

Version-to-Version Server Upgrade Guide

Server Upgrade Checklist

 Please see the [Server Upgrade Checklist](#) to help plan and execute a successful Server upgrade, including the [Pre-Upgrade Checks](#) (KB) workflow to identify issues that cause upgrades to fail.

How Does This Document Help?

This document highlights tasks and changes you need to be aware of when upgrading through versions of Alteryx Server. Issues are cumulative, so read through each section as you upgrade through multiple versions. This doesn't replace Release Notes (see links in each section).

Release Schedule

Quarterly releases add features but can also change Server management requiring you or your users to change behavior.

Maintenance releases/patches within each quarter address issues found in the initial release. For example, the first maintenance release for 2022.3 would be 2022.3.2.

Legend

 pit-stop	Significant change that requires upgrading to this version before upgrading to a later version.
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 MongoDB upgrade	<p>The Mongo database version is upgraded.</p> <p>An Alteryx Server upgrade can only include ONE MongoDB version upgrade. You may upgrade to a version past the MongoDB upgrade (ie, you do not need to upgrade to the specific Server version with the MongoDB upgrade before upgrading to a later Server version)</p>
	Impact
	Task
	<p>Critical Issue Admins must address or be aware of when moving to or past this version.</p>
<p>Criteria for entries in this list</p>	<p>This list condenses each version's Release Notes to highlight where:</p> <ul style="list-style-type: none"> • Admin or Users are required to perform an action. • Item is important in choosing an upgrade version (i.e., changed behavior or defect). • A defect exists.

Version-to-Version Guide

Quick Links

18.1	19.3	20.1 20.2 20.3 20.4	21.1 21.2 21.3 21.4	22.1 22.2 FIPS 22.3	23.1 23.1
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Version	Actions to take when upgrading to—or past—this version.
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2018

18.1



MongoDB
3.4

MongoDB Upgrade - Embedded MongoDB upgrades from version 3.0.4 to 3.4



If using embedded Mongo, upgrade to 2018.1-2019.2 before upgrading to 2019.3+ to ensure embedded Mongo upgrades to version 3.4. Note free drive space requirements of 1x-3x your current Mongo database size.

[MongoDB in Server Upgrades Best Practices](#)

[MongoDB schema reference](#)

2019

19.3



MongoDB
4.0

MongoDB Upgrade - Embedded MongoDB upgrades from version 3.4 to 4.0.10



If using embedded Mongo, upgrade to 2019.3-2021.3 before upgrading to 2021.4+ to ensure embedded Mongo upgrades to version 4.0. Note free drive space requirements of 1x-3x your current Mongo database size.

[MongoDB in Server Upgrades Best Practices](#)

[MongoDB schema reference](#)

[Troubleshooting-a-failed-MongoDB-migration-Server-2019-3](#) (KB)

19.3



Python Upgrade - Embedded Python upgrades from 3.6.0 to 3.6.8 (Conda)



Users should retest Python in workflows. Engine still uses Python Version 3 so there should be little impact on scripts.



All Connector Tools must be re-installed from YXI's

[Install Custom Tools](#)

[Connectors](#)

[Alteryx Embedded Python](#)

2020.1

20.1	<p>MongoDB Issue - NULL user names, emails, or subscriptions will cause upgrade failures in this and future versions</p> <ul style="list-style-type: none">  Use the Pre-Upgrade Checks (KB) workflow to identify NULL values before upgrading to this or later versions. How to Identify and Fix Null/Incorrect values in Users collection - MongoDB (KB) How to Identify and Fix Null/Incorrect values in Subscriptions collection - MongoDB (KB)
20.1	<p>Administration Change - Artisans are given the ability to create Collections by default</p> <ul style="list-style-type: none">  This adds capabilities Artisans may not have had before.  To remove this functionality for a user, edit their User record and set Create Collections to No.
<p>20.1</p> 	<p>Administration Change - Users with Viewer Role lose ability to run workflows in Collections shared with them (TGAL-2666)</p> <ul style="list-style-type: none">  Users who want to run workflows shared with them in a Collection need to have their Role set to Member. Expected error message: <ul style="list-style-type: none"> <i>This Workflow is published in a private Studio. An Analytics Gallery Membership is required to run Workflows published in private Studios. Contact the Artisan who shared the Workflow to request a Membership. For more information on Memberships, please contact sales@alteryx.com</i>  Set the user's Role to Member. Viewers cannot execute workflows in Collections after upgrade to 2020.1 (KB)
<p>20.1</p> 	<p>Defect TGAL-2745 - If using AD authentication: Schedules, Collections, and individual Users may not display (corrected 2020.3.9)</p> <ul style="list-style-type: none">  If using Active Directory authentication, if an AD User is deleted: <ul style="list-style-type: none"> -- Their User record will present an error when edited: Unknown Error: IdentityNotMappedException -- If they owned a Schedule or Collection, those views will show Error loading schedules or Error loading collections  To determine if you have any Server Users who have deleted AD User accounts prior to upgrading, run the AD Health Check workflow*. If you experience this issue, contact Customer Support to resolve [CSEs Gallery Errors when using Windows Authentication]

