

SERVER INSTALLATION AND CONFIGURATION GUIDE

© 2020 Alteryx Date: December 2020 Version: 1.9 Author: Brianne Hillmer

EXPERIENCE ALTERYX: ALTERYX.COM/TRIAL



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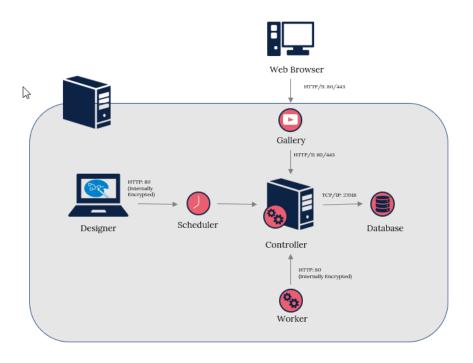
About This Guide

This guide includes the essential installation, configuration, and administration steps for Server admins. For the most up-to-date and comprehensive help content, including help for Gallery users, visit the online help documentation for Server at <u>http://help.alteryx.com/current/server</u>.



1. System Overview

Alteryx Server includes these primary components.



Designer

Designer is a Windows software application that provides an intuitive drag-and-drop user interface for you to create repeatable workflow processes. You can drag tools from a toolbox onto a canvas, connect them, and edit their properties to create workflows, apps, and macros. You can use these workflows to blend and enrich data from a range of sources, perform advanced analytics, and quickly produce results to share with others.

In a Server deployment, Designer users can publish their workflows, apps, and macros to the Gallery where other Gallery users can access, run, and download them.

A scheduler interface, which allows users to schedule workflows to be executed at a specific time or on a recurring interval, is also added to Designer as part of the Server deployment.

Gallery

Gallery is a cloud-hosted or self-hosted application for publishing, sharing, and executing workflows. In a Server deployment, users can publish Designer workflows, macros, and apps to a private Gallery hosted on your server infrastructure. Once published, other Gallery users can run workflows and view the results. Alteryx also offers the <u>Alteryx Analytics Gallery</u>, where you can sign up and share workflows, apps, and macros publicly or with selected users.

Controller

The controller manages the Server settings and delegates workflows to be executed to the workers.

The controller consists of the Alteryx service as its primary piece of code. The service allows you to deploy the engine, which processes workflows, across multiple servers, providing a scalable architecture for the scheduling, management, and execution of analytic workflows. The service uses a controller-worker architecture where 1 server acts as the controller and manages the job queue, and others act as workers that run the jobs. If you deploy Server across multiple servers, you can only enable 1 machine as a Controller. The service relies on the persistence layer to store information critical to the functioning of the service. The service also sends content to the Gallery when requested.

Worker

Workers are responsible for executing workflows. Once the controller delegates a job to a worker, the worker runs it and produces the output. There has to be at least 1 worker machine in a Server deployment.

Workers contain an instance of the Alteryx engine. The engine supports direct connections to various data sources. The engine accesses the input data and then processes it in memory during workflow execution. When processing exceeds memory limitations, the engine leverages temporary files on disk and deletes them once the processing is complete.

The engine can be self-contained in a Designer deployment, scaled across an organization via Server, or deployed in the cloud in the Gallery.

The engine integrates with R. Both the suite of R-based tools and the macros used for predictive analysis leverage the R program.

Developers can write applications that call the engine directly using the application programming interface (API). The software development kit (SDK) allows developers to add programs to their Alteryx toolbox.

Persistence Layer

The persistence layer stores application data and ties all the components together. It is the management record for your Server. The service relies upon the persistence layer to store information critical to the functioning of the Service, such as application files, the job queue, and result data.

There are 2 supported mechanisms for persistence: SQLite and MongoDB. For lightweight and local deployments, SQLite is adequate for most scheduling needs. For heavier usage, or if you are deploying the Gallery, you have to use MongoDB. If you use MongoDB, you can use the embedded MongoDB or connect to your implementation of MongoDB.

1.1 System Requirements

	REQUIRED MINIMUMS
Machine	64-bit
OS	Microsoft Windows Server 2008 R2 or later
Chip	Quad-core (single chip)
Processor	2.5GHz or faster
RAM	16GB
Disk Size	1TB

To install and run Alteryx, your system must meet these minimum system requirements.

Other Requirements

- Administrator Rights: Admin access to the host server's operating system or physical access to the server hardware is required to install Server.
- Active Directory Read Access: Read access to Active Directory, if you plan to use Integrated Windows Authentication. Go to <u>4.3 Configure Gallery Authentication</u> for more info on authentication options.
- Access to the Alteryx Licensing System: Ensure the computer can contact the whitelist.alteryx.com web domain used by the Alteryx licensing system.
- File Share Access: Read and write permissions to the file share.
- **Predictive Tools Install**: Install Predictive Tools to run workflows that use the Predictive Tools on Server.
- **Base Address**: The base address is the URL that users use to access the Gallery. The URL defaults to http://localhost/gallery/ which you can use to run the Gallery locally.
- **SMTP Server**: SMTP host information is required for Gallery email notifications.
- Alteryx Admin User: The Gallery administrator can manage users and workflows. You specify a Default Gallery Admin when configuring the Gallery authentication.
- **Database Type:** To configure a machine to run a Gallery instance you have to use MongoDB.

Important

If you were previously using SQLite for Alteryx Scheduler, jobs have to be manually re-scheduled when switching to MongoDB.

• **Ports**: These are the default ports used by Server. You can customize ports if necessary.



Public

- 80: AlteryxService, Non-SSL/TLS AlteryxServerHost (webserver), and AlteryxAuthHost (Authentication Service)
- 443: AlteryxServerHost (webserver) and AlteryxAuthHost (Authentication Service) with SSL/TLS
- 27018: Embedded MongoDB

Loopback Only

- 5562: AlteryxMetrics
- 8700-8799: Python for Insights

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2. Install

2.1 Download the Server Installation File

Download the Server product from the Alteryx Downloads and Licenses portal.

- 1. Sign in to the Alteryx Downloads and Licenses portal at licenses.alteryx.com.
- 2. Under Product Downloads, select Alteryx Server.
- 3. On the Download Products page, select the version of the product you want to download. The latest version is available on the **New Versions** tab. Access previous versions on the **Previous Versions** tab.
- 4. On the **Downloads** page, select the **plus** icon next to **Alteryx Server** to display a description of the product.
- 5. Select the link for the Alteryx Server product in the **File Name** column to download the file.

2.2 Install Server

- 1. Run the Alteryx Server Installer with admin rights. (Right-click and select **Run as** administrator.)
- 2. Confirm the destination folder and select Next.
- 3. Check the I accept the license agreement checkbox and select Next.
- 4. Select 1 of these options and select **Finish**.
 - **Configure Server now**: Opens the **Alteryx System Settings** window so you can configure the Server.
 - Close and run Alteryx Designer later: Closes the installation window. Access the system settings at any time via the Alteryx System Settings desktop icon.
 - **Install Predictive Tools**: Installs the predictive tools in Designer. The predictive tools use R, an open-source programming language used for statistical and predictive analysis. Select this option to launch the R installer. You have to install the predictive tools to use the predictive macros in Designer. To install at a later time, go to **Options** > **Download Predictive Tools** in Designer.

Best Practice

We recommend you install all Server components on a separate, physical drive (for example, D:) from the OS install. To avoid latency, use a local, solid-state drive not a network drive. Assign all workspaces and directories to use the same drive as the installation.

Benefit: This minimizes input/output contention with OS operations.

3. License

3.1 Activate Online

If you haven't licensed your Server, you are prompted to do so. Use the license key from your license administrator to activate a product license. If the license prompt doesn't immediately load, you can access it in Designer under **Options** > **Manage Licenses** > **Activate New License**.

To activate a license online...

- 1. In the Alteryx Server Activation window, enter your email address.
- 2. Enter your License keys one per line.
- 3. Select Activate.
- 4. In the Activation Success window, select Experience Alteryx.

3.2 Activate Offline

As an alternative to online activation, you can submit a request for an activation (BIN) file. If you want to activate with a file, select **Activate with File** to open the **Alteryx Offline Activation** window.

Step 1. Create a Request (REQ) File from the Offline Computer

- 1. Open Designer. If the Alteryx Designer Activation window doesn't open automatically, select Options > Manage Licenses > Activate New License.
- 2. Select Activate Offline.
- 3. In the **Offline Activation** window, select **Create** in the **Request** step to create a request (REQ) file.
- 4. Enter your First name, Last name, Email address, and your License keys.
- 5. Select **Create request**. Alteryx creates a request file with your email address and REQ extension as shown in this example: **email@company.com.req**
- 6. Select **Save** to save the request (REQ) file where it can be accessed from the Alteryx Downloads and Licenses portal or send the file to your license administrator.

Step 2. Upload the Request File to the Alteryx Downloads and Licenses Portal

Important

This step requires internet access.

- 1. Sign in to the Alteryx Downloads and Licenses portal at licenses.alteryx.com.
- 2. On the Home page, select Upload Activation Request.
- 3. Select **Browse** and select the request (REQ) file you saved in the previous step.



- 4. The **Alteryx Downloads and Licenses portal** generates an activation file with your email address and BIN extension as shown in this example: **email@company.com.bin**.
- 5. Save the activation (BIN) file so that you can access it from the offline computer.

Step 3. Open the activation (BIN) File on the Offline Computer

- In the Alteryx Designer Activation window on the offline computer, select Back. Or select Options > Manage Licenses > Activate New License to open the Alteryx Offline Activation window.
- 2. Select **Browse** and select the activation (BIN) file.
- 3. In the Activation Success window, select Experience Alteryx.

3.3 Activate Using a License Server

The Alteryx License Server allows for the hosting and managing of purchased product licenses within your organization's internal network. The license server allows for smoother and more-secure deployment of Alteryx products, especially behind proxies and firewalls. Download the license server from the Alteryx Downloads and Licenses portal at licenses.alteryx.com.

To activate using a License Server:

1. Open Designer. If the Alteryx Designer Activation window doesn't open automatically, select **Options** > **Manage Licenses** > **Activate New License**.

Note: If don't have valid licenses, the license server displays **Install License**. Select **OK** to continue.

- 2. Select the **here** link within **To access your License Server, click here** text. The license server displays **Manage Licenses**.
- 3. In **License Server Connectivity**, select **Connect**. The license server displays available licenses. If this is the first time you have activated a license, enter your email address.
- 4. Select Activate for each product you want to activate.
- 5. Select Close.

4. Configure

4.1 System Settings

After you install and license Server components, if you select **Configure Server now** on the last page of the installation, the **System Settings** window automatically opens. If the window doesn't open automatically, select the **Alteryx System Settings** shortcut icon on your desktop. You can also access **System Settings** in Designer under **Options** > **Advanced Options** > **System Settings**.

From **System Settings**, you can configure your Server instances to be a single or multiplemachine configuration. Go to <u>4.2 Configure Controller and Workers</u> for more info on single or multiple-machine configuration.

4.1a Environment

On the **Environment** screens in **System Settings**, select the Server **Setup Type** and the **Global Workspace** to use as a root location for file storage.

Setup Type

On the **Setup Type** screen, select the components of the Server architecture to enable on the machine. You can enable the complete Server architecture on a single machine. If you want to have a multi-machine, scaled Server deployment, you can enable specific components per machine.

- **Designer Only**: Enables only Designer on the machine. Scheduler and Gallery functionality aren't enabled or configurable.
- **Designer and Scheduler Only**: Enables Designer and Scheduler on the machine. Gallery functionality isn't enabled. Select this option if you want users on the machine to build and run workflows and schedule workflows to run in the future.
- **Complete Alteryx Server**: Enables the entire Server architecture to run on the machine. This includes Designer, Scheduler, and Gallery. Select this option if you want to run a single-machine environment and want the complete Server functionality.
- **Custom**: Allows you to enable specific components for the machine. Select this option for multi-machine deployments of Server.
 - **Enable Controller**: Enables a controller on the machine. The controller manages and distributes scheduled workflow jobs to workers.
 - **Enable Worker**: Enables a worker on the machine. Workers execute scheduled workflow jobs assigned by the controller.
 - **Enable Gallery**: Enables Gallery on the machine. If you enable Gallery, you have to specify a **Default Gallery Administrator** on the **Gallery > General** screen.
- Send Server usage data: When enabled, Alteryx collects usage data for each job run, including manual and scheduled runs. Alteryx uses this information to plan future enhancements and prioritize fixes and features. To opt out of sending your usage data to Alteryx uncheck this option. Unchecking this option doesn't prevent your IT department from collecting usage data. The usage data collected includes the following:



- Version of Server running the job.
- Serial number of the Server installation.
- Job schedule.
- o Job ID.
- Date and time the job was run.
- Errors, warnings, conversion errors, messages.

Global Workspace

On the **Global Workspace** screen, select a root location where Server files are stored. The root path is used as the base location for storage of temporary files, log files, and database files. This path should point to a location that is safe to store large amounts of files. Go to <u>4.7 Configure</u> and Use Server Logs for more info.

4.1b Controller

The controller manages the service settings and delegates work to the workers. You can only enable 1 machine as the controller in a deployment.

Configure the controller component on the **Controller** screens in **System Settings**. The **Controller** screens are available in **System Settings** if you've selected 1 of these options on the **Environment** > **Setup Type** screen:

- Designer and Scheduler Only
- Complete Alteryx Server
- Custom > Enable Controller

General Configuration

The **General Configuration** screen includes configuration options such as where you want to store temporary files and log files and what information you want to log.

Controller Token

The **Controller Token** is an auto-generated secret key that the controller uses to communicate with workers and machines using Designer.

If a machine using Designer isn't a controller machine and you want to schedule a workflow for a future date on this machine, you have to add the controller token on the **Schedule Workflow** screen to schedule a workflow.

