



Tableau Enterprise Server

User Management Help Guide | irmhelp@cu.edu



University of Colorado

Boulder | Colorado Springs | Denver | Anschutz Medical Campus



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Information Current as of 11-4-2021



Purpose of this Guide

The purpose of this guide is to provide guidance (particularly for each Site Administrator Explorers at each campus) regarding user management activities within the Tableau enterprise-wide server. This resource also provides answers to several frequently asked questions regarding ongoing release maintenance and upgrade activities.

This user management guide is not intended to suffice as Tableau Server training or serve as a comprehensive guide to working with Tableau. If you are interested in learning more about Tableau, there are numerous Tableau training options within the university's Skillsoft training offerings.

Where to Get Help

If you are a user and have encountered an error or need help, contact your Site Administrator Explorer (i.e., Site Owner), your local OIT service desk, or irmhelp@cu.edu.

Tableau Overview

Tableau was developed in 2003 and is a business intelligence tool designed to visually analyze data. It offers interactive data manipulation (drag and drop data capabilities) and can work with large amounts of data from various data sources and types.

While campuses have been using Tableau for several years, the university was able to negotiate contract terms that will benefit all campuses and save CU almost \$1 million over five years. In addition to price locks and future desktop purchase discounts, the implementation of the enterprise-wide version of Tableau Server will increase processing capabilities, expand collaboration and data sharing opportunities, and deliver consistent leadership for upgrades, performance, and overall support.



User Management in Tableau Enterprise Server

Tableau Enterprise Server is an enterprise-wide server managed by the University Information Services (UIS) team. It allows centralized management of content, data and user groups within the same server. Site Administrator Explorers (i.e., Site Owners) may create new sites when a need arises to share material restricted for use by a specialized group. Each site is a separate space on the server and users are defined and permissions are set specific to each site. Unless a user has been given a role within a site, they will not be able to access that 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.

User Roles within Tableau

The following roles are available within Tableau Enterprise Server:

- **Site Administrator Explorer (i.e., Site Owner):** These users can add other server users to their site. Within the site, they can create groups to make the management of permissions easier at a Project Level. Site Administrator Explorers have full editing and saving rights to any dashboards on their sites and can publish content to the server.
- **Explorer (can publish):** Users with an Explorer (can publish) license cannot publish new content to Tableau Server but can save and publish changes made to content.
- **Explorer:** Users with the Explorer role can visualize the existing data and explore existing data sources but can't add any new data or data sources.
- **Viewer:** This role allows casual users to access and interact with trusted content.
- **Unlicensed:** This type of user exists on the server, but they can't login or see data unless they are granted a site role and the proper permissions. Users were given the Unlicensed designation in the enterprise server if they were unlicensed in campus servers or have never been granted access to Tableau Server.



Adding Users within the Tableau Enterprise Server

The user population in Tableau Enterprise Server includes all staff, faculty, and students existing in each campus's active directory. Users are automatically populated in the Tableau Enterprise Server based on active directory updates per campus via nightly batch processing.

TAKE NOTE: Because users are automatically populated into the Tableau Enterprise Server, Site Administrator Explorers (Site Owners) should not manually add users. Manually adding a user will NOT link the account to the appropriate Constituent ID (CID) within the enterprise server and the user will not gain access to the Server.



- Users are **automatically populated** in the campus directory and integrated with Tableau server overnight/early morning.
- Site Administrator Explorers will be able to select from users already populated, assign the appropriate site role, and then add users to groups. If Site Administrator Explorers do not see a user on Tableau, wait one day for the nightly integration to complete.
- **EXCEPTION:** Campus affiliates may not exist in a campus active directory. If this is the case, the Site Administrator Explorer should create ticket with irmhelp@cu.edu with all necessary user information and the IRM team will manually create that user in the server.




Assigning Site Role to Users

Once a user is populated in the enterprise server, Site Administrator Explorers (Site Owners) will be required to assign site roles and permissions for each user they allow access to their site(s). Site roles determine each user's level of access within the site.

TAKE NOTE: Site Administrator Explorers (Site Owners) will need to ensure 'Unlicensed' users needing access to their site are assigned a role of 'Viewer' or 'Explorer.' Users were given the 'Unlicensed' designation in the enterprise server if they were unlicensed in campus servers or have never been granted access to Tableau Server. Regardless of project or workbook-level permissions users may have, if they do not have a site role assignment, they will not have access within the system.