2020.2

20.2	<p>New Features</p> <ul style="list-style-type: none"> ● AMP Engine added to Server Alteryx AMP Engine Alteryx Engine and AMP Main Differences If AMP is enabled on Server, the number of Simultaneous Workflows should be set to 1 (2022.1 allows more than 1). ● Share Schedules and Results to Collections ● API enhancements <ul style="list-style-type: none"> -- Ability to Pass Credentials with Workflow via the API. -- Allow User Access to the Server API
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2020.3

20.3	<p>New Features</p> <ul style="list-style-type: none"> ● User and Group Management ● Ability to Run Workflows containing the File Browse Tool via the API ● Ability to Disable Direct Downloads
20.3	<p>Defect TSM-317 - Output Tool SQL Server error (corrected 2021.2)</p> <p> Output Tool SQL Server: An unknown error occurred in II_PushRecord (KB)</p>
20.3	<p>Defect TGAL-2832 - If using AD Groups, AD "Display Name" is now used and it can be different or blank (corrected 2021.4)</p> <p> If using AD authentication, AD Group names changed from the "Network Name" to the "Display Name" field. This can cause the AD Group names to appear differently in Server UI or be completely blank.</p> <p> Active Directory Groups Not Showing when Adding Groups (KB)</p>
 20.3	<p>Defect TGAL-2671 - Active Directory authentication leading to slow Admin access of list of Users (corrected 2020.4)</p> <p> If you use Active Directory authentication, move to version 2020.4+.</p>

2020.4

20.4



Python Upgrade - Embedded Python upgrades from 3.6.8 to 3.8.5 (Conda)

 Users should retest Python in workflows. Engine still uses Python Version 3 so there should be little impact on scripts.

 All Connector Tools using Python must be re-installed from YXI's.

[Install Custom Tools](#)

[Connectors](#)

[Alteryx Embedded Python](#)

[Python-Upgrade-20-4](#) (655918)

[Python-Upgrade-20-4-Tool-Developers](#) (655305)

20.4

New Features

- [Share Credentials with Users and Groups](#)
- [Add a User Group to a Collection](#)
- Admin API endpoint to allow the retrieval of the schedule owner and the estimated run time. See API Help within the Server UI.

20.4

Administration Change - A Collection can no longer be shared with a Private Studio, share Collections with Users instead

 This feature had allowed a backdoor for Servers using Active Directory authentication to allow access to Collections by users in different AD Forests.

The steps for the backdoor had been: (1) AD User in other domain accessed Server UI website, (2) this created a Private Studio and ServerUser record for them, (3) the Collection was then shared with the Private Studio giving this Server User from the other AD domain access to the Collection.

Going forward, the AD User in a different domain can't have the Collection shared with them since the Collection can only be shared to users in the same AD Forest.

20.4	<p>Defect TGAL-6039 - If using AD authentication, unable to Change Collection Owner (corrected 2022.1)</p> <p> If using Active Directory authentication, if the AD User is deleted for a Server User who owns a Collection, the Collection Change Owner page appears blank.</p> <p> Edit the User in Server UI and set their Role to No Access to correct this problem.</p>
20.4	<p>Defect TDALI-1078 - PowerPoint Output from Render Tool is Corrupt (corrected 2022.3)</p> <p> The PPT / PPTX file presents an error when opened: PowerPoint found a problem with content in... Selecting Repair opens the file.</p>

2021.1	
<p>21.1</p> 	<p>Administration Change - Server Shared Database Connections must now be shared with Users attempting to run or schedule a workflow using the connection. Previously, a workflow using a Shared Database Connection could be shared with a Collection and all users in the Collection would be able to run it.</p> <p> Workflows and Schedules that were working before may now receive Unable to Translate Alias errors. 2022.1 Patch 5 and 2022.3 Patch 2 provide the option to restore this functionality.</p> <p> For workflows receiving an error after the upgrade, determine the shared Server Database Connection used by the workflow and share it with the User attempting to run or schedule the workflow.</p> <p>Sharing Data Connections with User Groups Alteryx 21.2 (KB) Troubleshooting "Unable to translate Alias" with Gallery Data Connections (464672)</p>
21.1	<p>New Features</p> <ul style="list-style-type: none"> • Schedule Forecast • User-managed Mongo supports connection strings for TLS/SSL, replica sets, sharding, or Mongo Atlas, see Alteryx System Settings > Controller > Persistence.