You also need the controller token if you want to have one machine act as a controller and another machine act as a worker. Set up the controller machine to get your controller token. Then, add the controller token in **System Settings** > **Controller** > **Remote** when setting up the worker machine.

You can regenerate the token if necessary, for example, if the token is compromised. If you regenerate the token, you have to update Gallery and worker nodes in the deployment. If you want to regenerate your token, select **Regenerate**.

Workspace

The **Controller Workspace** is the location where the controller stores temporary or cache files. By default, the folder is located within the global workspace folder as defined in the Environment screens in **System Settings**. Use a location that is safe to store large amounts of files.

Logging

The controller produces logs for events, such as services started and shut down, execution requests, etc. These logs can be helpful for troubleshooting. Go to <u>4.7 Configure and Use</u> Server Logs for more info.

Scheduler

Select **Enable Scheduler auto-connect** to allow users on the machine to auto-connect to the Scheduler. Enable this if you have difficulties connecting to the Scheduler.

Insights

Select **Enable Insights** to allow the machine to handle requests for rendering insights in the gallery. Insights are interactive dashboards created in Designer.

Engine

Check **Enable AMP Engine** to enable running workflows that use the Alteryx Multithreaded Processing (AMP) engine in this environment. This is the on-off setting for the Server environment. If you enable the AMP engine for the controller, you also need to set at least 1 worker to run the AMP engine on the **System Settings** > **Engine** screen. Go to 4.1e Engine for more info.

Understand AMP Engine Settings

The Enable AMP Engine setting on the **System Settings** > **Controller** screen is the onoff setting for the Server environment. This setting enables AMP at the environment level. The setting in **System Settings** > **Engine** tells the worker which engines it can use and thus, which workflows it can run. Go to 4.1e Engine for more info.

For example, let's take a 3-node environment. Node 1 is set up for the controller and Gallery and has AMP enabled. Node 2 is a worker only node with the engine set to **Original Only**. Node 3 is a worker only node with its engine set to **Both**. In this scenario, running AMP workflows on Server is enabled and these workflows would only run on node 3. Original engine workflows would run on either node 2 or node 3. If node 3 is offline Original-engine workflows would still run on node 2, but AMP

workflows would get stuck in the queue until node 3 came back online.

We recommend testing the AMP engine in a development environment before deploying it to production.

Persistence

As the orchestrator of workflow executions and various other operations, the controller needs a location where it can maintain the available workflows, a queue of execution requests, and other information. Define where information critical to the functioning of the service is stored on the **Persistence** screen.

Database Type

The controller maintains data in either SQLite or MongoDB databases. Server offers embedded **SQLite** or **MongoDB** options, as well as a **User-managed MongoDB** option. If you are configuring the machine for a gallery, you must use **MongoDB** or **User-managed Mongo DB**.

- **SQLite**: Creates an instance of the SQLite database. Recommended for lightweight and local deployments that use the scheduler.
- **MongoDB**: Creates an instance of the MongoDB database. Recommended for heavier usage.
- User-managed MongoDB: Allows you to connect to your implementation of MongoDB.

Important

- For User-managed MongoDB, we only support MongoDB with SCRAM authentication. MongoDB with Kerberos authentication isn't supported.
- We highly recommended that you have an automated backup system for your persistence database.
- If you switch between SQLite and MongoDB database types, scheduled jobs aren't migrated. These jobs have to be manually rescheduled.

Data Folder

The **Data Folder** is the storage location for either the SQLite or embedded-MongoDB database files. If you select **User-managed MongoDB**, the **Data Folder** is disabled as it is configured in your MongoDB instance.

Advanced Database Connection

Select Advanced User-Managed Mongo DB if you require support for these.

- TLS/SSL
- Replica Sets
- Sharding
- MongoDB Atlas

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Note: If you were using replica sets before the availability of the connection string option (2019.4 release or previous), you have to change to a connection string.

When you have selected this option, the **Database** section displays a **MongoDB Connection** field for you to specify your MongoDB connection string.

Database

If you selected **User-managed MongoDB** and you aren't using the **Advanced Database Connection**, you will specify the **Host** location of the MongoDB instance, as well as the **Database Name** in the **Database** section. If the MongoDB instance requires authentication, enter these in the **Username** and **Admin Password** fields.

For embedded **MongoDB**, the **Host**, **Username**, **Admin Password**, and **Password** fields are automatically populated. The **Admin Password** is for MongoDB Admins to set up backups and replica sets. The **Password** is used by all components to communicate with MongoDB. You can also use the **Password** for creating usage reports that connect to the database.

Persistence Options

The controller maintains a queue of jobs and caches uploaded files for use in executing those jobs. Workflow queues and results can quickly take up space if left unattended. You can flag various items and files for deletion after a specified number of days. These settings may help to reduce the amount of drive space used.

Best Practice

We recommend that you enable the deletion of queue and results, completed schedules, and uploaded files after 180 days (or a non-zero value of your choice). A value of 0 persists items indefinitely.

Benefits: This reduces the hard-drive space usage and decreases the size of Server Usage Report output.

Mapping Configuration

On the **Mapping Configuration** screen, configure the machine to act as a Map Controller and define the thresholds for the tile and layer caching. Caching map tiles and the reference maps needed to render them increases performance. Larger cache size and increased time-to-live result in faster responses for previously requested tiles but take up more memory and disk space. A smaller cache has the opposite effect.

• Enable map tile controller: Select Enable map tile controller to allow the machine to serve map tiles rendered by workers. The Map Question and Map Input tools use these tiles for rendering maps.



- Memory cache: This is the maximum number of map tiles stored in memory.
 1,000 tiles require roughly 450 MB of memory. A higher memory cache results in more stored tiles to increase performance but requires more system resources.
- **Disk cache**: This is the maximum amount of space allocated for caching map tile images on the hard drive. A higher disk cache results in greater consumption of drive space but may increase the performance of map tile requests.
- **Reference layer time to live**: Map Questions and Map Input tools create reference layers and are driven by a YXDB file. The controller can maintain a reference to this YXDB file to help speed up rendering. This setting defines the amount of time to persist reference-layer information. Increasing this number may optimize the performance of frequently requested layers. Expired reference layers are regenerated the next time they are requested.

Remote Controller

If you have configured the machine to act as a worker, the **Remote Controller** screen is the only screen present under **Controller**. This is where you connect the machine to the controller machine. Enter the host location and the controller Token to connect to the controller machine.

- Host: Enter the host location of the controller machine.
- **Token**: Enter the controller machine token. You can find the **Controller Token** in the System Settings of the controller machine on the **Controller** > **General** screen.

4.1c Worker

The worker handles the execution of analytic workflows. There has to be at least 1 machine enabled as a worker to execute workflows. You can configure the same machine to be both the controller and a worker. The number of workers needed depends on the desired system performance.

Configure the worker on the **Worker** screens in **System Settings**. The worker screens are available for configuration if you've selected 1 of these options on the **Environment** > **Setup** Type screen:

- Designer and Scheduler Only
- Complete Alteryx Server
- Custom > Enable Worker

Worker Configuration

The Worker Configuration screen includes configuration options, such as, where you want to store temporary files and whether you want the machine to run scheduled workflows.

Workspace

The Workspace is where the worker stores temporary or cache files, and unpackaged workflows for use when executing workflows. By default, it is the same as the controller folder. This path should point to a location that is safe to store large amounts of files.

Allow Machine to Run Scheduled Alteryx Workflows

When checked, the worker accepts requests to run workflows from the scheduler and the Gallery. In multi-node deployments, you might want to uncheck this option if you have another machine that runs workflows. When unchecked, the machine will only render map tiles or insights.

Workflows Allowed to Run Simultaneously

This is the maximum number of jobs that you want to allow to run simultaneously on this machine. You might want to increase this to improve the responsiveness of scheduled jobs.

Depending on the available resources and other configuration parameters, if set too high, this might cause poor job throughput, stability issues, or general performance issues. For help with this setting, reach out to your Sales or Support representative.

Best Practice

- For Original Engine, we recommend setting **Workflows allowed to run** simultaneously to {# of Physical CPU Cores}/2.
- For AMP Engine, we recommend setting **Workflows allowed to run** simultaneously to **1**.

Go to <u>4.1b Controller</u> and <u>4.1e Engine</u> to learn more about engine settings.

To find the number of cores, enter this command in a command prompt:

wmic cpu get NumberOfCores/Format:List

Cancel Jobs Running Longer Than (Seconds)

Use this setting to force cancel jobs after a certain amount of time. This frees up system resources from being taken up by long-running jobs. This setting only applies to scheduled jobs and doesn't affect manual runs from the Gallery.

Quality of Service

In an environment where you have deployed multiple workers, Quality of Service determines which jobs each worker runs. When a worker handles a job request, it compares the priority level



of the job to its Quality-of-Service value. Jobs that have a value greater than or equal to the worker's Quality of Service value are handled by that worker.

For example, if an available worker has a Quality of Service of 0, the worker handles any request. But a worker with a Quality of Service of 3 only handles jobs that have a priority of 3 or higher. This allows you to reserve resources for higher-priority requests. For normal operation with 1 machine configured as a worker, set quality of service to 0.

- 0: Low (normal workflow execution)
- 1: Medium
- 2: High
- 3: Critical
- 4: Chained application execution (all apps in the chain aside from the last)
- 6: Workflow validation requests
- Job Assignment

You can assign a specific worker to run a job. To do so, first, add a job tag for the worker, then select that job tag when creating a schedule or running a workflow.

- Run unassigned jobs: Select this option to use the worker to run untagged jobs.
- Job tags: To assign the worker to run tagged jobs, add job tags. Comma separate multiple job tags. You can add the same job tag to multiple workers.

Run the Worker as a Different User

You can configure the machine to run the workflows as a specified user or account. This allows the worker to use specific credentials to access files or data locations. To set the machine to run as a different user, enter the **Domain**, **Username**, and **Password**.

Best Practice

We recommend engaging your IT team to create a service account that has access to the necessary databases, shared network drives, and files.

For information on run as user permissions, go to <u>4.6 Configure Required Run As</u> <u>User Permissions</u>.

Mapping Configuration

You can enable the worker to act as a map worker. Map workers render map tiles for map questions and the Map Input tool. You can specify the number of processes to use for tile rendering. The more processes allowed, the more simultaneous rendered tiles. Increasing this setting increases the system resources used.

Insights Configuration

Enable Insight Worker

You can configure the worker to act as an insight worker. Insights are interactive dashboards created in Designer and published in a Gallery. When enabled, the worker renders insights.

Insights Allowed to Run Simultaneously

The maximum number of insights to run simultaneously on the machine. Increasing this setting increases the system resources used.

Max Cache Size (# of Cache Directories)

The maximum number of insights cached on a worker machine. Each insight consists of a description and data file, so each insight cache is a directory that contains those files.

Max Port, Min Port

The range of port numbers designated for use when rendering insights.

4.1d Gallery

The Gallery is a cloud-based application for publishing, sharing, and executing workflows. It communicates with the service to manage and execute workflows. Gallery uses a MongoDB persistence layer for state maintenance. This allows you to deploy the Gallery across multiple servers behind a load balancer (not provided as part of the architecture) to support horizontal scalability.

The Gallery is a private website, hosted on your server infrastructure that allows internal users to share workflows, apps, and macros. Alteryx also offers a Public Gallery (<u>https://gallery.alteryx.com/</u>) where users can sign up and share workflows, apps, and macros.

Configure the Gallery component on the **Gallery** screens in **System Settings**. The Gallery screens are available for configuration if you've selected 1 of these options on the **Environment** > **Setup Type** screen:

- Complete Alteryx Server
- Custom > Enable Gallery

Gallery General

The **Gallery General** screen has configuration options, such as where you want to store temporary files and log files.

Gallery Workspace

The **Gallery Workspace** is the location where the Gallery stores temporary files. By default, it is a folder within the global workspace folder. This path should point to a location that is safe to store large amounts of files.

- Logging Directory: This is the location where you want to store Gallery log messages.
- Base Address: This is the URL that users use to go to the Gallery.
- Enable SSL: Enabling SSL changes the URL in the Base Address field to HTTPS. If your certificate is set to a port other than the default 443, include the port in the URL (for example, https://localhost:445/gallery/).
- **Default Run Mode**: Run Mode determines the workflows that Gallery users can run. Use **Default Run Mode** to block workflows with specific tools or directory access from running in the Gallery.

Semi-safe and Safe are only available if you have enabled the Run As setting in System Settings on the Worker > Run As screen or if you have specified Run As.

If your **Default Run Mode** is **Safe** or **Semi-safe**, Gallery admins can change the run mode in each workflow on the **Workflows** page in the Gallery **Admin** interface.

- Unrestricted: Gallery users can run any workflow.
- **Semi-safe**: Block Gallery users from running workflows that read data from or write data to a location that isn't within the workflow staging directory (workspace).
- Safe: Block Gallery users from running workflows that read data from or write data to a location that isn't within the workflow staging directory (workspace). Gallery users are also blocked from running workflows that use specific tools, events, and data connectors. See <u>Safe and Semi-safe Run Modes: Blocked Tools</u>, <u>Events</u>, and <u>Data Connectors</u> in the online help documentation at for a complete list of blocked tools, events and data connectors.

Gallery Authentication

The **Gallery Authentication** screen has configuration options for the type of authentication you want to use to access the Gallery. Server supports built-in authentication, integrated Windows authentication with or without Kerberos support, and SAML authentication. Go to <u>4.3 Configure</u> <u>Gallery Authentication</u> for detailed steps for setting up your Gallery's authentication.

Gallery SMTP Configuration

The SMTP screen has configuration options for enabling SMTP. The information on the SMTP page is required for Server to send email notifications for various events, such as registering your Gallery account, changing your password, or sharing a workflow. Go to 4.4 Configure SMTP for steps to set up SMTP.