Distinguishing between Users with the Same Name

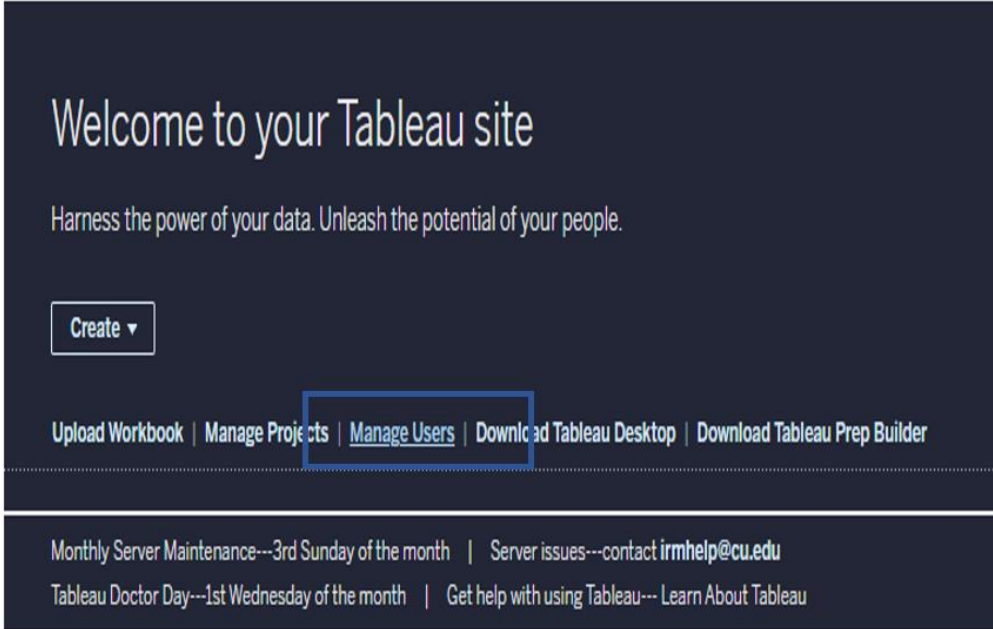
As more users are added to sites, there might be instances where there are multiple users with the same display name. The legacy campus-specific environment frequently used aliases to distinguish between these users. These aliases were not carried over into the Tableau Enterprise environments. However, it is possible for Site Administrator Explorers to trace distinct users through the username / CID (constituent identification).