21.1	<p>System Change - Configuration file locations have changed</p> <p>i Configuration files Was C:\Program Files\Alteryx\bin\config Now C:\Program Files\Alteryx\bin\server\config</p> <p>Webroot Was C:\Program Files\Alteryx\bin\RuntimeData\gallery Now C:\Program Files\Alteryx\bin\RuntimeData\server</p>
21.1	<p>Security Enhancement - Enforce that OAuth parameters are sent as headers rather than query parameters</p>
21.1	<p>Defect TGAL-2872 - Curators can see Jobs run by other users on shared workflows but receive Access Denied error when trying to access the results (corrected 2021.4)</p> <p>i If a UserA shares a workflow with a Curator via a Collection or by being in the same Studio, the Curator will see the Jobs UserA has run manually or through a Schedule. When the Curator selects the Job to view the Results they receive Error Getting Job Results Access denied. The defect is that the Job UserA ran should not appear in the list of Jobs the Curator sees.</p>

2021.2	
 <p>pit-stop</p>	<p>First version that is compatible with the 2022.3+ Crypto Migration</p> <p>i Versions 2021.2 - 2022.1 are compatible with the MongoDB crypto migration performed in the upgrade to the 2022.3+.</p> <p><input checked="" type="checkbox"/> If upgrading from an earlier version to 2022.3+ you will need to upgrade to 2021.2 - 2022.1, test, then upgrade to 2022.3.</p>
21.2	<p>Mongo Change - Duplicate emails will cause failure to upgrade in this and later versions</p> <p>i Use the Pre-Upgrade Checks (KB) workflow to identify duplicate emails before upgrading to this or later versions</p> <p>How-to-Identify-and-Fix-Users-with-Duplicate-Email-Addresses (KB)</p> <p>Gallery-Not-Starting-after-Upgrading-to-2021-2-Error-Duplicate (KB)</p>

21.2	<p>New Features</p> <ul style="list-style-type: none"> • Database Connections can be shared with Custom Groups • Added security feature: specify a List of Allowed Hosts • New API features, see API Help in the Server UI: <ul style="list-style-type: none"> ○ version workflows ○ publish and fetch version comments ○ get user groups associated with a Server Data Connection
21.2	<p>Feature Removed - Option to Share Workflows Removed from the Workflow Page</p> <p> This removes the options to share workflows via social media and email from this page.</p>
21.2	<p>Defect TCPE-120 - Designer Select Tool Defect: The field "XXX" was renamed conflicting with an existing field name (corrected 2022.1)</p> <p> An error message appears on the Select tool in cases where the incoming data field names changed case since the tool was configured. GCSE-544: Error: "The field "XXX" was renamed conflicting with an existing field name" (KB)</p>
21.2	<p>Upgrade change - Service will not start if the Mongo Schema migration failed</p> <p> This ensures issues preventing the schema migration are addressed before the Service starts. The Pre-Upgrade Checks (KB) workflow is the best way to ensure the schema migration will be successful.</p>
21.2	<p>Defect TCPE-531 - .hyper files read strings into Alteryx as V_WString</p> <p> .hyper files read strings into Alteryx as V_WString (1,073,741,823) while prior versions read in as V_WString (255).</p> <p> Use an Auto Field or Select Tool after reading .hyper data to reset the column type.</p>

2021.3

21.3	<p>Performance Improvement - Schedule Forecast performance significantly improved</p> <p> Schedule-forecast-admin-interface</p>
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21.3	<p>Defect TBD - Running alteryxservice setserversecret results in an error Set server secret failed: Error in CryptImportKey(3): Bad Data (-2xxx)</p> <p> No defect was created. To correct this, edit the Runtime Settings and remove the content of the server secret section and save.</p>
21.3	<p>Database Connections - End of Support for 32-Bit Database Connections</p> <p> End support 32-bit database connections faq. Final end-of-life for 32-bit is 2023.1.</p> <p> Users should move to 64-bit connections, 21-3-and-32-bit-connin actions (781329)</p>
21.3.4	<p>Defect TGAL-6268 - API endpoints GET /admin/v1/workflows and /workflows/jobs/ not returning expected data (corrected 2021.3.6, 2021.4.2_Patch2)</p> <p> GET admin/v1/jobs - blank Search used to return all jobs, now returns empty array. GET admin/v1/workflows - blank Search used to return all workflows, now returns empty array. Processes that use the admin/v1/workflows API endpoint to migrate workflows between servers are impacted.</p> <p> See a discussion of the changes you'll need to make and an example workflow that performs workflow migrations that have been updated based on this defect: Migrating-Workflows (KB)</p>
<p>21.3.6</p> 	<p>MongoDB Upgrade - Embedded MongoDB upgrades from version 4.0 to 4.2</p> <p> The .6 maintenance release of 2021.3 upgrades the Mongo version, please see details in the 2021.4 section below.</p>
<p>21.3.6</p> 	<p>Defect TGAL-6566 - Service fails to start after upgrading to 2021.3.6 with Mongo error: Index with name: fd5e7f7ad987788251ca676578977ec1 already exists with a different name: generic server error" code: <mongodb:85> in LastStartupError.txt (corrected 2021.3.7)</p> <p> This affects upgrades to 2021.3.6 only.</p> <p> Contact Support and refer CSE to internal article (KB). Note to TAMs: the steps in the article are easy and can be done proactively before upgrading (see Jennifer Powell).</p>

2021.4

[What's New](#) + [Release Notes](#)

21.4



MongoDB
4.2

MongoDB Upgrade - Embedded MongoDB upgrades from version 4.0.10 to 4.2.15

-  While the initial upgrade was to 4.0.10, subsequent patches upgraded to 4.2.15 [CSE Internal - ([TGAL-6772](#))]
-  If using embedded MongoDB, upgrading to this version or later will upgrade MongoDB to version 4.2. Note free drive space requirements of 1x-2x your current Mongo database size.