Gallery Persistence

On the **Gallery Persistence** screen, specify where you want to store Gallery information, like users, collections, etc.

By default, both **Web Persistence** and **Search Persistence** are set to use the same settings as those specified for the controller on the **Controller** > **Persistence** screen.

Use Advanced Connections

Select Use Advanced Connections if you *don't* want to use the same location as specified for the controller or if you require support for these.

- TLS/SSL
- Replica Sets
- Sharding
- MongoDB Atlas

If you were using replica sets before the availability of the connection string option (2019.4 release), you have to change to a connection string.

When you select. Use Advanced Connections, the Web Persistence and Search Persistence sections display a Connection field for you to specify your MongoDB connection string.

Web Persistence

Select **Use Controller Persistence Settings** to use the same location as specified for the controller on the **Controller** > **Persistence** screen. This is the default option for Gallery web persistence.

If you want the Gallery to use a different MongoDB connection than the controller, chose 1 of these:

• Select Use Advanced Connections and specify a Connection.

OR

• Uncheck Use Controller Persistence Settings and specify the Host, Database name, Username, and Password.

Search Persistence

Indices for search functionality within the Gallery are also stored in the MongoDB.

Select **Same settings as Web Persistence** to use the same location as specified for web persistence. This is the default option for Gallery search persistence.

If you want the search indices to use a different MongoDB connection than web persistence, chose 1 of these:

• Select Use Advanced Connections and specify a Connection.

OR

• Uncheck **Same settings as Web Persistence** and specify the **Host**, **Database Name**, **Username**, and **Password**.

4.1e Engine

The engine executes workflows using high-speed data processing and analytics. This process can be self-contained in Designer, scaled across an organization by the Alteryx service, or deployed in the cloud in Gallery.

Configure the engine component on the Engine screens in System Settings.

Engine Configuration

The **Engine Configuration** screen has configuration options, such as where you want to store temporary files and log files and options for specifying system resource usage to optimize performance.

Temporary Directory

The location where Server stores temporary files used in workflow processing.

Logging Directory

The location where Server stores output logs produced during workflow processing. Go to <u>4.7</u> <u>Configure and Use Server Logs</u> for more info.

Package Staging Directory

The location where Server temporarily saves files associated with the workflow when you edit workflows stored in a Gallery. By default, Server saves these files inside of the Engine Temporary Directory.

Memory Limit per Anchor

The maximum memory to use to consume data for each output anchor for tools in a workflow. The default memory doesn't typically need to be changed.

Engine

The **Engine** setting tells the worker which engines it can use and thus, which workflows it can run. If you select AMP Engine Only or Both, you also have to select **Enable AMP Engine** to enable AMP at the environment level.

- Select **Original Engine Only** to run only Original Engine workflows on this node.
- Select AMP Engine Only to run only AMP Engine workflows on this node.
- Select **Both** to run Original Engine and AMP Engine workflows on this node.

Understand AMP Engine Settings

The **Enable AMP Engine** setting on the **System Settings** > **Controller** screen is the on-off setting for the Server environment. This setting enables AMP at the environment level. Go to 4.1b Controller for more info. The setting in **System Settings** > **Engine** tells the worker which engines it can use and thus, which workflows it can run.

For example, let's take a 3-node environment. Node 1 is set up for the controller and Gallery and has AMP enabled. Node 2 is a worker only node with the engine set to **Original Only**. Node 3 is a worker only node with its engine set to **Both**. In this scenario, running AMP workflows on Server is enabled and these workflows would only run on node 3. Original engine workflows would run on either node 2 or node 3. If node 3 is offline Original-engine workflows would still run on node 2, but AMP workflows would get stuck in the queue until node 3 came back online.

Default Sort/Join Memory Usage

Default Sort/Join Memory Usage is the minimum memory the engine will use to perform sort and join operations in a workflow. The default memory doesn't typically need to be changed.

Default Number of Processing Threads

Default Number of Processing Threads defines the number of processing threads tools or operations can use. The default value is the number of available processor cores plus 1. Generally, this value shouldn't be changed.

Allow Users to Override

Select **Allow Users to Override** to allow users to override the above settings to define their memory usage, processing, threads, etc. If unchecked, the users assume the settings provided.

Run Engine at a Lower Priority

Select **Run Engine at a Lower Priority** if you are running other memory-intensive applications simultaneously. We recommend you select this **Run Engine at a Lower Priority** for machines configured to run the Gallery.

Allow User Alias to Override

Select **Allow User Alias to Override** to allow any user alias that is in the Alias Repository to take priority over a system alias.

Proxy

Server can use a proxy to access the internet, rather than connecting directly to an internet host.

Server pulls the proxy settings displayed in **Engine** > **Proxy** from the Windows internet settings for the user logged into the machine. If there are no proxy settings for the user logged into the machine, **Engine** > **Proxy** isn't available within the System Settings menu.

The proxy settings displayed in **Engine** > **Proxy** might not reflect the proxy settings that are used when the service runs during workflow execution. If your organization uses proxies for internet access, we recommend using the **Worker** > **Run As** setting to ensure access to the internet is allowed when Gallery users run and schedule workflows. Go to <u>4.1c Worker</u> for more info.

If a proxy server is set up for the machine and a username and password are required, select **Proxy requires password** to enter the **Username** and **Password** for proxy authentication.

4.2 Configure Controller and Workers

You can configure Server in a basic setup, with all components running on the same machine, or as a multi-node instance with multiple machines.

After you install and license Server components, the **System Settings** window opens. Configure Server components in **System Settings**.

4.2a Single-Machine Configuration

- 1. If the **System Settings** window doesn't open automatically, double-click the **System Settings** desktop icon. The **System Settings Status** screen displays the system components that are enabled by default.
- 2. Select Next to configure settings for each component (See <u>4.1 System Settings</u>).
 - Environment (Go to <u>4.1a Environment</u>)
 - Controller (Go to <u>4.1b Controller</u>)
 - Worker (Go to 4.1c Worker)
 - Gallery (Go to <u>4.1d Gallery</u>)
 - Engine (Go to <u>4.1e Engine</u>)
- 3. On the **Finalize Your Configuration** screen, select **Finish**. The **Status** screen displays the system components you enabled.
- 4. Select **Done** to close the **System Settings** window.

4.2b Multiple-Machine Configuration

After you install Server on a machine, you can scale it to accommodate for higher levels of usage by enabling certain components on additional machines. Increase engine processing capabilities by configuring an additional machine to act as a worker.

Configure a Controller Machine

- 1. Install Server on the controller machine.
- 2. Double-click the System Settings icon on the desktop of the worker machine.
- 3. On the **Environment** > **Setup Screen** select **Custom** > **Enable Controller**.
- 4. Select Next on the System Settings screens until you reach the Controller > General Configuration screen.
- 5. Select View to display the Controller Token. Copy the token and save it.
- 6. Find and save the controller machine name.

Configure a Worker Machine

- 1. Install Server on the worker machine.
- 2. Double-click the **System Settings** icon on the desktop of the worker machine.
- 3. On the **Environment** > **Setup Screen** select **Custom** > **Enable Worker**.
- 4. On the **Controller** > **Remote** screen, enter the controller machine name in the **Host** field and the **Controller Token** in the **Token** field.
- 5. Select **Test** to verify the connection to the controller machine.
- 6. Select Next to configure settings for the remaining components.
 - Worker (Go to <u>4.1c Worker</u>)
 - Gallery (If enabled, go to <u>4.1d Gallery</u>)
 - Engine (Go to <u>4.1e Engine</u>)
- 7. On the **Finalize Your Configuration** screen, select **Finish**. The **Status** screen displays the system components you enabled.
- 8. Select **Done** to close the **System Settings** window.

The worker machine is now configured to execute workflow job requests from the controller machine.

4.3 Configure Gallery Authentication

Configure the authentication method you want to use to manage Gallery access on the **System Settings** > **Gallery Authentication** page.

Start by selecting the authentication method you want to use for your Server. Then, see the setup steps for your selected method.

Server supports built-in authentication, integrated Windows authentication with or without Kerberos support, and SAML authentication.

- Built-in: Allows users to access the Gallery using an email address and password.
- **Integrated Windows authentication**: Allows users to access the Gallery with internal network credentials.
- **Integrated Windows authentication with Kerberos**: Allows users to access the Gallery with internal network credentials using Kerberos authentication protocols.
- **SAML authentication**: Allows users to access the Gallery with Identity Provider (IDP) credentials.

Warning

Server doesn't support changing the authentication type after configuration. Doing so might compromise Gallery functionality.

4.3a Set Up Built-In Authentication

The set up for each authentication type varies. Select your selected authentication type for steps to complete the setup.

Step 1. Set a Default Gallery Administrator for Built-In Authentication

After selecting **Built-in** authentication, create a **Default Gallery Administrator** at the bottom of the **Gallery Authentication** page. The Gallery administrator manages users, workflows, and more. For **Built-in** authentication, enter the administrator's email address.

Complete the remaining screens in **System Settings** (go to <u>4.1d Gallery</u> and <u>4.1e Engine</u> for more info on these screens) and select **Finish**.

Step 2. Finish the Gallery Administrator Account Creation

- To complete the creation of the Gallery administrator account, go to the sign-in page of the Gallery. To do so, select the link to the Gallery shown on the System Settings > Status page or enter the URL to the Gallery in your internet browser.
- 2. Select Sign In.
- 3. On the sign-in page, select Don't have an account? Create one now.
- 4. Enter a First Name, Last Name, and select a time zone from the drop-down menu.
- 5. In **Email**, enter the email address that you provided for the **Default Gallery Administrator** on the **System Settings** > **Gallery Authentication** page.
- 6. In **Password**, create an account password.
- 7. Select Sign Up.

You are now logged in as the Gallery administrator. The credentials you entered in the sign-up form are saved as your credentials going forward. You are now ready to add Gallery users. Go to **5.3a Add Gallery Users**.

4.3b Set Up Integrated Windows Authentication

Step 1. Set a Default Gallery Administrator for Built-In Authentication

After selecting Integrated Windows authentication, create a Default Gallery

Administrator at the bottom of the Gallery Authentication page. The Gallery administrator manages users, workflows, and more. For Integrated Windows authentication, enter the user account in this format: domain/username.



Complete the remaining screens in **System Settings** (go to <u>4.1d Gallery</u> and <u>4.1e Engine</u> for more info on these screens) and select **Finish**.

Step 2. Access the Gallery

The default Gallery administrator can now access the Gallery. To do so, select the link to the Gallery shown on the **System Settings** > **Status** page or enter the URL to the Gallery in your internet browser. You are now logged in as the Gallery administrator and ready to add Gallery users. Go to **5.3a Add Gallery Users**.

Multi-Domain Support

- Server supports multiple domains for Windows authentication. You don't need to configure anything in Server to enable this, but these capabilities and permissions have to be present across the domains.
- The domain the Gallery runs on needs to have the same trust policy as other domain users so Active Directory can resolve and determine user permissions.
- Both domains need to be part of the same forest.
- The Alteryx service needs to be able to read all attributes from CN=Users and CN=Computers containers for both domains. The Alteryx service runs under the local system account on the server it is installed on. If you define a dedicated service account instead of using the local system. The account needs permission to read all attributes from both containers to enable authentication for both domains.

4.3c Set Up SAML Authentication

To configure SAML authentication for Single Sign On (SSO), your Identity Provider (IDP) has to support SAML.

Before configuring SAML authentication for the Gallery, you have to add Server as a Service Provider in the IDP. The IDP might need...

- the ACS Base URL (for example, http://localhost/aas/Saml2/Acs).
- the SP Entity ID (for example, http://localhost/aas/Saml2).
- The IDP might also require that you map email, firstName, and lastName attribute statements to corresponding fields in the IDP to authenticate users.
- 1. Select an option for obtaining metadata required by the IDP. You can configure SAML using an IDP Metadata URL or an X509 certificate and IDP SSO URL.
- 2. Complete the **SAML IDP Configuration**.

- ACS Base URL: The URL for the Assertion Consumer Service that accepts SAML messages to establish a session.
- **IDP URL**: The URL for the Alteryx application configured in the IDP, also known as, the IDP Entity ID.
- **IDP Metadata URL**: The URL provided by the IDP that includes the IDP SSO URL and the X509 certificate for configuring the Alteryx Authentication Service.
- **IDP SSO URL**: The SSO URL, provided by the IDP, that the Alteryx Authentication Service uses to log into the IDP.
- **X509 certificate**: The public certificate provided by the IDP for secure communication with the Alteryx Authentication Service.
- **Verify IDP**: Select to open a browser window, log in, test the IDP configuration, and set the default Gallery administrator.

Set a Default Gallery Administrator for SAML

A Gallery administrator account has to be created to administer the site (manage users, workflows, and more). For **SAML authentication**, select **Verify IDP** to test the IDP configuration and populate the field with IDP credentials.

You are now logged in as the Gallery administrator. You are now ready to add Gallery users. Go to **5.3a Add Gallery Users**.

4.4 Configure SMTP

The SMTP screen has configuration options for enabling SMTP. SMTP is required for Server to send email notifications for various events, such as registering your Gallery account, changing your password, or sharing a workflow. Go to <u>5.9 Notifications</u> for more info.

- 1. Enter the email address from which you want emails to be sent in **From Email**.
- 2. Enter the email service hostname in Host.
- 3. Enter a username and password in **Username** and **Password**, if the SMTP server configuration requires it.
- 4. Select Test to send a test email to the email address in From Email.
- 5. The port default is 25 as this is standard for SMTP. You can customize this port if necessary.
- 6. If the SMTP server is set up to use SSL, select the Use SSL checkbox.

Deselect **Enable SMTP** to complete the Server setup without enabling SMTP. Email notifications from the Gallery are disabled until SMTP settings are configured.



