# UW System Tableau Server: Memorandum of Understanding

## Overview

This Memorandum of Understanding (MOU, agreement) identifies roles, responsibilities, services, and costs associated with the operation of Tableau Server by UW System Administration (UWSA) for use by participating UW System institutions (UW or UWs).

## Background

In 2019, UW System Administration (UWSA) was approached by several UW institutions seeking access to software for rapidly creating and disseminating data for organizational decision-making in an online, visual, and interactive format. Institutional colleagues specifically requested access to the publishing capabilities of Tableau Server.

Data visualization is the communication of data through visual means, which can result in more complete and efficient comprehension of information. Tableau software includes two modules that together provide data visualization functionality to a wide audience of users: Tableau Desktop and Tableau Server.

Tableau Desktop is a module that data analysts use to create data visualizations. It is licensed at relatively low cost to individual users and is installed on personal computers. Tableau Desktop has emerged as a tool of choice for many UW data analysts because of its effectiveness at rapidly combining data from multiple internal and external sources into interactive data visualizations. Its flexibility is well-suited to iterative analyses in response to immediate, new, non-routine questions.

Tableau Server is a server-based module that allows a data analyst to publish visualizations. It allows fine-grained control over who views and interacts with data visualizations and fulfills a need to share data visualizations with specific internal audiences. Beginning in 2018, UW-Madison used Tableau Server as its institution-wide data visualization publishing solution, while also hosting UW-Whitewater on the server. UW-Madison agreed in 2020 to reconfigure its Tableau Server to be operated by UWSA and include other interested UWs.

## Purpose

The UW System Tableau Server provides UWSA and participating UW institutions the capability to publish interactive data visualizations to inform and support organizational decision-making. It is intended to help staff in a variety of functional roles (institutional research, budget, finance, admissions, libraries, etc.) communicate data to organizational decision-makers at a variety of levels (e.g., chancellors, provosts, directors, department chairs). UW System Tableau Server may be used to provide information on academic instruction and academic research as institutional activities, but is not available for instructional uses (e.g., course activities or student projects) or academic research projects.

This MOU covers the terms of UWSA's governance and operation of UW System Tableau Server, the continuation of services to UW-Madison and UW-Whitewater, and the new provision of services to additional participating UWs.

## Terms of agreement

## Parties

This MOU is an agreement between the UW System Administration (UWSA) and the individual UW institution (the UW, the institution) undersigned below.

#### Duration

This MOU is effective as of July 1, 2020 or the date signed by the Parties, whichever comes later. It ends June 30, 2026, unless terminated sooner (see Early termination). The duration of six years reflects Tableau, Inc.'s guarantee to UW System of a fixed Tableau Server license cost for three years, with the option to renew at the same cost for another three years.

## Modification

The level of service described in this MOU is intended to meet the most important needs of participating UWs at a cost that is sustainable throughout the agreement. However, it may become necessary to modify the level of service, either to better meet the needs of participating UWs or to manage total operational costs. Similarly, unanticipated changes in costs may require modifications to this agreement independent of changes to the level of service.

Modifications to this MOU will be in writing and by mutual agreement of the Parties. Any modifications will be scheduled to take effect at the beginning of a fiscal year (July 1), unless otherwise mutually agreed upon.

#### Early termination

This MOU remains in effect as represented herein and as subsequently modified unless terminated at the request of either party. Any termination prior to the end of the agreement will be done in a cooperative fashion that allows sufficient time for transition of resources to occur. Parties expect that a minimum of four months will be necessary to complete an early termination.

## Cost

The undersigned UW institution will pay UWSA the cost indicated in Exhibit A annually for the duration of this agreement.

## Billing

UWSA will invoice the undersigned UW institution once each fiscal year. UWSA will endeavor to provide invoices by the third quarter of the fiscal year.

## Scope of services

UWSA will:

- Provide the undersigned UW institution a site on Tableau Server for publishing visualizations.
- Provide a default process to provision all the UW institution's employees as site users with the "Viewer" role. In lieu of the default process, the UW institution may develop and maintain its own provisioning process at its own expense, or retain a pre-existing process, so long as it is not detrimental to the operation of Tableau Server and is communicated to UWSA in writing.
- Provide a process for user authentication to Tableau Server through the UW institution's identity provider.

- Provide the UW's site administrator with an initial orientation to the technical and data governance practices required to administer the site.
- Provide systemwide governance and administration of Tableau Server, including
  - Execute contracts for server hosting (hardware and operating system), Tableau Server software licensing and maintenance, and Tableau Server software administration.
  - Coordinate Tableau Server software upgrades.
  - Coordinate, report, and resolve issues affecting server-wide performance or multiple sites on the server.
  - Communicate minimum security standards, best practices, or similar guidance for content published on Tableau Server.
  - Convene Tableau Server site administrators to discuss server-wide issues, best practices, and other topics of mutual interest. Convenings are expected to occur at least annually.

