the virtual connection

You will need to recreate all published data sources that use the virtual connections:

1. Follow the procedure at Use a Virtual Connection.
2. Create a Published Data Source in Tableau Cloud so that it exactly mirrors the original Server data source. The following details must match:
    - All fields in the original data source must exist in the new data source
    - Field names: case must also match
    - Measure and dimension must map from original to new fields
    - Default field settings. See Edit Default Settings for Fields.
3. Make note if Tableau Bridge is required for the data source.

Step 3: Update workbooks to replace previous data sources

Run the following procedure from Tableau Desktop for each workbook that you want to migrate to Tableau Cloud:

1. Sign in to Tableau Server, navigate to the workbook that you are migrating, and then download the workbook.

2. Within the workbook select **File > Close**. Do not close Tableau Desktop.

3. Sign out of Tableau Server: **Server > Signed into http://example > Sign out**. You will get a warning about signing out while connected to Tableau Server. Click **OK**.

4. Sign in to Tableau Cloud: **Server > Sign in > Tableau Cloud**.

5. From the Desktop home screen, select the workbook file to open it again.

   You will receive two *Unable to complete action* error messages. Close the error messages. When the worksheet opens, it will display the *Worksheet Unavailable* message. Do not edit the connection from the main window.

6. If you've already created a new published data source skip to Step 8. Otherwise, update the data source by navigating to **Data > New Data Source.**

   - Navigate to the new virtual connection that you created for this workbook, and then click **Connect**.
   - Open the original Tableau Server workbook and copy the formulas. Paste the formulas in the updated Cloud workbook.

7. Create a new data source that exactly matches the previous data source. Field names must match exactly.

8. Replace data source: On the Data tab, right-click the data source that you just created, and then click **Replace Data Source**. In **Replace Data Source** specify the correct source in the **Replacement** selector, and then click **OK**.

9. Right-click on the old data source and select **Close**.

10. To publish the data sources:

- Separately to Tableau Cloud, select **Publish>Data Source>Data Source Name**.
- Embedded in the workbook, select **Publish > Workbook**.

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Migrate Data Sources, Workbooks, and Prep Flows to Tableau Cloud

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For many organizations running a manual migration, it may make sense to have users (or a subset of users) migrate content they are familiar with to the new Tableau Cloud site. The content migration steps described in this topic can be completed by users (with Creator roles) in your organization.

Before you begin

Before you embark on content migration, we want to reinforce the recommendation to do a full inventory and clean up of your existing Tableau Server environment. See Cleaning house: Does your content give you joy?

Keep the Tableau Server lights on! During your migration process, ensure that all content and business processes remain operational in your Tableau Server system. Do not decommission your Tableau Server environment until you have verified and validated that your content and procedures have been properly migrated to Tableau Cloud.

Step 1: Create projects for your site with minimum access policy

We recommend setting up your new Tableau Cloud site with a minimum access policy. It's important to know that after a user is added to Tableau Cloud they can begin accessing content on the platform.

Before you begin, we recommend reviewing Quick Start: Permissions for a refresher course on how permissions interact and inherit in Tableau. If you are familiar with these concepts in the context of Tableau Server, then you're good to go. Tableau Cloud permissions use the same logic as Server.

Follow these steps to set up projects with a minimum access policy.

1. Configure template permissions on the Default project before creating more projects.

2. Remove permissions for All Users group. Removing All Users ensures that projects are configured with explicit permissions for users who need to access the content.

3. Create groups. Groups simplify permission management as your organization and/or content scales.

For more general project permission guidance, see Use Projects to Manage Content Access.

Step 2: Add users with Creator roles

After you have configured the minimum access policy, now is the time to add any users who will be migrating content. If you are not relying on users to migrate content, then you can add them later in the process. See Configure Permission and Content Access for Migrated Users.

Follow these guidelines for adding the creator users:

- Review site roles: Set Users' Site Roles.
- You can add users manually or you can import them with a CSV file.
- After you've added the users and set their roles, add them to the appropriate groups that you set up in the previous step.

Step 3: Migrate published data sources

If multiple workbooks use a single published data source, you only need to migrate the published data source once.

1. On Tableau Desktop, sign in to your Tableau Server environment, navigate to the work-book(s) that you want to migrate, and click **Download**.

2. On the **Data** menu in Tableau Desktop, select the data source, select **Create Local Copy**, and then save the local copy of the data source.