1 Type viz.cu.edu in your favorite browser, select your campus, and log in using your VPN and AD credentials as you do today.	
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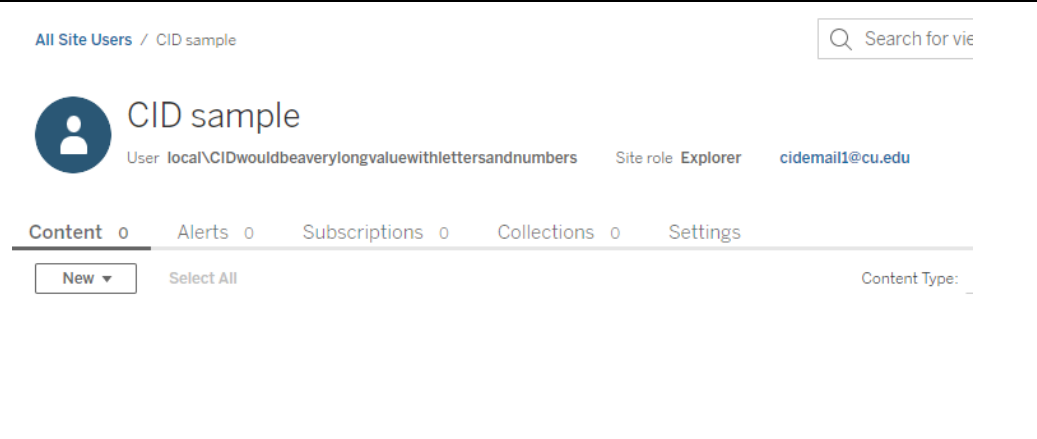
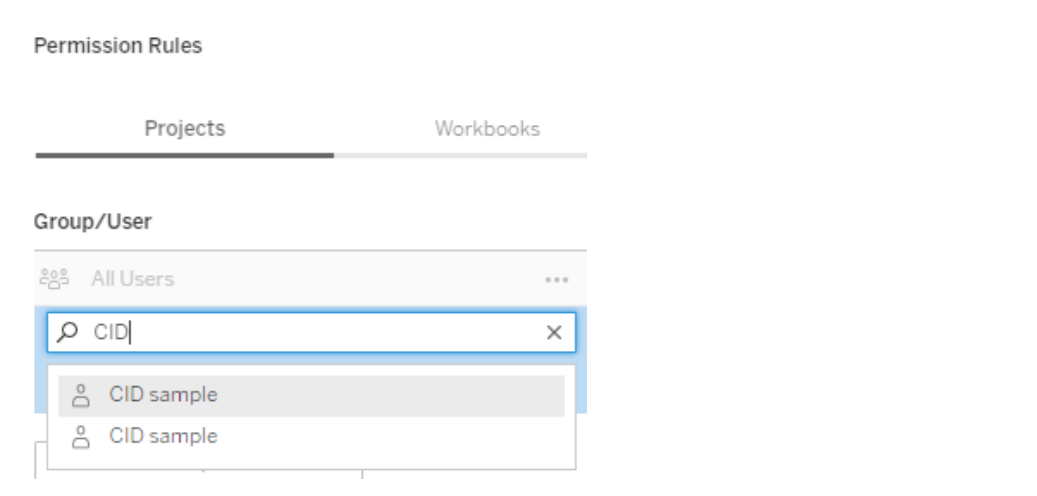
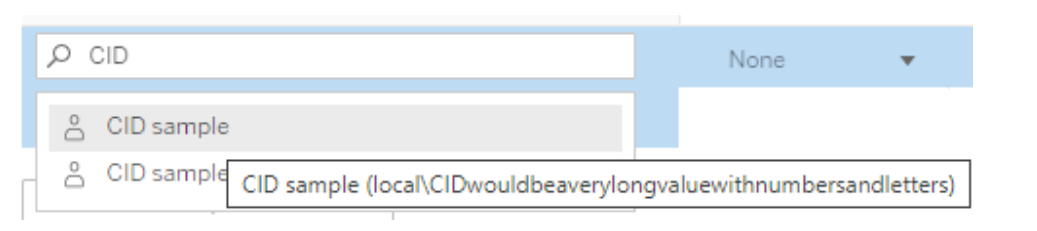


<p>2 Navigate to the appropriate Site</p>	 <p>The screenshot shows the Tableau 'Select a Site' dialog box. At the top is the Tableau logo and the text 'Select a Site'. Below this is a search bar with the placeholder text 'Type to search for a site'. A list of sites is displayed below the search bar, including 'BFP', 'Boulder Default', 'CCO', 'College of Engineering', 'College of Nursing', 'CUBoulder Education Abroad', and 'Default'. A vertical scrollbar is on the right side of the list.</p>
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3	Select Manage Users from the home screen	
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<p>5 If you need more information on each user, click on the user display name to view the user's CID, site role, and email address along with any content, alerts, or subscriptions for that user.</p> <p>Once you have identified the appropriate user's CID, you will be able to match the CID to the appropriate display name when applying permissions.</p>	 <p>The screenshot shows the 'All Site Users / CID sample' page. At the top, there's a search bar. Below it, the user's profile is displayed with a blue circle icon, the name 'CID sample', and details: 'User local\CIDwouldbeaverylongvaluewithlettersandnumbers', 'Site role Explorer', and 'cidemail1@cu.edu'. A horizontal menu below the profile includes 'Content 0', 'Alerts 0', 'Subscriptions 0', 'Collections 0', and 'Settings'. At the bottom, there's a 'New' button and a 'Select All' link.</p>
<p>6 When securing content and adding users to projects or workbooks, Site Administrator users are shown by their display name.</p>	 <p>The screenshot shows the 'Permission Rules' dialog box with tabs for 'Projects' and 'Workbooks'. Under the 'Group/User' section, there's a search bar with 'CID' entered. Below the search bar, a list of users is shown, including 'CID sample' and 'CID sample'.</p>
<p>7 To distinguish between the users, hover over each user display name, and Tableau will display the CID value.</p>	 <p>The screenshot shows a dropdown menu for selecting a user. The search bar contains 'CID'. The dropdown list shows 'CID sample' and 'CID sample'. A tooltip is visible over the second 'CID sample' entry, displaying the full CID: 'CID sample (local\CIDwouldbeaverylongvaluewithnumbersandletters)'.</p>