[MongoDB in Server Upgrades Best Practices](#)

[MongoDB Schema Reference](#)

 **Special note for long-standing customers:** If your first Server installation was prior to 2018.1 and your MongoDB folder does not contain files with the .WT extension, you need to backup and restore your Mongo database, then set your Server to use the restored data folder prior to this upgrade. [MongoDB Migrate from MMAPv1 to WiredTiger Storage](#) (KB). [CSE Internal - [TGAL-6590](#) and [Teams](#)] (**corrected 2021.3.7**)

21.4



Internal Change - Controller Token length extended

-  The shorter Controller Token will continue to work following your upgrade, however you will not be able to perform a [Server Host Recovery](#) using the shorter token because it will not be accepted by the "AlteryxService.exe setserversecret" step. The best practice is to proactively reset your controller token to the new extended length to ensure you'll be able to perform a Server Host Recovery in the future.

 **THIS IS CRITICALLY IMPORTANT** 

 Steps:

1. Upgrade your Server and test that it is working as expected
2. **Stop** the Alteryx Service on all nodes (order: Workers ... Server UI ... Controller)
3. Run **Alteryx System Settings** on the **Controller node**
4. Make a **backup** of your existing **Controller Token** and **RuntimeSettings.xml**. This Controller Token is required to roll back to 2021.3 or prior, if needed, or to restore any recent 2021.4 backups
5. Choose **Controller > General > Controller Token > Regenerate**
6. Select **Next** until you reach **Finish** to restart the **Controller Service**
7. Update all nodes with the new **Controller Token** (order: Server UI ... Workers)

21.4

New Feature - Data Connection Manager (DCM)

- i** A User can store passwords for Credentials, Data Sources, and Connectors in the DCM. These can be used by a User in workflows locally or on the Server, and shared on the Server so other Users or Groups can run the User's workflows on the Server. This moves control of credentials from the Server Administrator to the User publishing the workflow.

[DCM - Designer](#)

[DCM - Server](#)

[Data Connection Manager Server UI](#)

[What-is-Data-Connection-Manager-DCM](#) (KB)

[How-to-Set-up-DCM-for-Designer-and-Server](#) (KB)

21.4

New Feature - API V3 added with many new Administration endpoints, OAuth2, and new API endpoints

- i** [OAuth1 to OAuth2 Instructions](#)
[Alteryx Server API V3](#)
[Introducing the Alteryx Server v3 API](#) (899228) -- includes **v3 API Macro Pack** to facilitate calling the API from a workflow
[Server API Overview](#)

- ✓** If your Server uses a Base Address other than **localhost**, copy the domain into the **Web API Address** in **Alteryx System Settings > Gallery > General**. The **http://mydomain/gallery/API** endpoint remains OAuth1 but will be deprecated in 2022.1. See 2022.1 below for more information on the new OAuth2 Web API.

The screenshot shows a settings window titled "Base Address and Web API Address" with a help icon. It contains two input fields: "Base Address" with the value "http://ayx.mycompany.com/gallery/" and "Web API Address" with the value "http://ayx.mycompany.com/webapi/". Below these fields is a checkbox labeled "Enable SSL" which is currently unchecked.

If you have a **Load Balancer** you must implement **Sticky Sessions** to use **OAuth2**. Failure to do so will lead to intermittent **401-Unauthorized** errors when the load balancer sends an API call to a different machine than generated the Bearer Token. [CSEs - Jira TGAL-6353, TCPE-402; Aha SERV-605]

21.4

Server UI Change - Private Studio and Home pages merged

- i** [Alteryx Server UI Overview](#)

21.4	<p>Server UI Change - If users have been moved between Private Studios, they will now see all workflows they've created</p> <p> Prior to this version, if users were moved between Private Studios (Subscriptions) they would only see workflows from their current Private Studio. With the change to viewing workflows in "My Workspace", users will now see all workflows they have ever created. However, while displayed, users will not be able to delete or open workflows other than those in their current Subscription (as assigned in the Admin > Subscriptions page).</p> <p>This is a step in the direction of removing Private Studios from the Server product in favor of sharing workflows via Collections. In a future release, users will be able to open and delete all of their workflows, regardless of the Private Studio they were created in.</p> <p> No action needed</p>
21.4	<p>Administration Change - "Jobs Shared With Me" tab was removed from Private Studio (which is now called My Workspace)</p> <p> If Users shared Scheduled Workflow Job Results by being in the same Private Studio with the Studio setting Shared Schedules Enabled, they will no longer see the Jobs Shared With Me tab in their Private Studio to view the Job Results from these Schedules.</p> <p> To provide access to shared Schedules:</p> <p>Option 1: Enable Schedule Jobs for affected Users. They can now see the Schedules Job Results on the Schedules page, but this also grants them the ability to schedule jobs.</p> <p>Option 2: Have the Schedule owner share the Schedule in a Collection that all Users are members of. This is preferred as Server design moves away from Private Studios in favor of Collections.</p>
21.4	<p>Improved - Telemetry enhanced to track usage at the workflow level</p> <p> Customer Managed Telemetry</p>
21.4	<p>Defect TGAL-6408 - Default Worker Tag assigned to a Private Studio is not being saved (corrected 2022.3)</p> <p> The Private Studio Assigned Worker setting is not saved.</p> <p> Workaround: set the Job Tag when publishing the workflow (the User must have Assign Jobs set to true).</p>
<p>21.4</p> 	<p>Defect TGAL-6502/TCPE-292 - If you have user-managed MongoDB Atlas, schema migration fails with 250+ Users/Subscriptions (corrected 2021.4.2_Patch2)</p> <p> Corrected in version noted above.</p>