3. Working from a Sheet, select **Data > Replace Data Source**. Enter the following options:

   - Current: The current Local Copy Replacement: the local copy you saved
   - In the Data pane, right-click the original published data source, and then select **Close**.

4. Select **Server** and then click **Sign Out**.

5. Select the data source in the **Data** menu and select **Publish to Server**.

6. In Tableau Desktop, sign in to Tableau Cloud, then publish the data source.

7. If necessary, schedule a refresh of that data source in Tableau Cloud. For more inform-ation, see Recreate Refresh Schedules for Tableau Cloud.

If the newly published data source is the only data source in the workbook, then follow the next two steps to publish the workbook as well. If the workbook has multiple published data sources, skip to the next step.

1. When Publishing the data source, verify that **Update workbook to use the published data source** is selected.
2. Select **Server > Publish Workbook** to publish the workbook to Tableau Cloud.

Step 4: Migrate workbooks with multiple pub-lished data sources

Repeat the following process for all published data sources that you would like to migrate to Tableau Cloud.

1. On Tableau Desktop, sign in to your Tableau Server environment, navigate to the published data source that you want to migrate, and click **Download**.

2. The file will open in Tableau Desktop. On the **Data** menu in Tableau Desktop, select the data source, select **Create Local Copy**, and then save the local copy of the data source.

3. In the Data pane, right-click the original published data source, and then select **Close**.

4. Repeat steps 2-3 for all Published Data Sources in the workbook.

5. Select **Server** and then click **Sign Out**.

6. Working from a Sheet, select **Data > Replace Data Source**. Enter the following options:

   - Current: The current Local Copy
   - Replacement: the local copy you saved

7. After all Published Data Sources are replaced, select **Select > Publish Workbook** to publish the workbook to Tableau Cloud.

If the workbook also has an Embedded Data Source requiring Tableau Bridge, those data sources will need to be published separately as during the migration. See Publish a Data Source.

Step 5: Migrate workbooks with embedded data sources

1. On Tableau Desktop, sign in to your Tableau Server environment, navigate to the workbook(s) that you want to migrate, and click **Download**.

2. Select **Server** and then click **Sign Out**.

3. Select **Server** and then click **Sign In** to sign into Tableau Cloud.
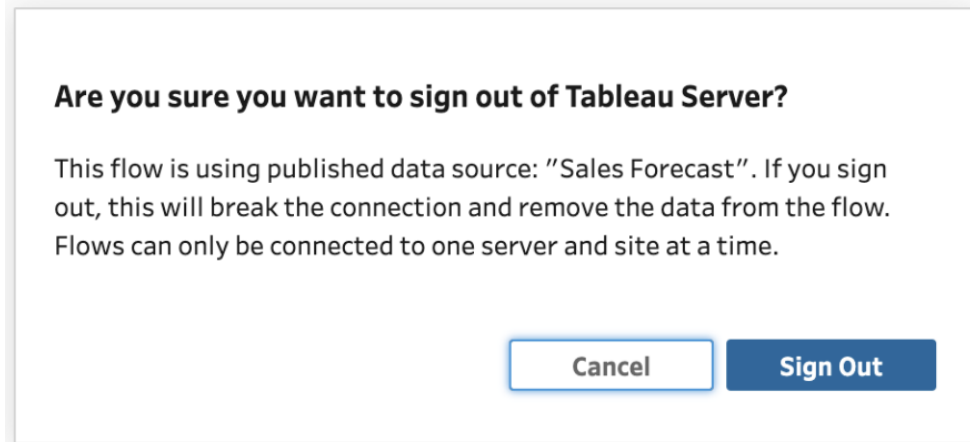
4. If the embedded data source requires Tableau Bridge for automated refresh and is **file data** (such as .cvs and .xlsx), follow the instructions at Publish on-premises data (Tableau Cloud only).

5. If the data source does not require Tableau Bridge **or** is not file data, **select Server > Publish Workbook**.

Step 6: Migrate Tableau Prep flows

For all publicly available cloud data, you may need to enable Tableau Cloud to query it. To enable connectivity, see Authorize Access to Cloud Data Published to Tableau Cloud.

Repeat the following procedure for all Tableau Prep flows that you would like to migrate to Tableau Cloud. Run this procedure on a computer that is running Tableau Prep Builder.