4.5 Configure Gallery SSL

Server supports SSL (Secure Socket Layer) encryption via HTTPS to ensure safe and secure communication between Designer and Server, as well as any communication between a user's web browser and your company's Private Gallery.

Best Practices

- We recommend involving IT network administrators to configure SSL. SSL configuration requires expertise in creating, distributing, and certifying SSL files via a Certificate Authority (CA).
- Use a recognized CA to sign your SSL certificates.
- Self-signed certificates are discouraged.

Before enabling SSL on your machine, obtain a valid SSL certificate for your company's Private Gallery from a trusted Certificate Authority (CA). The service address that you specify for the certificate has to match the address that you want to use for your Gallery website domain (the **Base Address** in **System Settings** on the **Gallery General** screen). Go to <u>4.1d Gallery</u> for more info about your **Base Address**.

After you have obtained an SSL certificate, you need to configure your webserver to use that certificate when users visit your site. To do this, the certificate thumbprint has to be associated with a specific port on the machine.

Step 1. Obtain Your SSL Cert's Thumbprint

Obtain the thumbprint of the certificate:

- 1. Locate and open the certificate (.cer) file.
- 2. Select the **Details** tab.
- 3. Scroll through the list and highlight **Thumbprint**.
- 4. The value displayed in the box at the bottom is the thumbprint of the certificate. Copy the value and paste it into a text editor to remove all spaces. Use this value when configuring the port.

Step 2. Configure a Port to Use the SSL Cert

To associate the certificate thumbprint to a specific port:

- 1. Select the Windows Start button.
- 2. Enter netsh in Search and select Enter.
- 3. Edit the example command. Example Command. http add sslcert ipport=0.0.0:443



```
certhash=0000000000003ed9cd0c315bbb6dc1c08da5e6
appid={eea9431a-a3d4-4c9b-9f9a-b83916c11c67}
```

- a. Replace the certhash value with the certificate thumbprint value without the spaces.
- b. Modify the ipport value if you want to use a port other than the default port (443).
- c. Leave the appid as it is since it is the application ID for the Gallery.
- 4. Paste the resulting command into the netsh console and select **Enter** to associate the certificate with the given port.
- 5. Verify the association and successful install of the certificate by running this command in the netsh console.

http show sslcert

6. All SSL certificate associations and their respective ports are listed.

Step 3. Configure the Gallery URL

After the certificate is associated with a port, the Server configuration has to be changed to expect web requests over HTTPS instead of HTTP. If you associated the certificate with a port other than the default (443), Server has to be configured to utilize that port.

- 1. Double-click the System Settings icon on your desktop.
- 2. Select Next on each screen in System Settings to navigate to the Gallery screens.
- 3. On the **Gallery General** screen, select **Enable SSL**. Enabling this option changes the URL in the **Base Address** field to HTTPS.
- 4. If you enable SSL and your certificate is set to a port other than the default 443, specify the port in the **Base Address**. For example, https://localhost:445/gallery/.
- 5. Select Next to continue navigating through the settings.
- 6. Select **Done** to close the **System Settings** and restart Alteryx Services.

After you have enabled SSL in the Server **System Settings**, users who go to the Gallery will see HTTPS and a padlock symbol displayed before the URL address in their browser. This means that a secure connection is established with a unique session key and communications are secure.

4.6 Configure Run As User Permissions

Server supports the ability to run workflows using specific user accounts. These accounts are referred to as Run As user accounts. You can set a Run As user account to execute workflows as a specific user. This allows workflows to read and write data to the program files the user has access to.

You can configure your Server's worker and subscriptions (studios) to use specific Run As user accounts. Go to <u>4.1c Worker</u> and <u>5.5 Subscriptions</u> for more info. You can also require Gallery users to enter their credentials to run a workflow making each user's account a Run As user account. Go to <u>5.8 Credentials</u> for more info.

To use a Run As user account to execute workflows, enable all required permissions on each Server worker machine. Verify the Secondary Logon service is running to enable alternative users to run other services.

First, edit the local group policy on the machine to give the Run As user account permission to log on as a batch job.

- 1. Select **Start** on the Windows taskbar.
- 2. In Search, enter gpedit.msc or local group policy.
- In the Local Group Policy Editor window, select Computer Configuration > Windows Settings > Security Settings > Local Policies > User Rights Assignment.
- 4. Select Log on as a batch job.
- 5. In Log on as a batch job Properties, select Add User or Group.
- 6. Complete the required information to add the user or group.
- 7. Select **OK** and **Apply**.

Then, set permissions on each of the folders requiring Run As user permissions.

- 1. Right-click the folder for which you want to set permissions and select Properties.
- 2. Select the **Security** tab and select **Edit**.
- 3. In **Group or user names**, select the name of the user you want to grant permissions to or select **Add** to add a user that doesn't appear in the list.
- 4. In **Permissions for Run As User**, select the required Run As permissions for the user.
- 5. Select Add after selecting all required permissions.
- 6. Select Apply.

Complete these steps on each worker machine for each of the user accounts you want to add as a Run As user.

Required Run As User Permissions

Each Run As user has to have all these permissions set on each worker machine. You might need to enable additional permissions on the machine depending on the workflow and the data and program files the workflow accesses.

The Run As user also needs permissions to access the data sources included in the workflows run in the Gallery. Necessary permissions and data sources vary based on the workflow.

Required Run As User Permissions

The folder where Alteryx is installed contains Alteryx program files.

- Location: [Install Directory] (The default location is C:\Program Files\Alteryx. This might be hidden by Windows.)
- Permissions: Read & Execute, List, Read

alteryx The Thrill of Solving

The Windows Program Data folder contains content related to encryption keys used by Windows APIs.

- Location: %ProgramData%\Microsoft\Crypto\RSA\MachineKeys
- Permissions: Read, Write

The folder that contains Server license files.

- Location: %ProgramData%\SRC
- Permissions: Read & Execute

The Server program files folder contains installed spatial data. Spatial data can also be installed in other locations. Access is only necessary if spatial data is included in workflows.

- Location: %ProgramFiles(x86)%\Alteryx
- Permissions: Read & Execute

In staging folder specified in **System Settings** > **Worker** > **General** > **Workspace**. This folder contains temporary files, such as unpackaged workflows, or other files used to execute workflows. Ensure that these subfolders inherit permissions: MapTileCache, Results, Cache, TileSetInfoCache, and XProcessCache.

- Location: %ProgramData%\Alteryx\Service\Staging
- Permissions: Modify, Read & Execute, List Folder Contents, Read, Write

The engine folder in **System Settings** > **Engine** > **General** > **Temporary Directory**. This folder contains temporary files used in processed workflows and apps.

- Location: %ProgramData%\Alteryx\Engine
- Permissions: Modify, Read & Execute, List Folder Contents, Read, Write

The logging directory specified in **System Settings** > **Engine** > **General** > **Logging Directory**. This folder contains output files created when workflows or apps are processed. By default, logging isn't enabled so the directory might be empty.

• Permissions: Modify, List Folder Contents, Read, Write (Write permission is only needed if logging is enabled.)

The Run As and workflow credentials user account has to have a profile on the local machine where the workflow is executed and needs to have full control of that profile. This profile should be created automatically with the correct permissions the first time a job runs with the specified credential.

- Location: C:\Users: %HOMEDRIVE%%HOMEPATH%
- Permissions: Full Control

This is the minimum permission required on the windows profile storage folder so profiles can be created successfully.

- Location: C:\Users\<UserName>: %HOMEDRIVE%\Users
- Permissions: Read & Execute, List Folder Contents, Read

4.7 Configure and Use Server Logs

Server creates log files and saves them to a location set in your Server's system settings. Logs capture warnings and errors and can be used to investigate and diagnose issues.

4.7a Configure Logging for Your Server

Configure Service Logs

Configure the service log file location, logging level, file size, and file rotation on the **System Settings** > **Controller** > **General** screen.

- The storage location for service log files is set to C:\ProgramData\Alteryx\Service by default. Customize the location if necessary.
- 2. Choose the **Level** of messages to log.

Best Practice

We recommend setting the log level to **Low** or **None**. This minimizes disk write operations and input/output contention. You can increase the log level when debugging aberrant Server behavior.

- None: No logging.
- **Low**: Only log emergency, alert, critical, and error messages.
- **Normal**: Log low, warning, and notice messages.
- **High**: Log all message types.
- 3. Specify the maximum **File size** in MB for log files.
- 4. Select **Enable log file rotation** to place log files that exceed the max size in an archive file. New events write to a new file. This prevents the creation of large log files that are difficult to consume in standard log readers.

Configure Gallery Logging

The storage location for Gallery log files is set to C:\ProgramData\Alteryx\Gallery\Logs by default. Customize the location if necessary, on the **System Settings** > **Gallery** > **General** page.



Configure Engine Logging

Engine logs are not stored by default. You can specify a location to store engine log files on the **System Settings** > **Engine** > **General** page in the **Logging Directory**.

4.7b Use Log Files for Troubleshooting

Service and Gallery logs are most-commonly used for investigating issues. There are several steps you can take to investigate logs and diagnose issues in Server.

- 1. Locate and open the log in a text editor or Microsoft Excel.
- 2. Search log entries for words such as Error, Alert, and Critical.
- 3. Read the error description.
- 4. Starting from the error, locate the point in the log where Server started ("AlteryxService starting").
- 5. Scan for events before the error occurred to identify potential causes.
- 6. Scan for events after the error occurred to identify potential consequences.

4.7c Types of Log Files

Service Logs

File Name: AlteryxServiceLog.log

Default Location: C:\ProgramData\Alteryx\Service

Service logs contain communication between components and startup and shutdown of processes on the controller and worker machines. Go to 4.1c Controller for more info.

Gallery Logs

File Name: alteryx-[year]-[month]-[date].csv

Default Location: C:\ProgramData\Alteryx\Gallery\Logs

Gallery logs contain Gallery processes and functions, including errors found when running an Analytic App that uses interface tools, and schedule migration records. Go to <u>4.1d Gallery</u> for more info.

Engine Logs

File Name: Alteryx_Log_[number].log

Default Location: Manually set.

Engine logs contain the output of messages created when a workflow runs, as well as the timestamps when tools run in a workflow. Go to <u>4.1e Engine</u> for more info.



Ul Error Logs File Name: [name].log

Default Location: C:\ProgramData\Alteryx\ErrorLogs (might be saved in a sub-folder)

The UI error logs contain stack traces for errors.



5. Administer Gallery

5.1 Access the Gallery Admin Interface

Users with the curator **user role** are considered Gallery admins. Curators can access the Gallery **Admin** interface directly via this URL: [BaseAddress]/gallery/admin. Go to <u>4.1d</u> <u>Gallery</u> for more info about your base address.

You can also access the Gallery **Admin** interface via Gallery. To do so, select your username in the upper-right corner and select **Admin**.

5.2 Gallery Configuration

There are 3 categories of Gallery-level settings available to Gallery admins to configure on the Gallery Configuration page of the Gallery Admin interface. These are user settings, workflow settings, and Gallery settings.

To manage Gallery-level settings, select **Configuration** on the Admin toolbar.

User Settings

There are 3 user settings on the Configuration page.

Default Role

The default user role is set to **Viewer** by default. You can change the default role using the **Default Role** dropdown on the **Gallery Configuration** page. Go to <u>5.3b User Roles and</u> <u>Permissions</u> to learn more about how roles are evaluated.

Users Can Register

By default, users are not allowed to sign up for access to your company's private Gallery. To allow users to sign up, enable the **Users Can Register** setting.

When enabled, users can sign up for a new account on the Gallery sign-in page. When disabled, the **Don't have an account? Create one now.** is removed from the sign-in page. When the sign-up form is disabled, new users must be added by an Admin.

Integrated Windows Authentication

Users Can Register is enabled by default for Galleries configured to use Integrated Windows Authentication and can't be disabled.

SAML Authentication

We recommend enabling Users Can Register for Galleries configured to use SAML Authentication.

This setting was previously Enable user registration on the Users page of the Gallery **Admin** interface.

Unregistered Users Can Run Public Workflows on the Homepage

By default, only users signed in to the Gallery can run workflows. When enabled, the **Unregistered Users Can Run Public Workflows on the Homepage** setting allows workflows placed in the company Gallery can be run without signing in.

This setting was previously **Enable unregistered users to run Public Gallery workflows** on the **Workflows** page of the Gallery **Admin** interface.

Workflow Settings

There are 2 workflow settings on the Configuration page.

Curators Can Flag Workflows for Promotion

When enabled, Curators (Gallery admins) can indicate a workflow is ready to be promoted by selecting **Yes** for **This workflow is ready to be migrated** within a workflow. Go to **<u>5.6e Enable</u> <u>Workflows for Migration</u>** to learn about workflow migration.

This setting was previously **Enable workflows to be marked as ready for migration to a separate environment** on the **Workflows** page of the Gallery **Admin** interface.

Workflow Credentials Setting

The **Workflow Credentials Setting** determines the credentials required for running workflows at a Gallery-level.

- Use Default Credentials: Runs all workflows using the default Run As account, which defaults to the LocalSystem account. The Run As account may be defined on any of the following process levels, listed in order of precedence:
 - Per studio subscription via Default Credentials.
 - Per Server worker node by adding a Run As account via Server System Settings.
 - Per Server via modification to Alteryx Service with the Windows Services Console.
- **Require User Credentials**: Prompts users to enter their credentials when they run the workflow.
- Allow Users to Select: Allows users to select credentials requirements when saving a workflow in Designer to a private Gallery. Options include:
 - User is not required to specify credentials
 - User must specify their own credentials
 - Always run this workflow with these credentials

Important

The credentials setting you select may require additional user permissions. Go to **4.6 Configure Required Run As User Permissions** for more information on setting Run As User permissions.