21.4	<p>Defect TCPE-473 - Collection names appear with %20 or %26 instead of space of ampersand (corrected 2023.1)</p> <ul style="list-style-type: none">  In past versions Collection names were saved URLEncoded, where a space would be replaced with %20 (as well as other character substitutions). 2021.4+ are displaying the Collection names exactly as they appear in the database.  You can determine if this will be an issue by reviewing the AlteryxGallery.collections collection for names with %20's. If they exist you can edit the Collections in Server UI to correct. If there are too many to edit easily, contact Customer Support for assistance.
21.4	<p>Excel XLSX file handling change - Excel XLSX files can no longer be read from if they are open in Excel [TDCB-3592]</p> <ul style="list-style-type: none">  This change was made to ensure data integrity.
21.4.2	<p>Defect TDES-4123 - Related to use of feature locking down users' Designer access to a single, specific Server UI URL (corrected 2021.4.2_Patch2)</p> <ul style="list-style-type: none">  If the feature below is used in local Designer installations to (1) specify a default Server UI URL and (2) prevent the user from connecting to Server UI's of their choice, the user will lose the default Server UI from the File > Open Workflow menu and thus no longer be able to open workflows from the Server UI. <p>Affected feature: Control Designer Access to Server</p> <p>Specific setting that causes the issue:</p> <pre data-bbox="373 868 1480 982"><Designer> <ManageGalleriesEnabled>False</ManageGalleriesEnabled> <DefaultGalleryUrl>http://my-server.com/gallery</DefaultGalleryUrl> </Designer></pre> <ul style="list-style-type: none">  Change the XML file <code><ManageGalleriesEnabled></code> setting to <code>True</code> and have the user add the Server UI manually in Designer. Note: the user is now free to add other Server UI Nodes, which they were not able to do before.
21.4.2	<p>Defect TGAL-6443 - POST /v3/workflows/ID/versions does not show in UI for workflows uploaded from Designer (corrected 2022.3)</p> <ul style="list-style-type: none">  If a workflow is originally published from Designer, subsequent updates using the <code>POST /v3/workflows/{workflowId}/versions</code> endpoint do not update the workflow. Workflows originally uploaded with the API are updated as expected.
21.4.2	<p>Security Notice - AMP Engine (corrected 2021.4.2_Patch1)</p>  <ul style="list-style-type: none">  Alteryx has received a report of a vulnerability in AMP processing. Alteryx is investigating the possible impact. (TELC-2814)  We recommend that you disable AMP on Designer and Server.

21.4.2
47792
Patch 5

Defect TGAL-6990 - Upgrade fails with Gallery Data Connections containing a blank password (corrected 21.4.2_Patch6, 22.1.1_Patch4)

 Upgrade fails when Gallery Data Connections containing a blank password exist, see [Community](#) (1045100) [[TGAL-6990](#)]

Connection String	Database	Share
odbc:DRIVER={SQL Server Native Client 11.0};UID={Username};PWD={Database_name};SERVER={D...	SQL	0 0

 Option - Skip this patch.

Option - See [KB](#). Find problematic records in Robo3T in AlteryxGallery database:

```
db.getCollection('dataConnections').find({"PasswordSecured" : ""})
```

Edit AlteryxGallery.dataConnections.PasswordSecured field for all records with blank passwords and copy a password from another record. Note: update the Gallery Data Connection in the server UI after the Server upgrade completes.

21.4.2
.47792
Patch 5

Defect TGAL-7256 - DCM connections don't work after Server Host Recovery (open)

 If the Mongo database is restored to a new machine (a Server Host Recovery), the DCM connections will not work (errors vary for each tool using DCM).

 Workaround:

Best option: Users edit their DCM Credentials in Server UI and reenter password.

Alternative: Delete records from the three collections in AlteryxService (dCMEConnections, dCMECredentials, dCMEDataSources), and have users sync their DCM Connections to the new Server from Designer. This process assumes DCM entries were not updated in the Server UI as they would be replaced with older versions from Designer.

2022.1

[What's New](#) + [Release Notes](#)

22.1



Server Requirements Change - Recommended Logical Core and Memory requirements have changed

- i** AMP is enabled by default in 2022.1 and memory and logical core requirements have changed to support this. Additionally, AMP can now run **Simultaneous Workflows** (1 per 8 logical cores). Note the change from "physical" to "logical cores" in the table below.