1. Sign in to your Tableau Server environment, navigate to the flow that you want to migrate, and click **Download**.
2. The flow will open in Tableau Prep Builder:
    a. If the flow connects to at least one published data source you will be automatically prompted to sign into your server. If you are not automatically prompted, from the top menu select **Server** > **Sign in** and sign in to Tableau Server.
    b. Navigate from the top menu and select **Server**. In the **Signed into server URL**, click **Sign Out**.
    c. If the flow connects to at least one published data source, you will see the following warning:

Are you sure you want to sign out of Tableau Server?

This flow is using published data source: "Sales Forecast". If you sign out, this will break the connection and remove the data from the flow. Flows can only be connected to one server and site at a time.

Cancel   **Sign Out**

    d. Click **Sign Out**.

3. Navigate to the top menu and select **Server** > **Sign in** > **Quick Connect to Tableau Cloud** to sign into Tableau Cloud.

4. If the flow does not contain any published data sources, proceed to the next step. If the flow connects to at least one published data source

    a. Open the Connections pane and connect to the new version of the Published Data Source on Tableau Cloud.

    b. Drag and drop the new connection to replace the existing Tableau Server Published Data Source input step.

    c. Right click on the existing connection in the connections flyout and delete the Tableau Server Published Data Source.

    d. Repeat steps for all other connected published data sources in the flow.

5. If your flow outputs to any published data source(s), navigate to the output step(s) and update them to reference the new published data source on Tableau Cloud.

    • Repeat steps for all other output published data sources in the flow.

6. After all published data sources are replaced, select **Server** > **Publish Flow** or click the **Publish** button in the top right hand corner to publish the flow to Tableau Cloud.

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Recreate Refresh Schedules for Tableau Cloud

You are in the Tableau Cloud Manual Migration Guide. This guide describes how to manually migrate Tableau Server deployments with fewer than 100 users to Tableau Cloud.

Establish new refresh schedules for extract data sources

- For extract Data Sources, navigate to the published or embedded data source in Tableau Cloud. Select **Extract Refreshes > New Extract Refresh > Select an extract schedule**.

  For data sources requiring Tableau Bridge, ensure Bridge is configured for the connection before establishing extract refreshes. See Use Bridge for Private Cloud Data.

Establish new refresh schedules for Tableau Prep flows

Scheduling flows are available to Data management customers only.

- To establish new refresh schedules for Tableau Prep flow, navigate to the flow in Tableau Cloud. Select **Scheduled Tasks > New Task** > Select and configure the schedule. Do the same for any Linked Tasks. For more information, see Schedule Flow Tasks.

Custom schedules for flows are not supported in Tableau Cloud.

Migration workflow

This guide is organized according to a step-wise process for migrating to Tableau Cloud:

1. Plan Your Migration
2. Create and Configure a Tableau Cloud Site
3. Migrate Virtual Connections
4. Migrate Data Sources, Workbooks, and Prep Flows to Tableau Cloud
5. **You are here**: Recreate Refresh Schedules for Tableau Cloud
6. Configure Permission and Content Access for Migrated Users
7. Add Remaining Users to Tableau Cloud
8. End-User Migration Checklist

Configure Permission and Content Access for Migrated Users

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Now that you've added your data sources, workbooks, and Prep flows to Tableau Cloud, you're ready to add your users. Before we do that, it's important to understand how Tableau determines who has access to what data. Tableau Cloud allows you to designate who has access to content and allows you to restrict the data access within a data source.

We will use content access tools to restrict who has access to a content item, and row level security tools to restrict the data a user can see within a data source.

Content access

Projects, nested projects, and individual content items are all subject to permission rules. You can see how those rules are used in your Tableau Server environment and then recreate them in Tableau Cloud. See Permissions.

Row level security

If you have any data sources or workbooks with row level security, your row level security permissions and calculations will need to be updated for Tableau Cloud because user names and group names may change during a conversion. See Restrict Access at the Data Row Level and Create a Data Policy for Row-Level Security.

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Add Remaining Users to Tableau Cloud

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Now that you've migrated over all the content and set up your projects, groups, and permissions, you can add the rest (or all) of your users.

This topic describes how to add users within a site. To add or remove users and modify their site roles across multiple sites, cloud administrators can use Tableau Cloud Manager. For more information, see Manage Users With Tableau Cloud Manager.
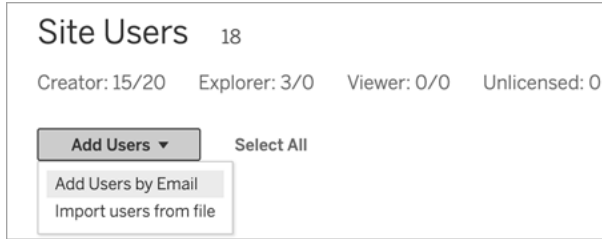
Add users

As soon as you add users, they will be able to access content. Make sure to follow the procedures in Configure Permission and Content Access for Migrated Users before adding users.