Changing the credentials setting in these ways disables schedules in the Gallery:

- Use Default Credentials to Require User Credentials.
- Require User Credentials to Use Default Credentials.
- Allow Users to Select to Require User Credentials if users did not create schedules with credentials.
- Allow Users to Select to Use Default Credentials if users created schedules using their credentials.

This setting was previously **Credentials setting for workflows** on the **Credentials** page of the Gallery **Admin** interface.

Gallery Settings

Users Can Schedule Workflows

When enabled, the **Users Can Schedule Workflows** Gallery-level permission enables users with the user-level **Schedule Jobs** permission to create and edit workflows. Both permissions must be enabled for a user to schedule workflows.

This setting was previously **Enable users to schedule workflows** on the **Jobs** page of the **Admin** interface.

Disable Direct Download

When enabled, **Disable Direct Download** removes the ability for Gallery users to download assets from the Gallery. Users can still download these assets from Designer.

5.3 User and Group Management

On the **User Management** page of the Gallery **Admin** interface, add and manage Gallery users and groups.

5.3a Add Gallery Users

Once you have set up the authentication method for your Gallery you can add Gallery users in the Gallery **Admin** interface.

The necessary steps for adding Gallery users depend on the Gallery authentication type. Go to **4.3 Configure Gallery Authentication**.

Steps for Adding Users for Built-In and SAML Galleries

Once Built-in or SAML authentication is set up, you can choose to add users yourself or allow users to register themselves. Follow the steps under either the **Add Users** section or **Allow Users** to **Register** section for further instructions.

Add Users

Creating the users yourself allows you to better control the new users' access and permissions upon their first login. When you manually create users, you can assign each user a role or assign them to user groups with a specific role.

Set a Default User Role

New Gallery users assume the default user role unless you assign them a group. The default user role is set to **Viewer** by default. Go to <u>5.3b User Roles and Permissions</u> to learn about the permissions each user role includes. You can change the default role using the **Default Role** drop-down menu on the **Gallery Configuration** page. Go to <u>5.2 Gallery Configuration</u>.

Create a New User

- 1. On the Users tab of the User Management page, select the plus icon to add a new user.
- 2. Enter the user's first name in the First Name field.
- 3. Enter the user's last name in the Last Name field.
- 4. Enter a valid email address in the **Email** field.
- 5. Select a Role.
- 6. Select **Yes** for **Can Schedule** to allow the user to schedule workflows to run at a scheduled time. Note, you have to also enable workflow scheduling on the **Jobs** page for a user to be able to schedule jobs.
- 7. Select **Yes** for **Can Prioritize** to allow the user to prioritize a job. When there are multiple jobs in the queue, the job with the highest priority runs first.
- 8. Select **Yes** for **Can Tag Jobs** to allow the user to assign a specific worker to run a workflow.
- 9. Select Yes for Can Create Collections to allow the user to create collections.
- 10. Select Yes for API Access to allow the user to access the Gallery API.
- 11. (Optional) In **Subscription Id**, enter a Studio Subscription Key. If left blank, the user is assigned their private studio. If you want to have the user share a studio with another user, paste the corresponding subscription key.



- 12. If you disabled the Users Can Register option (go to <u>5.2 Gallery Configuration</u>), enter a password for the user in the **Password** and the **Re-enter Password** fields.
- 13. Select Save.

If you set up an SMTP server to send email notifications, the user receives an email with the link to the Gallery and instructions for activating their account. Go to <u>4.4 Configure SMTP</u> and <u>5.9 Notifications</u>.

Set Up Groups and Assign Group Roles

If you want to have users assume a role other than the default user role you can assign them to a group and assign that group a role. Or you can assign a specific role for each user.

Create a New Group

- 1. On the **Groups** tab of the **User Management** page, select the **plus** icon to add a new group.
- 2. Enter a name for your group in Group Name.
- 3. Select a Group Role to assign to all users in the group.

Add Users to a Group

Custom Groups allow you to choose the users that are part of the user group. Follow these steps to add a user to a group:

- 1. Select a group.
- 2. Select Add User.
- 3. Search for the user by username or email.
- 4. Select the user.
- 5. Select Save.

Allow Users to Register

If you choose to register users, you can control users' initial access using the default user role. Once a user has registered, you can log in to create user groups or assign individual user roles.

First, ensure that you enabled the Users Can Register setting on the Gallery Configuration page (go to <u>5.2 Gallery Configuration</u>). Next, customize the default user role to control users' access and permissions when users sign in.

Set a Default User Role

New Gallery users assume the default user role unless you add them to a group or assign a user role other than **Default**. The default user role is set to **Viewer** by default. Go to **5.3b User Roles and Permissions** to learn about the permissions each user role includes. You can change the

default role using the **Default Role** dropdown on the **Gallery Configuration** page. Go to <u>5.2</u> <u>Gallery Configuration</u>.

Now you are ready to invite users to register for a Gallery account. Once a user has registered, you can log in to create user groups or assign individual user roles.

5.3 Steps for Adding Users in Integrated Windows Authentication Galleries

Once integrated Windows authentication is set up, all users on the domain can go to your Gallery URL and log in with their Active Directory credentials. Before inviting users to log in to Gallery, customize the default user role to control users' access and permissions when users sign in.

Set a Default User Role

New Gallery users assume the default user role unless you add them to a group or assign a user role other than **Default**. The default user role is set to **Viewer** by default. Go to <u>5.3b User Roles</u> and <u>Permissions</u> learn about the permissions each user role includes. You can change the default role using the **Default Role** dropdown on the **Gallery Configuration** page. Go to <u>5.2</u> <u>Gallery Configuration</u> for more info.

Set Up Groups and Assign Group Roles

If you want to have users assume a role other than the default user role, you can add them to a group and assign that group a role. Or, after they have registered, you can change their user role.

Create a New Group

- 1. On the **Groups** tab of the **User Management** page, select the **plus** icon to add a new group.
- 2. Select a Group Type.
 - a. Select **Active Directory** to add a group from your Active Directory as a user group.
 - b. Select **Create Custom Group** to create a user group you can manually add users to.
- 3. If you are adding a Custom Group, enter a name for your group in **Group Name**.
- 4. If you are adding an Active Directory group, search for the Active Directory group in **Search Groups**.
- 5. For both Custom Groups and Active Directory groups, select a **Group Role** to assign to all users in the group.

Add Users to a Group

If you added an Active Directory group, the users in that group are assigned to that same group in Gallery and assume the role assigned to that group. Custom Groups allow you to choose the users that are part of the user group. Follow these steps to add a user to a group.

1. Select a group.



- 2. Select Add User.
- 3. Search for the user by username or email. This searches Active Directory for Active Directory users and groups.
- 4. Select the user.
- 5. Select Save.

Once you have configured your default role and created any custom and Active Directory groups you need, you can invite Gallery users to sign in using the Gallery URL. When users access the Gallery URL, they are prompted to log in using the Active Directory credentials.

5.3b User Roles and Permissions

User roles are set by Curators (Gallery admins) in the Gallery **Admin** interface. User roles determine the user's level of access to Gallery users and assets.

User Roles

Gallery users can have one of the following roles.

- **Curator**: Curators (Gallery Admins) can access the Gallery **Admin** interface to perform administrative tasks. Curators also have all the privileges of an Artisan.
- Artisan: Artisans can publish, run, and share workflows in their private studio and shared collections.
- Member: Members can run workflows that are shared with them via collections.
- Viewer: Viewers can run public workflows on the homepage and in districts.
- **No Access**: Blocks access to all Gallery assets. The No Access role is typically used in Galleries using either Integrated Windows Authentication or SAML Authentication to control initial access to the Gallery when new users sign up.
- **Default**: Assumes the default user role. Go to <u>5.2 Gallery Configuration</u> for more info.

User Permissions

In addition to user roles, there are several user permissions that you can set to control what users can do.

- Schedule Jobs: Allows the user to schedule workflows to run at a scheduled time. Note, you have to also enable workflow scheduling on the Jobs page for a user to be able to schedule jobs.
- **Prioritize Jobs**: Allow the user to prioritize a job. When there are multiple jobs in the queue, the job with the highest priority runs first.
- Assign Jobs: Allows the user to assign a specific worker to run a workflow.
- **Create Collections**: Allows the user to create collections.
- API Access: Allows the user to access the Gallery API.

• Active: Set to No to prevent the user from accessing the Gallery.

Set a Default User Role

New Gallery users assume the default user role unless you add them to a group or assign a user role other than **Default**. The default user role is set to **Viewer** by default. You can change the default role using the **Default Role** dropdown on the **Gallery Configuration** page. Go to **5.2 Gallery Configuration** for more info.

Note, the default role is displayed as **Evaluated** in some places like the in the group **Details**.

Understand Role Hierarchy

A user's role, and their resulting Gallery access, can come from 3 places, the user role, the group role, or the default role. Gallery evaluates roles in this order: user role, group role, default role. Users' access resolves to the most specific role assignment. So, if a user's role assignment is any role other than Default, that is their role and corresponding access. If a user's role is Default, then the Gallery looks to see if they are in a group. If the user is in a group, they assume the group role. If they are not in a group, they assume the default role.

5.3c Manage Groups

On the **Groups** tab of the **User Management** page in the Gallery **Admin** interface, Curators (Gallery admins) can create user groups. User groups allow admins to more efficiently assign **user roles**. They also support asset sharing via **collections**.

Create a New Group

- 1. On the **Groups** tab of the **User Management** page, select the **plus** icon to add a new group.
- 2. If you are using Integrated Windows Authentication, you have a Group Type option.
 - a. Select **Active Directory** to add a group from your Active Directory as a user group.
 - b. Select **Create Custom Group** to create a user group you can manually add users to.
- 3. If you are adding a Custom Group, enter a name for your group in Group Name.
- 4. If you are adding an Active Directory group, search for the Active Directory group in **Search Groups**.
- 5. For both Custom Groups and Active Directory groups, select a **Group Role** to assign to all users in the group.

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Add Users to a Group

Custom Groups allow you to choose the users that are part of the user group. Follow these steps to add a user to a group.

- 1. Select a group.
- 2. Select Add User.
- 3. Search for the user by username or email. This searches Active Directory for Active Directory users and groups if you are using Integrated Windows Authentication. If you are using Built-in Authentication this searches Server for Gallery users.
- 4. Select the user.
- 5. Select **Save**.

Delete a Group

To delete a group, select the **trash** icon in the Actions column of the group grid. When you delete a group, you also remove collections access for the group's members.

5.4 Collections

A collection allows users to share assets (workflows, apps, macros, and insights) with other Gallery users. This guide covers the options available to Curators (Gallery admins) on the **Collections** page in the Gallery **Admin** interface.

To learn more about options for collection users within the Gallery, visit the online help documentation for Server at <u>https://help.alteryx.com/current/server/collections-gallery-interface</u>.

5.4a Allow Users to Create Collections

Curators (Gallery Admins) have to give users permission to create collections. In Galleries that use built-in authentication, you can enable the **Can Create Collections** permission when creating a new user.

If you allow users to register in a built-in authentication Gallery or are using windows or SAML authentication, follow these steps to enable this permission once users have registered their Gallery account.

- 1. Go to the User Management page in the Gallery Admin interface.
- 2. Select the user.
- 3. In the Actions panel, select Yes for Create Collections permission.

5.4b Manage a Collection's Users and Groups

Manage a collection's users and groups on **Collections** pages of both the **Admin** interface and Gallery user interface.



Add a User or Group to a Collection

Important

The collection owner has to give you permission to add a user. Go to the **Users** tab of the collection to confirm you have permission to add users. Curators (Gallery admins) who have been added to the collection always have access to add and remove users and groups from collections.

- 1. Select Collections.
- 2. Select the collection.
- 3. Select Users > Add Users. Or, to add a group, select Groups > Add Group.
- 4. In the search field, enter the username, group name, or email address, and select the user or group when it appears in the list.
- 5. Select **Expiration Date** to assign a date for when the user's or group's access expires. Enter a date or use the date picker to select an expiration date.
- 6. Select permissions:
 - Admin: Select Yes to set all the permissions to Yes.
 - Add Assets: Select Yes to allow the user or group to add assets to the collection.
 - **Remove Assets**: Select **Yes** to allow the user or group to remove assets from the collection.
 - **Update Assets**: Select **Yes** to allow the user or group to open the asset in Designer, make changes, and save it back to the collection.
 - Add Users: Select Yes to allow the user or group to add users to the collection.
 - **Remove Users**: Select **Yes** to allow the user or group to remove users from the collection.

Important

You can't edit a Curator's collection permissions.

7. Select Add.

Edit User or Group Permissions

Curators (Gallery admins) can follow these steps to adjust user or group collection permissions. All other users can remove the user and re-add them to adjust their permissions.

1. Select Collections.



- 2. Select the collection.
- 3. Select Users. Or, to edit a group, select Groups.
- 4. Select one or more users or groups and select Edit.
- 5. Select **Expiration Date** to assign a date for when the user's or group's access expires. Enter a date or use the date picker to select an expiration date.
- 6. Select permissions:
 - Admin: Select Yes to set all the permissions to Yes.
 - Add Assets: Select Yes to allow the user or group to add assets to the collection.
 - **Remove Assets**: Select **Yes** to allow the user or group to remove assets from the collection.
 - **Update Assets**: Select **Yes** to allow the user or group to open the asset in Designer, make changes, and save it back to the collection.
 - Add Users: Select Yes to allow the user or group to add users to the collection.
 - **Remove Users**: Select **Yes** to allow the user or group to remove users from the collection.

Important

You can't edit a Curator's collection permissions.

7. Select Save.

Remove a User or Group from a Collection

- 1. Select Collections.
- 2. Select the collection.
- 3. Select Users. Or, to remove a group, select Groups.
- 4. Find the user or group you want to remove.
- 5. Select the **trash** icon in the **Actions** column to remove a user or group from the Collection.