Recommended

Desired # Concurrent Workflows	Recommended System Requirements (pre-22.1)		NEW Recommended System Requirements 22.1+	
	Memory (GB RAM)	Physical Cores	Memory (GB RAM)	Logical Cores (vCPU)
1	8	2	24	8
2	16	4	32	16
3	24	6	40	24
4	32	8	48	32
5	40	10	56	40
6	48	12	64	48
7	56	14	72	56
8	64	16	80	64

- ✓** Unless AMP is disabled, review that Worker nodes meet the new guidelines. See also: [AMP Engine Best Practices](#)

To disable AMP on the server, see "What if I want to preserve my current engine system settings?" in link above prior to upgrading.

Best practice when using AMP -- allow the Server to manage simultaneous workflows and memory, check:

- Alteryx System Settings > Worker > General > **Allow Server to manage workflows running simultaneously**
- Alteryx System Settings > Engine > **Allow Server to manage engine resources**

22.1



Settings Change - AMP Engine and "Allow Server to manage workflows running simultaneously" default **ON** [TCPE-309]

- i** This will **reset** your existing **Workflows Allowed to Run Simultaneously** setting based on the new AMP recommendations above. If you choose to disable AMP, you will need to restore your Simultaneous workflows setting to ensure performance is not impacted (the calculation for non-AMP Simultaneous workflows is $\text{physical_cores} / 2$).

- ✓** See the "AMP Engine Enabled by Default" section of [release notes](#) for more details. To disable AMP: **Alteryx System Settings > Engine > General > Engine > Original Engine Only.**



API Change - OAuth1 API deprecated

-  APIs now use OAuth2 exclusively. Select the question mark in the upper-right of the Server UI page for API documentation. See the 2021.4 section above that introduces OAuth2 for critical links and directions.

Removing WCF endpoints, leaving only Webapi endpoints

Legacy (WCF) endpoint	User V2	OAuth 1
	<code>http://myserver/gallery/api/user/v2/credentials</code>	✗
Current (Webapi) endpoint	Workflows (Webapi)	OAuth 2
	<code>http://myserver/webapi/user/v2/credentials</code>	

Timeline

<= 2021.3		2021.4		2022.1+	
WCF	<code>/myserver/gallery/api/user/v2</code>	WCF	<code>/myserver/gallery/api/user/v2</code>	WCF	<code>/myserver/gallery/api/user/v2</code>
		Webapi	<code>/myserver/webapi/user/v2</code>	Webapi	<code>/myserver/webapi/user/v2</code>

Script Example

<= 2021.3		2021.4		2022.1	
import requests		import requests		import requests	
<code>requests.get('http://myserver/gallery/api/user/v2/credentials')</code>	✓	<code>requests.get('http://myserver/gallery/api/user/v2/credentials')</code>	✓	<code>requests.get('http://myserver/gallery/api/user/v2/credentials')</code>	✗
		<code>import requests</code>		<code>import requests</code>	
		<code>requests.get('http://myserver/webapi/user/v2/credentials')</code>	✓	<code>requests.get('http://myserver/webapi/user/v2/credentials')</code>	✓

-  OAuth1 Authentication in scripts must be updated to OAuth2. Consider upgrading to 2021.4 first, where both authentication types are available, so scripts can be transitioned with no downtime.

<p>22.1 Patch 5</p>	<p>Administrative Change - Option to allow users to run workflows using Shared Server Database Connections</p> <ul style="list-style-type: none">  Allow Access to Workflows Without Shared Credentials option added to allow a workflow using a Shared Server Database Connection to be run by anyone the workflow has been shared via a Collection. The other users do not require the Gallery Connection to be explicitly shared with them.  Server UI > Admin > Settings > Assets > check Allow Access to Workflows Without Shared Credentials
<p>22.1</p>  <p>pit-stop for Built-in auth</p>	<p>Built-in Authentication Changes - Built-in Authentication Password Encryption has changed [TGAL-6431]</p> <ul style="list-style-type: none">  Built-in Authentication Password Encryption has changed. If you use Built-in authentication you will need to upgrade to this version before upgrading to later versions and follows steps below. Additional options have been added to customize Login Attempts.  Ask users to access the Server UI and reset their password when prompted (they can re-enter their same password). Upgrade users to Designer 2022.1 if they need to connect Designer to Server. Users who don't perform the steps above will receive the error "Email or Password were incorrect. Please try again." in Designer when connecting to the Server. Failure to do this and moving to a later version will require using the Rest Password option for each user.
<p>22.1</p> 	<p>R Upgrade - Embedded R upgrades from 4.0.5 to 4.1.3</p> <ul style="list-style-type: none">  Reinstall external R libraries and direct users to retest R in workflows. How-To-Use-the-R-Tool-with-Packages-Compatible-with-R-Version-4.1.3 (953958)
<p>22.1</p>	<p>Designer deployment to VDI - Virtual Desktop Infrastructure (VDI) Support added for Designer deployment</p> <ul style="list-style-type: none">  Designer can be deployed to persistent and non-persistent VDIs, see virtual desktop infrastructure support.
<p>22.1</p>	<p>Download Tool SSL security increased - SSL vulnerabilities addressed [Jira PSEC-8]</p> <ul style="list-style-type: none">  SSL vulnerabilities regarding handshake renegotiation (CVE-2009-3555) were addressed. However, this is leading some customers' Download Tool to stop working with error "Error transferring data: SSL connect error".  Contact the site you are accessing and ask them to upgrade their servers to support RFC 5746. If this is not possible, contact Customer Support and refer to Jira card PSEC-8 for additional workarounds. 2022.3 provides Peer Validation Allow List configuration option.