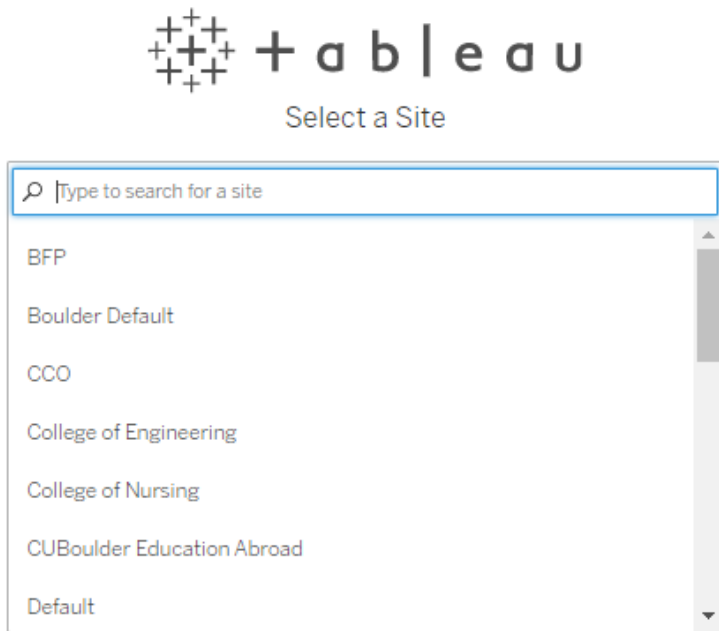


Adding Users to Groups

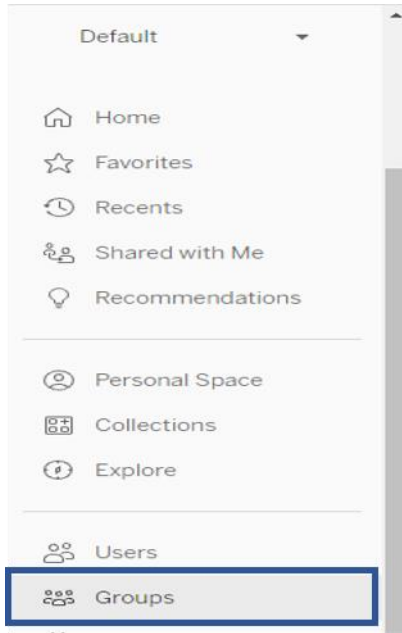

Site Administrator Explorers (Site Owners) can create groups of users by selecting from users already populated into Tableau Server and then adding users to groups. If Site Administrator Explorers do not see a user on Tableau, wait one day for the nightly data transfer from the campus to the Tableau enterprise server to be completed and then look again for the user.