Set an Expiration Date for a User's or Group's Access

- 1. Select Collections.
- 2. Select the collection.
- 3. Select Users. Or edit a group expiration date, select Groups.
- 4. Select the users or groups and then select Edit.
- 5. In **Expiration Date** enter a date or use the date picker to select a date.



5.4c Change a Collection's Owner

Curators (Gallery admins) can change a collection's owner in the Gallery Admin interface.

- 1. Select the collection.
- 2. Select Change Owner.
- 3. In the **Users** search bar, enter the username or email address, and select the user when they appear in the list.

5.5 Subscriptions

Important

In a coming release, to streamline your asset management, subscriptions (studios) are going away. Assets will be associated with users rather than a given subscription (studio). If you have assets in your Private Studio these will be associated with your user instead.

If you are using subscriptions (studios) to share assets, we recommend that you migrate shared assets to collections to prepare for this improvement.

A subscription allows Designer users to publish and share workflows privately within your organization. Gallery Admins can create subscriptions and manage the users and workflows assigned to them. Subscriptions are also known as studios.

A Private Studio (in other words, subscription) is automatically created for each Gallery user. When a user creates a workflow in Designer and publishes it to the Gallery, the workflow is added to the user's Private Studio (subscription). Workflows published to the Private Studio are private. Only other users assigned to the Private Studio (subscription) can see the workflows.

To manage subscriptions, go to the Subscriptions page of the Gallery Admin interface.

5.5a Create a New Subscription

- 1. On the Subscriptions page, select Add New Subscription.
- 2. Select **Yes** or **No** for **API Enabled**. Access to the Private Server Gallery API is disabled by default. The Gallery API supports the ability to authenticate, list apps, run apps, and retrieve app results using an API Key and Secret from Gallery Settings.
- 3. Select **Yes** or **No** for **Shared Schedules Enabled**. **Yes** allows users to view and edit the schedules and job results for workflows published by all users in the subscription.
- (Optional) To add Default Workflow Credentials select Set Account. Go to <u>5.8</u> Credentials for more info.
 - a. Select a saved credential in the Workflow Credentials dropdown.



- b. Select OK.
- 5. Select Save.

The new subscription is added to the Subscriptions page.

5.5b Add a User to a Subscription

- 1. On the Subscriptions page, select a subscription.
- 2. Select **Add User**. Enter the username and select the user when it appears. Note, this will change the user's Private Studio (subscription) and remove their access to the workflows in their existing subscription.

5.5c Remove a User from a Subscription

Users can only have one subscription. So, you must add a user to a new subscription to remove them from their existing subscription. There are 2 methods for moving a user from one subscription to another.

• Copy the **Subscription Id** of the new subscription and paste it in the **Subscription Id** field in the user's profile.

OR

• Go to the new subscription you want to add the user to. Select **Add User**. Enter the username and select the user when it appears. Note, this will change the user's Private Studio (subscription) and remove their access to the workflows in their existing subscription.

5.5d Edit a Subscription

- 1. On the **Subscriptions** page, select a subscription.
- 2. Enter a new Private Studio Name.
- 3. Select a new worker in the Assigned Worker dropdown.
- 4. Select **Yes** or **No** for **API Enabled**. Access to the Private Server Gallery API is disabled by default. The Gallery API supports the ability to authenticate, list apps, run apps, and retrieve app results using an API Key and Secret from Gallery Settings.
- 5. Select **Yes** or **No** for **Shared Schedules Enabled**. **Yes** allows users to view and edit the schedules and job results for workflows published by all users in the subscription.
- To change Default Workflow Credentials, select Change Account. Go to <u>5.8</u> Credentials for more info.
 - a. Select a saved credential in the Workflow Credentials dropdown.
 - b. Select OK.
- 7. To add a user to the subscription, select **Add User**. Enter the username and select the user when it appears. Note, this will change the user's Private Studio (subscription) and remove their access to the workflows in their existing subscription.

8. Select Save.

5.5e Delete a Subscription

Before you delete a subscription (studio), you have to remove all users from it. To do so, add the users to another subscription.

To delete a subscription, find the subscription and select the **trash** icon next to the subscription name. Note, deleting a subscription also deletes the workflows in that subscription.

5.6 Workflows

On the **Workflows** page, curators (Gallery admins) can add workflows to the Gallery and manage their settings. You can also add apps and macros to the Gallery via the **Workflows** page. Curators can also create and apply tags to workflows to improve search results and group similar workflows into districts. Go to <u>5.16 Districts</u>.

5.6a Add a Workflow

Curators (Gallery admins) can upload workflows directly via the Gallery Admin interface.

- 1. Begin by saving your workflows as an Alteryx workflow package (YXZP) file to upload to the Gallery.
- 2. On the Workflows page, select Add New Workflow.
- 3. Select the workflow on your computer or a shared location.

The workflow displays in your list on the **Workflow** page. Apps and macros can also be upload using these steps.

5.6b Workflow Options

These options are available on the workflow details page of the Gallery Admin interface.

- Uploaded: Date workflow was uploaded and Gallery user who uploaded the workflow.
- Private Studio: The private studio where the workflow is located.
- **Run**: The number of times all users who have access have run the workflow.
- Tags: To add a new tag, select **Add Tags**, and select the tags you want to apply. To remove a tag, select the **X** icon on the tag you want to remove.
- Change Icon: To change the workflow icon, select Change Icon, and browse for a new icon.
- Name: The name of the workflow. Not editable in Gallery.
- Author: The workflow author as specified in the Meta Info tab in Designer. Not editable in Gallery.
- **Description**: Enter a description for the workflow in the **Description** field.

- **Copyright**: Copyright info specified in the **Meta Info** tab in Designer. Not editable in Gallery.
- **Run Mode**: Use **Run Mode** to block specific tools or access. The Server admin selects the **Default Run Mode** during server configuration. Go to <u>4.1e Gallery</u>. To change the **Run Mode** for the workflow, select a setting from the drop-down.
 - Unrestricted: Gallery users can run the workflow regardless of tools or access.
 - **Semi-safe**: Blocks Gallery users from running the workflow if it reads data from or writes data to a location that is not within the directory or sub-directory of the workflow staging directory (workspace).
 - **Safe**: Blocks Gallery users from running the workflow if it reads data from or writes data to a location that is not within the workflow staging directory (workspace). Gallery users are also blocked from running the workflow if it uses specific tools, events, and data connectors.

Semi-safe and Safe are only available if the Server admin has enabled the **Run As** setting in System Settings on the Worker > Run As screen or if a **Run As** user is specified. Go to 4.1c Worker and 5.8Credentials for more information.

- Worker Assignment: To change the worker that runs the workflow, select a worker from the drop-down. If a worker is not assigned, the worker assigned to the studio runs the workflow.
- **Requires Private Data Setting**: Indicates the workflow needs licensed data to run. Select **Yes**, if the workflow needs licensed data, or **No** if the workflow does not need licensed data.
- **Private Data Exemption Setting**: Give an exemption to allow a workflow with private data to run. Select **Yes**, to allow an exemption or **No** to deny an exemption.
- Place in My Company's Gallery: Select Yes, to share the workflow in your company's Gallery, or No, to remove the workflow from your company's Gallery. Removing the workflow from your company's Gallery does not remove the workflow from the user's studio.
- This workflow is ready to be migrated: This option is only available when the Curators Can Flag Workflows for Promotion setting is enabled on the Configuration page. Go to <u>5.2 Gallery Configuration</u> for more info. Select Yes to mark workflows and apps for migration. Go to <u>5.6e Enable Workflows for</u> <u>Migration</u> for more info.

5.6c Create Workflow Tags

- Only Curators (Gallery Admins) can create workflow tags. Workflow tags can be assigned to districts to assist with workflow organization within the Gallery. Go to <u>5.16</u> <u>Districts</u> for more info. Gallery users can then assign tags to workflows.
- 2. To create a new tag, go to the Workflows page, scroll to the Tags section.



- 3. Enter a tag in the **Tag** field and select **Add New**.
- 4. Select **Admin Only** to make the tag only available to Curators (Gallery Admins) to assign to workflows.

5.6d Enable Users to Run Workflows

By default, only users signed in to the Gallery can run workflows. Curators (Gallery admins) can change this setting to enable users to run workflows on the homepage without logging in. To do so, enable the **Unregistered Users Can Run Public Workflows on the Homepage** setting on the **Configuration** page in the **Admin** interface.

5.6e Enable Workflows for Migration

Curators (Gallery admins) can manage workflow deployments during development and testing phases by migrating workflows from one Server environment to another using a series of endpoints.

Mark workflows for migration in 2 places.

- 1. Enable Curators to flag workflows for migration:
 - On the **Configuration** page of the Gallery **Admin** interface, enable the **Curators Can Flag Workflows for Promotion** setting.
- 2. Mark a specific workflow for migration:
 - On the **Workflows** page of the Gallery **Admin** interface, select a workflow, and select **Yes** for **This workflow is ready to be migrated**.

Once you mark workflows for migration, you can then use a series of API endpoints to publish them from the source environment into the appropriate subscription (studio) of the target environment.

5.7 Jobs (Schedules)

On the **Jobs** page, you can enable workflow scheduling in Gallery; this allows users with scheduling permission to schedule workflows to the Gallery while working in Designer or Gallery. You can also view the status of all jobs running in Gallery and manage schedules. The **Jobs** page does not display jobs running in Designer.

To manage jobs (schedules), go to the **Jobs** page of the Gallery **Admin** interface.

The Jobs page contains 3 tabs:

- Status: Displays all jobs that are currently running or queued in your Gallery. Jobs include workflow runs that were scheduled or manually run. Jobs can be run one at a time or simultaneously based on the configuration of your Server. Go to <u>4.1c Worker</u> to learn more about these configuration options.
- Scheduled Workflows: Displays all schedules set up for Gallery workflows. Edit, disable, or delete schedules on this tab.

• **Migrate**: Displays schedules saved to a controller. From here, you can select schedules to migrate from the controller to the Gallery and assign a Gallery user to own each schedule.

5.7a Enable Users to Schedule Workflows

By default, Gallery users aren't allowed to schedule workflows. Curators (Gallery admins) can allow users to schedule workflows. First, enable the **Users Can Schedule Workflows** Gallery-level setting on the **Configuration** page in the Gallery **Admin** interface.

Next, each user has to have permission to schedule workflows.

- 1. Select **Users** on the Gallery **Admin** interface toolbar.
- 2. Select the User.
- 3. In the Actions panel, select Yes for the Schedule Jobs permission.
- 4. Select Save.

5.7b Enable Shared Schedules on Subscriptions

Curators (Gallery admins) can follow these steps to enable shared schedules on the same subscription.

- 1. Select **Subscriptions** on the Gallery **Admin** interface toolbar.
- 2. Select the Subscription.
- 3. Select Yes for Shared Schedules Enabled.
- 4. Select Save.

5.7c Edit or Delete a Schedule

Curators (Gallery admins) can edit and delete schedules on the **Jobs** page of the Gallery **Admin** interface.

Edit a Schedule

- 1. On the Scheduled Workflows tab, find the job you want to edit.
- 2. Select the **pencil** icon next to the Schedule you want to edit.
- 3. In the **Edit Schedule** window, edit schedule details. All schedule details, except workflow credentials, are editable.
- 4. Select **Done**.

Delete a Schedule

On the Scheduled Workflows tab, select the trash icon next to the schedule you want to delete.

5.7d Cancel a Job

Curators (Gallery admins) can cancel jobs on the Jobs page of the Gallery Admin interface.

- 1. On the **Status** tab, find the job you want to cancel.
- 2. Select the **cancel job** icon on the job you want to cancel.

Canceling a scheduled job cancels that occurrence. The job will run again at the next scheduled time. Go to **<u>5.7c Edit or Delete a Schedule</u>** for steps to cancel all future job runs.

5.7e Migrate Schedules to the Gallery

The **Migrate** tab of the **Jobs** page of the Gallery **Admin** interface displays workflow schedules that were scheduled to a controller via Designer. You can migrate these scheduled jobs to your private Gallery. Each schedule has to be assigned a Gallery user as the schedule owner.

Schedules that were created to run in the scheduled workflow's original location on disk aren't available for migration. Only schedules that were created to use a copy of a workflow saved to the Scheduler DB are available for migration.

Before migrating schedules to the Gallery, consider these recommendations:

- Deleting a schedule on the **Migrate** tab removes the schedule from the page and deletes it from the controller. Create a back-up of your MongoDB database.
- If the current Gallery credentials setting is **Require users to enter credentials**, scheduled runs will fail after migration. To remedy, migrate the schedules and ask the schedule owners to add credentials. Go to **5.8 Credentials** for more info.
- Migrate schedules from a single Curator (Gallery Admin) account at a time.
- Migrate all schedules for a single workflow at the same time to prevent multiple copies of the workflow from being added to the Gallery.
- Migrate schedules at a time when scheduled and ad hoc jobs aren't running because schedule migration is queued after those jobs.
- Workflows saved as a macro (YXMC) can't be run in the Gallery, so schedules of those workflows can't be migrated to the Gallery. However, schedules of workflows containing macros can be migrated to the Gallery.

To migrate schedules:

- 1. Select the **Migrate** tab.
- 2. Select the check box next to 1 or more schedules or select the check box next to **Schedules** to select all schedules displayed on the current page.
- 3. In **Search**, select or type the name of a Gallery user to own the selected schedules.
- 4. Select Migrate.

Once migrated, a copy of the schedule and a copy of the workflow are saved to the Server. The schedule owner can view a copy of the schedule on the **Schedules** page of the Gallery interface and a copy of the workflow in their private studio. If a schedule fails to migrate, check the



Gallery logs to investigate why the failure occurred. Go to <u>4.7 Configure and Use Server Logs</u> for more info.