We also recommend learning about user site roles before migrating to Tableau Cloud. See Set Users' Site Roles.

You can add users manually as shown below. If you have a lot of users and want to batch-import them with a CSV file, see Import Users.

Add users manually

1. When you're signed in to the Tableau Server site, select **Users**.

2. On the **Users** page, click **Add Users**, and then click **Add Users by Email**.

3. Select the authentication method that you want imported users to sign in to Tableau Cloud with. If no authentication is configured on the site, imported users will be assigned Tableau with MFA authentication method.

   Notes:

   - You can go to the **Users** page to change users' authentication type any time after you add them.

   - To work with Tableau Server by way of tabcmd, the Tableau Data Extract Utility, or the Tableau APIs, users must authenticate with a TableauID account.

4. In the **Enter email addresses** box, enter the users' email addresses. If you add more than one user, separate each address with a semicolon.

   For example, *tdavis@example.com; jjohnson@example.com; hwilson@example.com*

5. Select a site role from the drop-down list, to assign that site role to all users you're adding.

   For site role definitions, see Set Users' Site Roles.

6. Click **Add Users**.

After adding users

- If a new user's email address is already associated with an account on tableau.com, the user is prompted to sign in using the existing email address and password for that account.

- If a new user's email address is not already associated with an account on tableau-.com, the user is prompted to provide a first and last name and password.

- Until the user provides these values, their entry in the Tableau Server user list shows the email address preceded by a period.

    For example: `.snguyen@example.com`

- After the user signs in, the entry is updated to show the full name.

    For example: `Susan Nguyen`

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End-User Migration Checklist

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Welcome to Tableau Cloud!

You're here because your Tableau administrator has recently migrated your Tableau Server environment to Tableau Cloud, Tableau's fully managed analytics platform.

As a part of your migration, the following tasks need a few minutes of your time to make sure that you have a smooth transition to Tableau Cloud. If you were using any of the below features on Tableau Server, they will need to be re-created on Tableau Cloud. Review this list to understand what features need to be re-created and follow the steps provided to do so!

Work with your Tableau administrator to access both Tableau Server and Tableau Cloud while you migrate these items.

- **URL actions**: You'll need to update URL actions that originated on Tableau Server so that they point to Tableau Cloud URLs, or you can use updated field variables. See URL Actions.
- **Subscriptions**: You'll need to resubscribe to views, workbooks, and flows on the Tableau Cloud site. See Create a Subscription to a View or Workbook.
- **Custom views**: A custom view is a copy of a view that has your selections and filters applied. You'll need to reapply custom views on your Tableau Cloud site. See Use Custom Views.
- **Row-level security**: User and group names can change in a migration. If you used groups and user names in row-level security solutions within Tableau data policies, data sources or workbooks, they will need to be updated following a migration.
- **Ask Data lenses**: You'll need to reconfigure Ask Data Lenses on Tableau Cloud. See Create Lenses that Focus Ask Data for Specific Audiences.
- **Favorites**: You must recreate your favorites. You can add any type of content to your favorites, except for embedded data sources. See Mark Favorites.
- **Collections**: Collections will need to be re-created by users in Tableau Cloud.

- **User account settings**: Update your email settings and user interface options. See Manage Your Account Settings.
- **Saved credentials for data sources**: You must update all data sources and flows that previously included your saved credentials. See Manage Saved Credentials for Data Connections.
- **Webhooks**: You must recreate Webhooks on Tableau Cloud. See Tableau Webhooks.
- **Embedding solutions**: If Tableau Server views are embedded in any other applications, those solutions will need to be updated to use Tableau Cloud configurations. This includes, but isn't limited to, the URL of the content item, how the web page interacts with the items, and authentication to the visualization.
- **Dashboard extensions**: Depending on the use case, dashboard extensions may need to be adapted to the new Tableau Cloud environment. See Dashboard Extensions. Your Tableau administrator may need to set up dashboard extension support on your Cloud site.
- **Data Management**: If your organization has Data Management capabilities (either through previously purchased Data Management, or by purchasing Tableau Enterprise), then you must update data quality warnings and field descriptions. See Virtual Connections and Data Policies.

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8. **You are here**: User Migration Checklist