1 Type viz.cu.edu in your favorite browser, select your campus, and log in using your VPN and AD credentials as you do today.	 <p>The image shows the University of Colorado login page. At the top is the University of Colorado logo and name, with locations listed below: Boulder Colorado Springs Denver Anschutz Medical Campus. Below this is the instruction "Click on your campus to log in." and four buttons, each with a campus photo and a label: "CU Boulder", "CU Denver Anschutz", "UCCS", and "CU System Office".</p>
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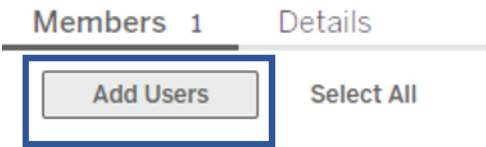
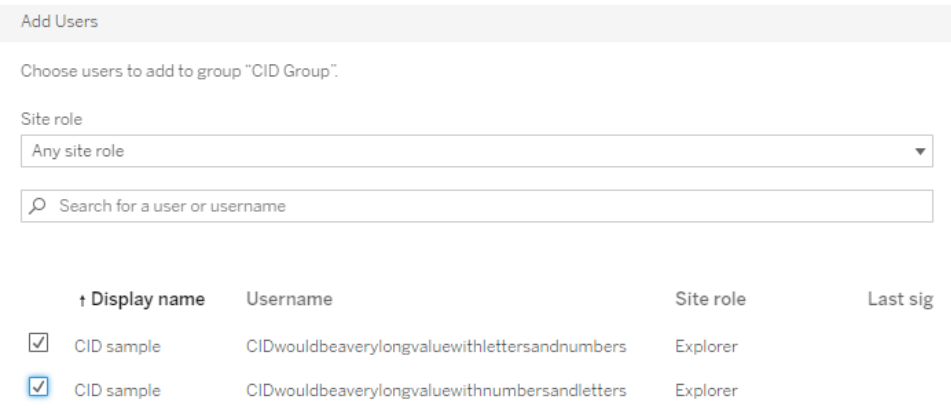
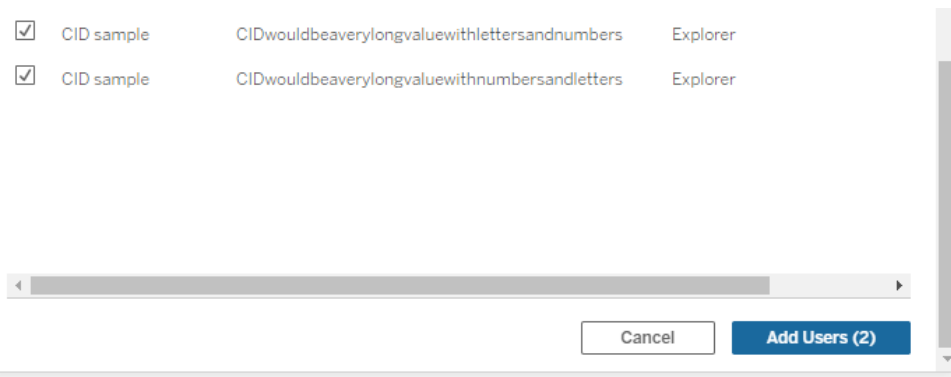


2	Navigate to the appropriate Site	 <p>The screenshot shows the Tableau 'Select a Site' interface. At the top, the Tableau logo is displayed above the text 'Select a Site'. Below this is a search bar with a magnifying glass icon and the placeholder text 'Type to search for a site'. A dropdown menu is open, showing a list of sites: BFP, Boulder Default, CCO, College of Engineering, College of Nursing, CUBoulder Education Abroad, and Default. The list is scrollable, as indicated by a vertical scrollbar on the right side of the dropdown.</p>
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3	Navigate to Groups from the pane on the left	 A screenshot of the Tableau navigation pane. The pane is a vertical list of items. At the top is 'Default' with a dropdown arrow. Below it are 'Home' (house icon), 'Favorites' (star icon), 'Recents' (clock icon), 'Shared with Me' (people icon), and 'Recommendations' (lightbulb icon). A horizontal line separates these from 'Personal Space' (person icon), 'Collections' (grid icon), and 'Explore' (magnifying glass icon). Another horizontal line separates these from 'Users' (two people icon) and 'Groups' (three people icon). The 'Groups' item is highlighted with a blue border and a light gray background.
4	Select the group you want to modify	 A screenshot of the 'All Groups' page in Tableau. At the top, it says 'All Groups /'. Below this is a group icon (three people) and the text 'GROUP 1'. Below that is another group icon and the text 'GROUP 2'. The 'GROUP 2' text is enclosed in a blue rectangular box.



5	Click on Add Users	
6	Check the box to the left of the Display name for each user you want to add to the Group	
7	Click Add Users in the bottom right of the Add Users window.	



Administrative Items within Tableau Enterprise Server

Content Permissions

Content permissions are based on role assignments and determine how users can interact with content such as workbooks and data sources. They enable the ability to save to a project, edit a workbook, connect to a data source, etc. Permissions can apply to a user or group and a specific piece of content (project, data source, workbook, view, or flow).

TAKE NOTE: For each project, Site Administrator Explorers (Site Owners) should ensure the ‘All Users’ content permissions are set appropriately. For example, if a mass email is sent to all users and the content permissions are not set appropriately, users not normally having access to certain visualizations may receive notice of access. With HIPAA data or other PI included in many visualizations, ensuring content permissions are set correctly is a critical step in safeguarding sensitive data.