UWSA will NOT:

- Provide or manage Tableau Desktop licenses, maintenance, or upgrades.
- Provide resources for the development of Tableau data visualizations.
- Train users in the use of Tableau products (other than initial orientation for site administrators noted above) or provide funding for user training or Tableau conference attendance.
- Provide debugging or troubleshooting of Tableau content, including but not limited to data visualizations, workbooks, or data source connections, unless the UW institution demonstrates a link to a server-wide issue.
- Perform technical functions for the UW institution's site, including but not limited to adding users (other than through the default provisioning process noted above), assigning roles or groups, managing project folders, or setting permissions.
- Perform data governance functions for the UW institution's site, such as establishing publication standards or reviewing content for publication, other than the guidance noted above.

## Level of service

## Availability

The UW System Tableau Server environment typically will be available 24 hours a day, 7 days a week. It may be unavailable during periodic application, operating system, or hardware upgrades, which will be planned ahead of time and performed outside of normal business hours to the extent possible.

The UW System Tableau Server is not considered a mission-critical environment. While the server and application are backed up daily, there is not the expectation that the environment can be restored rapidly in the case of a disaster.

## Upgrade process

UWSA will keep Tableau Server current with major software releases, which Tableau typically provides annually. Minor releases and maintenance releases will be evaluated by UWSA to determine whether they will be applied. Typically, minor and maintenance releases only will be applied if they fix a major security flaw or provide significant functionality that is urgently needed. Upgrades are expected to occur as follows:

- The server administrator will upgrade the server in a test environment and conduct initial tests.
- The server administrator will invite site administrators to review content and functionality in a test environment, to make sure nothing was broken by the upgrade. Site administrators may invite users who publish to the server to participate in this stage of testing.
- Once the upgrade has been tested, the server administrator will schedule a date and time for the upgrade in the production environment. The upgrade will be scheduled outside of normal business hours at a mutually convenient time for participating institutions, to the extent possible.
- The server administrator will notify site administrators of the upgrade at least one week in advance.
- Site administrators will communicate the timing of the upgrade to their users who publish to the server. Users who publish to the server may find it desirable to upgrade Tableau Desktop on the same schedule as Tableau Server. UWSA is not responsible for ensuring users have the current version of Tableau Desktop.
- The server administrator will notify site administrators upon completion of the upgrade to the production environment.

## Functionality

A large component of the operating cost of Tableau Server is the software license, which is based on server cores. When server use increases to the point it affects performance, more server cores must be added, dramatically increasing the license cost. To manage server capacity, UWSA provides two levels of functionality at different costs. These are defined in Exhibit A and are designed to keep server usage within current capacity for the duration of this agreement.

#### Issue management

Issues that may arise with the routine operation of Tableau Server will be communicated between UWSA and the UW institution's site administrator. Typically, issues will be managed as follows. Site users experiencing an issue will communicate it to the UW's site administrator. The UW's site administrator will work to resolve the issue. If the site administrator cannot resolve the issue, or it appears to affect server-wide performance or multiple sites, the site administrator will communicate the issue to UWSA. UWSA will work with site administrator(s) and the Tableau Server software administrator to resolve the issue. UWSA will report the status of server-wide issues to site administrators on a regular basis.

UWSA will maintain an email address for the UW institution's site administrator to report issues with Tableau Server. The email address will forward to UWSA and Tableau Server software administration staff and will be monitored during business hours, 7am to 6pm, Monday through Friday, except holidays. Issues sent to the email address will be read and acknowledged within two hours. UWSA and the Tableau Server software administrator will prioritize issues based on the impact on users.

## Expansion of server capacity

Should server usage increase beyond expectations, or should participating UWs desire increased capacity, UWSA will evaluate expansion options. Evaluation will include expected changes to level of service (if any), estimated overall cost of expansion, and estimated cost per participating institution. If

not all participating institutions support expansion, UWSA still will facilitate expansion if the overall cost is covered by one or more institutions and there is no adverse impact on participating institutions that do not wish to expand. Expansion of server capacity would entail a modification to this agreement.

## Roles and responsibilities

UWSA will provide the scope and level of service described in this MOU.