5.8 Credentials

Within the Gallery **Admin** interface, curators (Gallery admins) can save credentials to share with Gallery users to use when running workflows to support access to directories and data.

5.8a Select the Workflow Credentials Setting for Your Gallery

A Note About Changing Your Credentials Setting

Changes to your credentials setting can affect your schedules.

- A change from Use Default Credentials to Require User Credentials disables schedules in the Gallery.

- A change from Require User Credentials to Use Default Credentials disables schedules in the Gallery.

- If users created schedules without credentials, a change from Allow Users to Select to Require User Credentials disables schedules in the Gallery.

- If users created schedules with their credentials, a change from Allow Users to Select to Use Default Credentials disables schedules in the Gallery.

The **Workflow Credentials Setting** determines whether users are required to enter when they run workflows. Select the **Workflow Credentials Setting** on the **Configuration** page of the Gallery **Admin** interface.

- Use Default Credentials: Runs all workflows using the default Run As account, which defaults to the LocalSystem account. You can define a Run As account on any of the following process levels, listed in order of precedence:
 - Per studio subscription via Default Credentials.
 - Per worker node by adding a Run As account on the System
 Settings > Worker > Run As screen. Go to <u>4.1c Worker</u> for more info.
 - Per Server via a modification to Alteryx Service with the Windows Services Console.
- **Require User Credentials**: Prompts users to enter their credentials when they run the workflow.
- Allow Users to Select: Allows users to select credentials requirements when saving a workflow to the Gallery. Options include:
 - User is not required to specify credentials



• User must specify their own credentials

• Always run this workflow with these credentials

The credentials setting you select might require additional user permissions. For information on setting Run As User permissions, go to <u>4.6 Configure Required Run As User Permissions</u>.

5.8b Add a Credential

To add a new credential for users to use when running workflows, go to the **Credentials** page of the Gallery **Admin** interface.

- 1. On the Credentials page, select Add Credentials.
- 2. Enter a **Username**. The username is the Active Directory username. You can reference an AD account in one of 3 ways:
 - userName, for example, flast. This assumes the domain the server is attached to.
 - netbiosDomainName\userName, for example domain\flast.
 - userName@domain.tld, for example, flast@domain.tld.
- 3. Enter a **Password**. The password has to be 62 or fewer characters.
- 4. Select Add.

The Gallery validates credentials against Windows Active Directory. Valid credentials return a confirmation message. If the credentials are invalid or don't exist, an error message displays.

5.8c Share Credentials

To share credentials, go to the **Credential**s page of the Gallery **Admin** interface, and select a credential.

Share with a User

- 1. Select the User tab.
- 2. Select Add User.
- 3. Search for and select a user to share the credentials with.
- 4. Select Add.

Share with a Group

You can only share Credentials with custom groups. If you want to share credentials with an Active Directory (AD) group, you can add an AD group to a custom group and then share the credentials with the custom group.

- 1. Select the **Custom Groups** tab.
- 2. Select Add Group.

- 3. Search for and select a group to share the credentials with.
- 4. Select Add.

Share with a Studio

- 1. Select the **Private Studios** tab.
- 2. Select Add Private Studio.
- 3. Search for and select a studio to share the credentials with.
- 4. Select Add.

5.9 Notifications

Server admins can set up email notifications for various events, for example, Gallery account registration, password changes, or workflow sharing. Manage enabled email notifications, message text, and email groups on the Notifications page.

Only users who have logged into the Gallery at least once receive email notifications.

To enable email notifications, enter the SMTP server information in System Settings on the **Gallery** > **SMTP** screen. Go to 4.1d Gallery.

To manage notifications, go to the Notifications page of the Gallery Admin interface.

Add a System Message

You can add a system message to display to Gallery users when they log into the Gallery. The system message displays as a banner alert at the top of the page when Gallery users log in. Users can close the system message by selecting **OK**. You might use this message to notify users of changes or system downtime.

To add a system message, enter your message text in the **System Message** field and select **Save**. To remove a system message, delete the text in the **System Message** field and select **Save**.

Enable or Disable Emails

To enable or disable emails, select an email in the list. Change **Email** status to **Enabled** or **Disabled**.

Change Emails to HTML or Plain Text

Emails send as HTML by default. HTML emails support images and text formatting. Plain text emails do not support image or text formatting. If users are having trouble viewing the content of email notifications, you may want to switch to plain text. To change how emails are sent, select an email in the list. Change **Send email as** to **HTML** or **Plain Text**.

Edit Email Text

- 1. To edit the default email text, select an email in the list.
- 2. In the **Subject** field, edit the default subject of the email.
- 3. In the **Body** field, edit the message text.
- 4. Select **Group** to change the email group to whom the email is sent. You can also manage email groups on the **Notifications** page.
- 5. Select Save.

Edit Placeholder Variables

The email subject line and body contain placeholder variables that populate based on the user's profile. You can edit which placeholder variable is used, but the populated text for a given placeholder variable can't be changed.

To change the placeholder variable, double-click the highlighted placeholder, for example, **[[Collection Owner Name]]**, and enter a new **Placeholder Name**. Select **OK**.

Email Notifications Actions List

Email notifications send for each of these actions once SMTP is set up for your Server. You can disable individual email notifications.

- Workflow Added to Collection: Sent when a user adds a workflow to a collection.
- Workflow Updated in Collection: Sent when a user updates a workflow in a collection.
- Collection Shared with User: Sent to the user when another user shares a collection with them.
- Membership Granted: Sent when a curator assigns the user a member role.
- Artisanship Granted: Sent when a curator assigns the user an artisan role.
- Workflow Shared in Public Gallery: Sent when a user shares a workflow to the public gallery (homepage).
- Curator Created a New License Owner Account: Sent to the user when their account is created.
- Curator Created a New User Account: Sent to the user when their account is created.
- License Created: Sent to the curator when they buy a license.
- Membership Expired: Sent to the user when their membership has expired.
- Membership Revoked: Sent to the user when their membership is revoked.
- Validation Email: Email with validation code that is sent to the user when they create an account.
- Password Changed: Sent to the user when their password is changed.
- Password Reset: Sent to the user when they request a password reset.

- Pending User Workflow Added to Collection: Sent to a pending collection user when a workflow is added to a collection that they are invited to view.
- Pending User Collection Updated: Sent to pending user when a collection they are invited view is updated.
- Pending User Invited to a Collection: Sent to a pending user when they are invited to a collection.
- Pending User Granted Membership: Sent to a pending user when they are granted membership.
- Pending User Granted Artisanship: Sent to a pending user when they are granted artisanship.
- Referral: Sent when a user wants to refer someone to the Gallery.
- Workflow Shared Link: Sent to a user when a workflow has been shared with them.
- License Created Notification: Message sent to Alteryx when a new license is created.
- Curator Created a New Active User Account: Sent when a curator adds an active account.
- Collection Sharing Granted: Sent when sharing rights are granted to a user in a collection.
- Collection Sharing Revoked: Sent when sharing rights are revoked to a user in a collection.
- Collection Cleanup Error: Sent to Gallery admins when the collection cleanup background process has an error.

5.10 Data Connections

On the **Data Connections** page of the Gallery **Admin** interface, Curators (Gallery admins) can create Gallery data connections to allow Gallery users to connect to databases. Once configured, these data sources are available for users who have added the Gallery to select from a list and use.

- Data connections in Gallery are different than those in Designer.
- Gallery data connections aren't available for in-DB connections

5.10a Add a Data Connection

- 1. On the Data Connections page, select Add New Data Connection.
- 2. Select the connection type in the **Connection** drop-down.

Microsoft SQL Server Setup Steps

- 1. In Name, enter a connection name.
- 2. In **Host**, enter the SQL database hostname



- 3. Select an authentication option.
 - **Use Windows authentication**: Use the default credentials or enter specific credentials for the data connection.
 - Use SQL Server authentication: Enter server credentials. Pipe characters aren't supported in passwords.
- 4. (Optional) Select **Test Connection**. A connection verification or failure message displays. You can save a connection if the test fails.
- 5. If you selected Use Windows authentication, select an option, then select Test.
 - **Default**: Use the default credentials for data connection testing.
 - Use specific test credentials: Enter specific credentials for the data connection.
- 6. (Optional) Select **Database** to view a list of databases on the server. A list displays only if the connection test was successful.
 - Select a database to set it as the default database for this connection.
 - Select **Type a database name** and enter the name of the database on the server. Ensure the name contains a forward slash (\) in the server name, such as **RM-LT-013\SQLEXPRESS2**.
- 7. Select Save.

Oracle Setup Steps

All fields are required. After you complete the required information, test the connection.

- 1. In **Name**, enter a connection name.
- 2. In **Host**, enter the Oracle server hostname or IP address.
- 3. In **Service Name**, enter the name of the TNS-based application on the network. This information is optional if only 1 service exists.
- 4. In **Port**, enter the network listening port for the Oracle database. The default is 1521.
- 5. In **Username** and **Password**, enter the username and password for the data connection. Pipe characters aren't supported in passwords.
- 6. (Optional) Select **Test Connection**. A connection verification or failure message displays. You can save a connection if the test fails.
- 7. Select Save.

Other Data Connection Setup Steps

- 1. In **Name**, enter a name for the connection.
- 2. Enter a connection string in Connection String.
 - Connection strings have to be 212 characters or less.
 - Connections that don't use a data source name (DSN) are recommended. This is also known as a DSN-less connection.

Copy Connection Strings from Designer

You can copy and paste connection strings from data connections you created in Designer. To do so, log into Designer as an Admin. Go to **Options** > **Advanced Options** > **Manage Data Connections**.

3. Select Save.

5.10b Testing Data Connections

Connection Tests on a Multi-Node Server

A multi-node configuration of Server has a controller and 2 or more worker machines. In this configuration, the test functionality tests the connection on the controller machine, not the individual worker machines. To ensure that the connection will work on any of the machines, confirm that the same database drivers and driver versions are installed on each machine.

Failed Connection Tests

Connection tests can fail for many reasons. These are the most common reasons for connection tests to fail.

- You don't have access to the server or database. For example, in some cases, only the connection end-user has the authority to access the server or database.
- Network security can also prevent you from connecting to the server or database.
- Server isn't able to reach the database server host. To troubleshoot, ping the database server host to ensure that there is network connectivity while logged in to the server where Server is installed,
- The credentials for the database are invalid or don't have the appropriate access permissions. Contact the database administrator.
- The database is offline. Contact the database administrator to confirm that the database is online and working as expected.
- You are running a multi-node configuration of Server.

You can still save data connections that fail the connection test.

Default Credentials Used in Connections Tests

You can use Windows Authentication or SQL Server authentication to create a Microsoft SQL Server connection. For Windows Authentication, you can use default credentials or specific credentials for the data connection. You can set default credentials in multiple locations. The Gallery looks for available credentials in these locations. and selects the default credential in this order:



- **System Settings** > **Worker** > **Run As**. Go to <u>4.1c Worker</u> for more information on run-as users.

- Windows Server Manager > Tools > Services. Locate the AlteryxService, and right-click and select **Properties**. The credentials on the **Log On** tab, under **This** account.

- Local machine.

The connection test fails if credentials are invalid.

5.10c Share a Data Connection

After you create a data connection, return to the **Data Connections** page to share the connection with users to use in Designer.

- 1. On the **Data Connections** page, select the **pencil** icon for the data connection you want to share.
- 2. On the Edit Data Connections screen, select Users and Studios.
- 3. Enter the name of a user or subscription.
- 4. Select the user or subscription.

The user or studio you share the connection with is listed under Edit Data Connections > Users and Studios.

Important

For Microsoft SQL Server connections, confirm that the user has the same or more recent version of Microsoft SQL Server Native Client installed on their computer.

5.10d Revoke Access to a Data Connection

To revoke a user's access to a connection, select the "x" icon next to the user's name.

5.10e Edit or Delete a Data Connection

- 1. On the Data Connections page, select the pencil icon for the data connection.
- 2. On the Edit Data Connections screen, edit information in Name or Connection String.
- 3. Select Save.

Delete a Data Connection

To delete a connection, select the **trash** icon next to the connection name.

5.11 Diagnostics

The **Diagnostics** page of the Gallery **Admin** interface provides visibility into user and asset information on the Gallery and worker machines in a Server environment.

Use the **Diagnostics** page to monitor the number of users, assets, collections, studios, credentials, schedules, and jobs on the Server. You can also view the number of worker machines that are connected and identify constraints in resources impacting performance.

Apps

- **Total Apps**: The total number of all versions of workflows, apps, and macros saved on the server, including those that users have deleted.
- **Published Apps**: The number of workflows, apps, and macros made public in **My Company's Gallery**.
- **Deleted Apps**: The number of workflows, apps, and macros that users have deleted.

Users

- Total Users: The total number of active and inactive users in the MongoDB.
- Active Users: The number of users marked as active.
- **Disabled Users**: The number of users marked as inactive.

Collections

- Total Collections: The total number of collections created.
- **Apps in Collections**: The total number of workflows, apps, and macros shared in all collections. If a workflow is in 2 collections, it is counted twice.
- Users in Collections: The total number of users in all collections. If a user is in 2 collections, it is counted twice.

Server

- **Studios**: The total number of studios (subscriptions) created.
- Credentials: The total number of credentials created for running workflows.
- **Schedules**: The total number of schedules created for running workflows that have a valid next run date. Schedules that will no longer run are not included.
- Active Jobs: The total number of jobs that are queued, initialized, or running.
- Data Connections: The total number of data connections.
- **AMP**: An AMP icon displays if the Server admin has enabled the Alteryx Multithreaded Processing (AMP) engine for the environment. Go to <u>4.1b Controller</u>.

Workers

- Available Workers: The total number of workers communicating with the controller.
- Worker: The hostname of the worker machine.
- **CPU**: The percentage of the current CPU usage for a specific worker.
- Memory: The percentage of the current memory usage for a specific worker.