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Select the appropriate permissions for ‘**All Users.**’

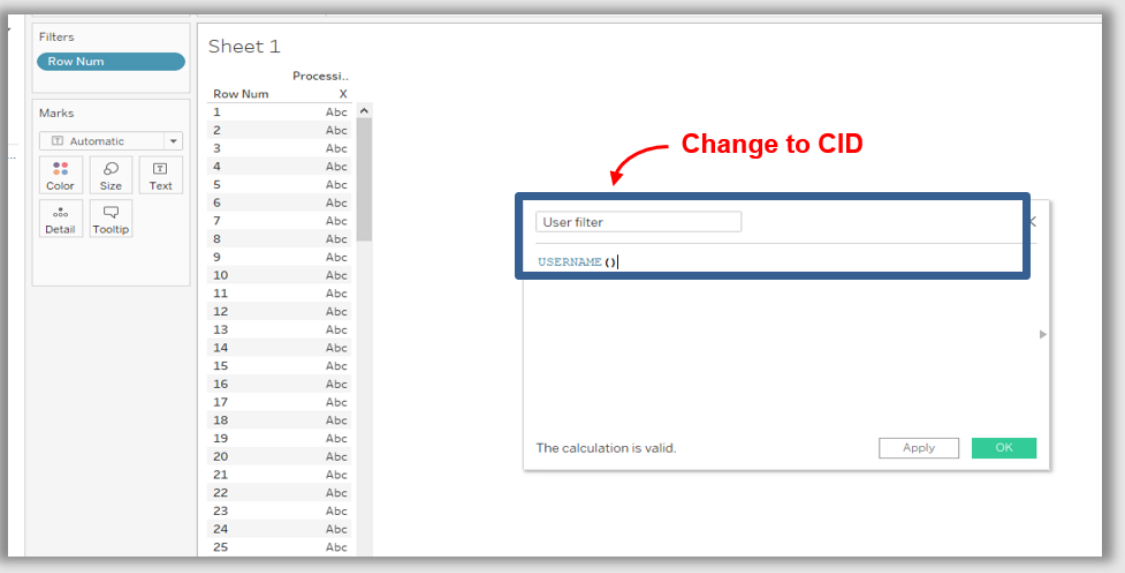
The screenshot displays the 'Content permissions: Customizable' interface in Tableau. At the top, there is a lock icon and the text 'Content permissions: Customizable' with an 'Edit' link. Below this is the 'Permission Rules' section. There are four tabs: 'Projects', 'Workbooks', 'Data Sources', and 'Data Roles'. The 'Projects' tab is currently selected. Below the tabs is a table with columns: 'Group/User', 'Template', and two checkboxes. The 'All Users' row is highlighted with a blue box. The 'CU Medicine - Administrators' row has 'Administer' as the template and both checkboxes checked. The 'CU Medicine - Publisher' row has 'Publish' as the template and both checkboxes checked.

Group/User	Template		
All Users	None	<input type="checkbox"/>	<input type="checkbox"/>
CU Medicine - Administrators	Administer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CU Medicine - Publisher	Publish	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



Updating Row-Level Security Calculations

TAKE NOTE: Site Administrator Explorers (Site Owners) should be aware that Tableau Enterprise Server works with constituent identification (CID) unique to each Tableau user rather than 'username' previously used across campuses. In Tableau Enterprise Server, row-level security calculations from Identikey (user-name) to Constituent ID (CID) need to be updated to ensure proper data management and user access to work within Tableau server.

<p>1 This is one view of how to change row-level security.</p> <p>Your view may be different. If you have questions about how to access row-level security, please contact irmhelp@cu.edu.</p>	 <p>The screenshot shows the Tableau interface. On the left, there's a 'Filters' pane with 'Row Num' selected. The main view is 'Sheet 1' showing a table with 'Row Num' and 'Process...' columns. A dialog box titled 'User filter' is open, showing 'USERNAME ()'. A red arrow points to the dialog box with the text 'Change to CID'. The dialog box also has a message 'The calculation is valid.' and 'Apply' and 'OK' buttons.</p>
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Release and Maintenance Versions of Tableau