The undersigned UW institution will designate a site administrator for the UW institution site on Tableau Server. The site administrator role is primarily about governing content: who can publish it, who can view it, and minimum standards. The role may be filled by an administrative office that leads institutional data analysis or by an individual "power user" or data analyst with extensive knowledge of institutional data. Since the role does not involve IT-type development or database management, it need not be filled by institution IT staff. The site administrator will serve as the point of contact between UWSA and the institution's site users, fulfilling the following specific responsibilities as well as others determined by the UW institution:

- Manage user roles, groups, project folders, and permissions.
- Manage content standards, data security standards, and the publication process for the site.
- Communicate information about site changes and server-wide changes such as upgrades to Tableau Server users at the UW institution.
- Participate in testing of upgrades and recruit users to participate in testing, if needed.
- Participate in systemwide convenings of Tableau Server site administrators to address serverwide issues and other topics of common interest.
- Communicate with UWSA any difficulties or abnormalities observed with the operation of Tableau Server, especially those that may affect other institutions.
- Act as a liaison to institution resources needed to resolve any technical issues affecting Tableau Server, including content or practices that negatively affect server performance.

In addition, the UW institution accepts the following responsibilities, which may or may not be assigned to the site administrator:

- Purchase, manage, and upgrade any Tableau Desktop licenses necessary for the UW to develop data visualizations for publication on Tableau Server.
- Provide permission, when requested, for Tableau Server software administrators to access UW institution content where necessary to troubleshoot technical issues.
- Provide IT staff resources as needed to work with Tableau Server software administrators to resolve issues affecting Tableau Software operation. Potential issue areas may include authentication, firewalls, or database whitelisting.

## Signatures

The following signatures formalize this MOU for UWSA:

	Date:
Steven Hopper, CIO, UWSA	
	Date:
Ben Passmore, Associate VP OPA	R, UWSA
The following signatures formaliz	ze this MOU for the UW institution:
	Date:
	-
	Date:

## Exhibit A: UW institution level of functionality and cost

UWSA provides Tableau Server functionality at two levels. The founder level is provided to UW-Madison and UW-Whitewater as pre-existing users of Tableau Server. It allows them to preserve continuity of operations while they continue to pay the majority of ongoing operating costs. The base participation level of functionality is provided to UWSA and any additional participating UW institutions. It allows them to use Tableau Server to communicate institution-wide to specific internal audiences at a low annual cost.

The characteristics of each level of functionality have been identified as having an impact on overall server capacity. UWSA reserves the right to use additional server performance measures beyond the listed characteristics to manage server capacity and to modify the level of functionality as needed to address server performance issues. Whenever possible, UWSA will work with the UW institution to identify and resolve server performance issues in a way that preserves the institution's level of functionality.

Level of Functionality

Characteristic	Founder: UW-Madison and UW-Whitewater	Base Participation: UWSA and any other participating UWs	
Named users	All UW institution employees	All UW institution employees	
Number of users who can publish to the server (e.g., roles of Creator, Explorer, Explorer can publish)	No limit. Users are required whenever possible to design visualizations in Tableau Desktop rather than on the server.	May be limited if server capacity is affected.	
Storage	Will be maintained at existing levels. Additional storage may be provided if server capacity allows. Founders will have priority if storage needs to be managed server-wide.	A starting allotment will be provided. Additional storage may be provided if server capacity allows.	
Live data connections or "refresh on view" workbooks	Existing uses may continue. Additional uses will be allowed as server capacity permits.	None	
Scheduled refreshes and subscriptions	Existing uses may continue. Additional uses will be allowed as server capacity permits.	Can be scheduled during non- peak times only.	
Guest account (allows general public to view without logging in)	Existing uses may continue. Additional uses will be allowed as server capacity permits.	Not available. Tableau Public is a free resource for institutions to publish to the general public.	
Provisioning users	May keep current provisioning processes at own expense or may use UWSA's default provisioning process.	By default, UWSA will provision the UW institution's employees to the site. The institution may develop its own provisioning process at its own expense with written communication to UWSA.	

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	Level of Fu	Level of Functionality		
Characteristic	Founder: UW-Madison and UW-Whitewater	Base Participation: UWSA and any other participating UWs		
User authentication	Users log in via a common WAYF page and IdP proxy that redirects to UW institution IdP and multifactor authentication. No "local accounts" available.	Users log in via a common WAYF page and IdP proxy that redirects to UW institution IdP and multifactor authentication. No "local accounts" available.		
Annual Cost*	Included as part of the overall Enterprise Directions Council budget beginning FY23.	Included as part of the overall Enterprise Directions Council budget beginning FY23.		

\*Cost is based on the expected annual total cost of ownership of Tableau Server and participation by UWSA, UW-Madison, and UW-Whitewater. Participation by additional UW institutions may allow proportional reductions in cost shares. UWSA will determine the total cost of ownership of Tableau Server each year and invoice participating institutions for their share of the actual total cost.