22.1
42590
Patch 3

Defect TGAL-6990 - Upgrade fails with Gallery Data Connections containing a blank password (corrected 21.4.2_Patch6, 22.1.1_Patch4)

 Upgrade fails when Gallery Data Connections containing a blank password exist, see [Community](#) (KB) [[TGAL-6990](#)]

Connection String	Database	Share
odbc:DRIVER={SQL Server Native Client 11.0};UID={Username};PWD={Database_name};SERVER={D...	SQL	0 0

 Option - Skip this patch.

Option - See [KB](#). Find problematic records in Robo3T in AlteryxGallery database:

```
db.getCollection('dataConnections').find({"PasswordSecured" : ""})
```

Edit AlteryxGallery.dataConnections.PasswordSecured field for all records with blank passwords and copy a password from another record. Note: update the Gallery Data Connection in the Server UI after the Server upgrade completes.

2022.2

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22.2

This is a FIPS-only release designed for new customers who work within FIPS environments. FIPS stands for [Federal Information Processing Standards](#).

The general-release Server and Designer products will skip a quarterly release and the next version will be 2022.3. Alteryx will continue to release maintenance updates to previous versions while awaiting the 2022.3 quarterly version. If upgrading from an earlier version, skip this version and upgrade to 2022.3+.

[Alteryx Server-FIPS](#)

2022.3

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<p>22.3</p> 	<p>Mongo database re-encryption - Database collections must be re-encrypted with AES256 and SHA256 hashing standard prior to upgrade</p> <ul style="list-style-type: none">  The Crypto Migration Prep Tool should be run prior to upgrade to 2022.3+ to re-encrypt workflows in the background while the Server continues to function. After running the Prep Tool, the first time the Service starts after upgrading a few more collections, as well as the RuntimeSettings.xml, will also be CryptoMigrated.  Your Server should be on 2021.2 or later before starting this process. If you are on a prior version, upgrade to a version between 2021.2 and 2022.1 prior to attempting to upgrade to 2022.3+. <p>Run the Crypto Migration Prep Tool prior to upgrading Server and review the Migrator log for error lines containing ;3; . Don't upgrade Server until Migrator issues are resolved. Review log again if Server Upgrade fails as additional collections being migrated could error.</p> <p>Following upgrade, you can delete the old, unencrypted collections. (Contact Support for information on cleaning up the temporary files created and reducing the size of the Mongo database [CSEs see here]).</p> <p>If you need to rollback the upgrade, you will need to restore the backup of the RuntimeSettings.xml made during upgrade, C:\ProgramData\Alteryx\</p>
<p>22.3</p> 	<p>Designer version requirement - Designer 2022.3 required</p> <ul style="list-style-type: none">  The encryption methods used by 2022.3 Server require Designer 2022.3  Users must upgrade Designer to save workflows to the Server
<p>22.3 Patch 2</p>	<p>Administrative Change - Option to allow users to run workflows using Shared Server Database Connections</p> <ul style="list-style-type: none">  Allow Access to Workflows Without Shared Credentials option added to allow a workflow using a Shared Server Database Connection to be run by anyone the workflow has been shared via a Collection. The other users do not require the Gallery Connection to be explicitly shared with them.  Server UI > Admin > Settings > Assets > check Allow Access to Workflows Without Shared Credentials
<p>22.3</p>	<p>Administration change - Load Balancer</p> <ul style="list-style-type: none">  Alteryx System Settings > Server UI > Canonical Address options have been added to ensure email messages from the Server will use the URL your users use to access the Server UI.  If you use a Load Balancer, set these values to the URL your users typically use to access the Server UI or API.

22.3	<p>Server Usage Report has been deprecated</p> <p> The Server Usage Report is no longer supported by Alteryx. Previous versions may continue to function.</p>
22.3	<p>Password management - HashiCorp and CyberArk password vault support added</p> <p> cyberark conjur configuration hashicorp configuration</p>
22.3	<p>Download Tool access to less secure handshake renegotiation - Settings file allows site-specific control</p> <p> Use the Peer Validation Allow List if receiving "SSL connect error" from Download Tool. Download Tool updated to OpenSSL 3.0.7.</p>
22.3	<p>Internal Change - Controller Token length</p> <p> Server 2021.4 introduced a longer, more secure Controller Token, however, upgrades from 2021.3 retained their shorter Token. If the Token was not Regenerated to the longer length at some point it will be automatically regenerated in the 2022.3 upgrade. This will occur on all nodes in the same manner so they will create the same longer token and be able to communicate with the Controller following upgrade.</p> <p> Use the new Controller Token to add new nodes to your Server architecture in the future</p>
22.3	<p>Defect TGAL-7199 - All versions of workflow labeled "1" (corrected 2022.3.1_Patch2)</p> <p> When viewing the list of versions of a workflow, all versions display "1" instead of a sequential version number. This is a UI issue and the correct version is being used to run Jobs.</p>