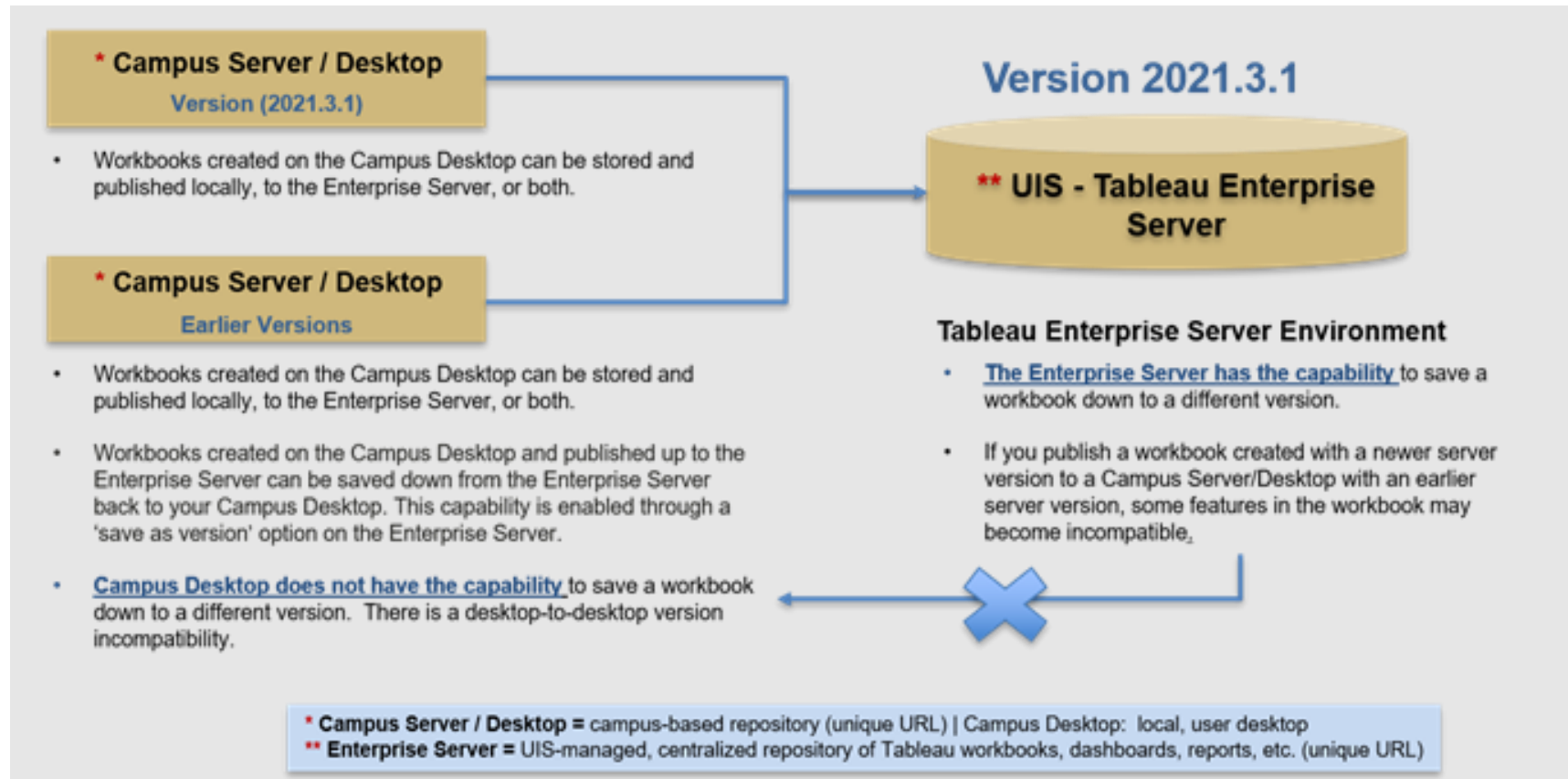
Tableau has ‘Release’ and ‘Maintenance’ (or dot) versions. For example, the enterprise-wide version of Tableau being used is **2021.3.1** which is the most current version of Tableau available (as of November 2021).

- **2021.3 is the ‘Release’ version.** Release versions often include a range of new features and updates. If you try to publish your updated workbook to a prior version of Tableau Server, the workbook and some of its features may become incompatible.
- **.1 is the ‘Maintenance’ version.** Maintenance version updates typically do not cause compatibility issues from one version to the next.



Campus Server / Desktop Interaction with Tableau Enterprise Server

Regardless of which Tableau version is being run on your Campus Desktop, when testing and publishing to the Enterprise Server, you should not encounter workbook functionality issues.





Ongoing Releases

Upon successful completion of testing and migration to the Production (PRD) environment, the University Information Services (UIS) team will provide centralized release or maintenance upgrades for the Tableau Enterprise Server approximately twice per year. UIS will provide communications for each release according to technical release communication protocols.