• **AMP**: The AMP icon displays if the Server admin has set up the worker to run AMP workflows. Go to <u>4.1e Engine</u>.

Worker [Host name of the machine]

- **Run Unassigned Jobs?**: If Yes, the worker has been configured to run jobs that have not been assigned a job tag.
- **Job Tags**: The tag added when configuring the worker that can be used to assign a specific worker to run a job. Job tags are selected when users create a schedule or run a workflow.
- **CPU**: The percentage of the current CPU usage for all connected workers.
- Memory: The percentage of the current memory usage for all connected workers.

CPU and Memory data isn't persisted in the database. If the service is restarted, the data is lost.

5.12 Pages

On the **Pages** page of the Gallery **Admin** interface, create new pages to add to your private Gallery. Pages are HTML friendly and include an editor toolbar to format text and include other common elements like hyperlinks, images, and tables.

Using links (go to <u>5.14 Links</u>) you can link to the page in the header of your Gallery to provide your Gallery users with useful content. For example, on the Alteryx Public Gallery (<u>https://gallery.alteryx.com/</u>), several of the links in the link menu are Gallery.

To manage pages, select **Pages** on the **Admin** toolbar.

Create a Page

- 1. On the **Pages** page, select **Add New Page**.
- 2. Enter a title for the page in the **Title** field.
- 3. **Permalink** displays the auto-assigned page URL based on the page title. Double-click to edit.
- 4. (Optional) Type a description of the page in **Excerpt**.
- 5. Select a **Status Draft** or **Published**.
- 6. In **Body**, enter text and use the editor toolbar to add other common elements like hyperlinks, images, and tables.
- 7. Select Save.



Edit a Page

To edit a page:

- 1. On the **Pages** page, use filters to locate the page.
 - a. Select the page title.
- 2. Edit the page details and body.
- 3. Select Save.

Delete a Page

On the **Pages** page, use filters to locate the page and select the trash icon next to the page.

5.13 Theme

On the Theme page of the Gallery **Admin** interface, brand the Gallery with your organization's name, logo, and colors. If you choose not to customize the Gallery, the default theme is used.

To update your Gallery theme, select **Theme** on the Admin toolbar.

- 1. On the **Theme** page, enter the server name in **Server Name**. This is displayed to Gallery users as the Gallery name in the Sharing menus.
- 2. To change the logo from the Alteryx logo, select **Upload a logo**, then **Choose File** and select an image file. Supported file formats are JPEG and PNG. Your image must be 20KB or less. For best results, use images that are about 200x46 pixels. Images wider than 200 pixels will be resized.
- 3. In Site Colors select new colors for various elements. Select the existing color to select a new color.
- 4. Select Save.

Refresh the Gallery to see your changes.

5.14 Links

On the **Links** page of the Gallery **Admin** interface, you can add a link to Gallery pages (go to **<u>5.12 Pages</u>**) or an external webpage. After you a create page, add a link to the page in the Gallery header. Links are visible to all users.

For example, on the Alteryx Public Gallery (<u>https://gallery.alteryx.com/</u>), several of the links in the link menu are Gallery pages.

To manage links, select Links on the Admin toolbar.

Add a Link

Add new links on the **Links** page, in the **Header** section. As of version 2019.4, you can only add links to the header.



- 1. In the **Page** dropdown, select a Gallery page to link to. Select **None (external link)** to link to an external webpage.**URL**:
- 2. If you selected **None (external link)** in the **Page** dropdown, enter a webpage URL in the **URL** field.
- 3. In the **Title** field, enter the link text you want to display to Gallery users.
- 4. Select Add New Link.

Users can select the **link** icon in the top-right of the header to access links.

Delete a Link

To delete a link, select the **trash** icon next to the link on the Links page.

5.15 Media

On the **Media** page of the Gallery **Admin** interface, upload banner ads and other images and files to the Gallery.

To manage media, select Media on the Admin toolbar.

Add a Banner Ad

- 1. On the Media page, select Banner Ads > Add New.
- 2. Select **Browse** and select an image file.
- 3. (Optional) Select the pencil icon to add a link and hover text.
 - In **Link**, enter a URL. This will send users to the URL specified when they select the image.
 - In **Hover text** enter text that will appear on hover.
 - Select **OK**.

Add an Image

- 1. On the **Media** page, select **Uploads > Upload a File**.
- 2. Select **Browse** and select an image file.
- 3. (Optional) In **Title**, enter a title for the image and select **Save**.

Delete a Banner Ad or Image

To delete a banner ad or image, select the **trash** icon next to the image you want to delete.



5.16 Districts

Use districts to group shared, public workflows on the homepage so that users can easily find them. You can see how districts are used in the Alteryx Public Gallery (<u>https://gallery.alteryx.com/</u>).

Curators (Gallery admins) can create new districts and modify existing districts on the **Districts** page of the Gallery **Admin** interface.

- 1. On the **Districts** page, select **Add New District**.
- 2. On the **Create District** page, enter a **Title** to display on the district page.
- 3. In Nav Link, enter the slug portion of the link URL.
- Select a workflow tag in the Tag drop-down. Workflows with this workflow tag will display on the district page. Go to <u>5.6c Create Workflow Tags</u> for steps on creating workflow tags.
- 5. Enter a **Description** to display on the district page.
- 6. Select Save.



6. Glossary

Α

Admin

Go to **Curator**.

Арр

An app or analytic app is a workflow with a user interface. Using the app interface app users can execute a workflow with their specific data and parameters. You can publish apps to your Gallery for others to access and run.

Artisan

A user role that grants the user permission to publish, run, and share workflows in the Gallery. Go to **5.3b User Roles and Permissions** for more info.

Authentication Type

The method users use to authenticate to your Gallery. Server supports built-in authentication, integrated Windows authentication with or without Kerberos support, and SAML authentication. Go to <u>4.3 Configure Gallery Authentication</u> for more info.

В

Base Address

The URL that users use to go to the Gallery. In email notifications, the base address is used in links to workflows. The Windows Communication Framework (WCF) technology also uses the base address to see if it needs to handle requests coming in. Go to <u>4.1d Gallery</u> for more info.

Built-In Authentication

Gallery authentication method where users specify an email address and password of their choosing to access the Gallery. Go to <u>4.3 Configure Gallery Authentication</u> for more info.

С

Collection

A collection allows users to share assets (workflows, apps, macros, and insights) with other Gallery users. Go to <u>5.4 Collections</u> for more info.

Controller

The controller handles the management of the service settings and the delegation of work to the workers. In a typical deployment, there is 1 machine enabled as the controller and it is set up to act as a worker as well. Go to <u>4.1b Controller</u> and <u>4.2 Configure</u> <u>Controller and Workers</u> for more info.

Controller Token

An auto-generated key used to configure a worker machine to communicate with the controller machine. Go to <u>4.1b Controller</u> and <u>4.2 Configure Controller and Workers</u> for more info.

Credentials

Within the Gallery **Admin** interface, curators (Gallery admins) can save credentials to share with Gallery users to use when running workflows to allow access to directories and data. Go to <u>5.8 Credentials</u> for more info.

Curator

A user role that grants Gallery users access to the Gallery **Admin** interface. Go to <u>5.3b</u> <u>User Roles and Permissions</u> and <u>5. Administer Gallery</u> for more info.

D

Data Connection

Curators (Gallery admins) can create data connections to allow Gallery users to connect to databases. Once configured, these data connections are available for users to select from a list and use. Go to <u>5.10 Data Connections</u> for more info.

Default Gallery Administrator

The initial Gallery administrator who sets up and manages Gallery users. Go to **4.1d Gallery** and **4.3 Configure Gallery Authentication** for more info.

Designer

Alteryx desktop application that provides an intuitive drag-and-drop user interface for authoring and executing analytic applications.

District

A category used to group shared, public workflows on the homepage. For example, the Alteryx Public Gallery (<u>https://gallery.alteryx.com/#!districts</u>) uses districts to organize public workflows. Go to <u>5.16 Districts</u> for more info.

Ε

Engine

Consumes workflows and provides high-speed data processing and analytics functionality. Go to <u>4.1e Engine</u> for more info.

Environment

A system settings component that includes machine configuration type (worker, controller, Gallery), as well as the global workspace for other components to use as a root location for file storage. Go to **4.1a Environment** for more info.

F

G

Gallery

A cloud-hosted or self-hosted application for publishing, sharing, and executing workflows. Go to <u>4.1d Gallery</u> for info on configuring the Gallery. Go to <u>5. Administer</u> <u>Gallery</u> for info on Gallery administration.

Group

User groups allow admins to more efficiently assign **user roles**. They also support asset sharing via collections. Go to **<u>5.3c Manage Groups</u>** for more info.

Н

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Insight

An insight is an interactive dashboard built using the Insight tool. You can publish an insight to your Gallery for others to view.



J

Job

All scheduled and manually-run workflows that are actively processing or queued. Go to **<u>5.7 Jobs (Schedules)</u>** for more info.

Κ

L

Links

Links are navigation links to Gallery **pages** or an external webpage. For example, you can see links in the link menu on the Alteryx Public Gallery (<u>https://gallery.alteryx.com/</u>). Go to <u>5.14 Links</u> for more info.

Logs

Information about system events, such as services started or shutdown, execution requests, warnings, errors, etc. Use logs to investigate and diagnose issues. Go to **4.7 Configure and Use Server Logs** for more info.

Μ

Macro

A macro is a workflow or group of tools built into a single tool that you can insert into another workflow. Create a macro to save an analytic process you perform repeatedly. You can publish macros to your Gallery for others to access and run.

Media

Banner images and other images and files uploaded for use on Gallery pages. Go to **5.15 Media** for more info.

Member

A user role that grants the user permission to run workflows that are shared with them via collections. Go to **5.3b User Roles and Permissions** for more info.



Ν

Notification

Curators (Gallery admins) can set up email notifications for various events, for example, Gallery account registration, password changes, or workflow sharing. Go to 5.9Notifications for more info.

0

Ρ

Pages

Pages are HTML friendly and include an editor toolbar to format text and include other common elements like hyperlinks, images, and tables. Using links (go to <u>5.14 Links</u>) you can link to the page in the header of your Gallery to provide your Gallery users with useful content. For example, on the Alteryx Public Gallery (<u>https://gallery.alteryx.com/</u>), several of the links in the link menu are Gallery pages. Go to <u>5.12 Pages</u> for more info.

Persistence

A part of the Alteryx service that stores information critical to the functioning of the service, such as application files, the job queue, and result data. Go to **4.1b Controller** and **4.1d Gallery** for more info.

Q

Quality of Service

The Quality of Service (QoS) setting is used to manage resource allocation in an environment where multiple workers are deployed. You can set the QoS per worker to reserve worker resources for higher-priority requests. Go to <u>4.1c Worker</u> for more info.

R

Run As User

A run as user is a user account that is configured to run workflows. Go to <u>4.6 Configure</u> <u>Required Run As User Permissions</u> for more info about configuring run as user accounts. Using a run as user allows workflows to read and write data to the program files the user has access to. In Server, you can specify a run as user on the worker screen within system settings. Go to <u>4.1c Worker</u> for more info. Curators (Gallery admins) can also add the credentials for user accounts configured to be run as users. Go to 5.8 Credentials for more info.

Role

User roles are set by Curators (Gallery admins) in the Gallery **Admin** interface. User roles determine the user's level of access to Gallery users and assets. Go to <u>5.3b User</u> **Roles and Permissions** for more info.

S

SAML Authentication

Gallery authentication method where users access the Gallery with Identity Provider (IDP) credentials. Go to <u>4.3 Configure Gallery Authentication</u> for more info.

Scheduler

Allows users to schedule workflows to run on a specified date and time or a recurring basis. The scheduler connects to either a local or remote instance of the service where the job is queued for execution at the appropriate time. Go to 5.7 Jobs (Schedules) for more info.

Service

A scalable service supporting workflow execution and scheduling. It uses a controllerworker architecture which allows it to be deployed across multiple servers.

SMTP Server

Sends out email notifications for various events, such as Gallery account registration, password resets, or shared workflow notifications. Go to <u>4.4 Configure SMTP</u> for more info.

SSL

SSL (Secure Socket Layer) encryption ensures safe and secure communication between Designer and Server, as well as any communication between a user's web browser and your company's Private Gallery. Go to <u>4.5 Configure Gallery SSL</u> for more info.

Studio

A studio (in other words, subscription) is automatically created for each Gallery user. When a user creates a workflow in Designer and publishes it to the Gallery, the workflow is added to the user's private studio (subscription).

Subscription

A subscription allows Designer users to publish and share workflows privately to your organization's Gallery. Curators (Gallery admins) can create subscriptions and manage the users and workflows assigned to them. Subscriptions are also known as studios.

System Settings

The various settings, including the Environment, Controller, Worker, Gallery, and Engine components, that you configure after Server installation.



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Theme

Allows you to brand the Gallery with your organization's name, logo, and colors. If you choose not to customize the Gallery, the default theme is used. Go to 5.13 Theme for more info.

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Viewer

A user role that grants the user permission to run public workflows on the homepage and in districts. Go to **<u>5.3b User Roles and Permissions</u>** for more info.

W

Windows Authentication

Gallery authentication method where users access the Gallery with internal network credentials. Go to <u>4.3 Configure Gallery Authentication</u> for more info.

Windows Authentication with Kerberos

Gallery authentication method where users access the Gallery with internal network credentials using Kerberos authentication protocols. Go to <u>4.3 Configure Gallery</u> <u>Authentication</u> for more info.

Worker

Workers are responsible for executing analytic workflows. There has to be at least 1 worker machine to execute applications through the service. You can configure the same machine to be both the controller and a worker. Go to <u>4.1c Worker</u> and <u>4.2 Configure</u> Controller and Workers for more info.

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