2023.1

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<p>23.1</p> 	<p>Minimum Designer Version</p> <p> Designer 2022.3 Patch 3 or later is required to connect with Server, see Server 2023.1 Release Notes</p>
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23.1	<p>Administrative Change - Option to allow users to run workflows using Shared Server Database Connections</p> <p> Allow Access to Workflows Without Shared Credentials option added to allow a workflow using a Shared Server Database Connection to be run by anyone the workflow has been shared via a Collection. The other users do not require the Gallery Connection to be explicitly shared with them.</p> <p> Server UI > Admin > Settings > Assets > check Allow Access to Workflows Without Shared Credentials</p>
23.1	<p>Password Management - AWS Secrets Manager password vault support added</p> <p> AWS Secrets Manager</p>
23.1	<p>API Additions - For Active Directory (AD) Authentication Servers, an AD Group can be added to a Custom Group</p> <p> Endpoints added: POST /v3/usergroups/{id}/activedirectorygroups DELETE /v3/usergroups/{userGroupId}/activedirectorygroups/{adGroupSid}</p>
23.1	<p>Administrative Change - Azure Active Directory Group Support with SAML Authentication</p> <p> Admins can now sync users and group access to Server using Azure Active Directory (Azure AD) and the SCIM protocol.</p> <p> Configure Alteryx Server SCIM Azure Active Directory</p>
23.1	<p>DCM Feature - Option to disable DCM synchronization between Designer and Server</p> <p> This feature is useful on a Prod Server to ensure users don't inadvertently synchronize and use a Prod credential in their local Designer.</p> <p> System Settings > DCM > check Block DCM Connections Synchronization between Server and Designer</p> <p> DCM - Server</p>
23.1	<p>Administrative Change - Workers can connect to User-Managed MongoDB with unique credentials</p> <p> This allows for auditing per Worker.</p>
23.1	<p>Database Connections - End of life for 32-Bit Database Connections</p> <p> End support 32-bit database connections faq. 32-bit connections will no longer function.</p>

<p>23.1 R installer</p> 	<p>R Upgrade - Embedded R version upgrades from 4.1.3 to 4.2.3 in RInstaller_2023.1.1.200.exe+</p> <p>i R version will be 4.1.3 or 4.2.3 as follows:</p> <ul style="list-style-type: none"> ● R version 4.1.3 = Server 23.1 installation, all versions ● R version 4.1.3 = RInstaller_2023.1.1.123 ● R version 4.2.3 = RInstaller_2023.1.1.200+ ● Patches do not affect the R version <p>✓</p> <ul style="list-style-type: none"> - Use a specific RInstaller_2023 to force a specific R version. - Reinstall external R libraries and direct users to retest R in workflows when upgrading to 4.2.3. - Designer's R version should match the R version used on Server. <p>How-To-Use-the-R-Tool-with-Packages-Compatible-with-R-Version-423 (KB)</p>
<p>23.1</p>	<p>Analytic App Defects - (corrected 2023.1_Patch_2)</p> <p>i TPRI-2043 -- Drop Down and List Box Tools return NAME from NAME:VALUE rather than VALUE TGAL-8126 -- Date Tool returns previous date from the date selected</p>
<p>23.1</p> 	<p>Connect Product - Connect is not compatible with the initial 2023.1 release</p> <p>i Release notes will indicate which patch is compatible with 2022.3.</p>

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<p>23.2</p>  <p>MongoDB 6.0.5</p>	<p>MongoDB Upgrade - Embedded MongoDB upgrades from version 4.2.15 to 6.0.5</p> <p>i Embedded MongoDB upgrades to 6.0.5</p> <p>✓ If using embedded MongoDB, upgrading to this version or later will upgrade MongoDB to version 6.0.5. Note free drive space requirements of 1x-2x your current MongoDB size.</p> <p>MongoDB in Server Upgrades Best Practices MongoDB Schema Reference</p>
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<p>23.2</p> 	<p>MongoDB Upgrade Dialog - The dialog to initiate the embedded MongoDB upgrade is minimized</p> <ul style="list-style-type: none"> When upgrading to 2023.2, after selecting Finish on the upgrade the Embedded MongoDB migration dialog opens but is immediately minimized, giving the impression that upgrade is complete [TGAL-9041]. Error in Service logs when upgrading to Server version 23.2: Invalid feature compatibility version value, expected '5.0' or '5.3' or '6.0' Ensure that you make this dialog visible and click to initiate the Mongo upgrade. The Service will not start until the MongoDB is upgraded.
<p>23.2</p>	<p>MongoDB Change - <code>__ServiceDataBlob</code> field removed from AlteryxGallery Collections</p> <ul style="list-style-type: none"> The <code>__ServiceDataBlob</code> field has been removed from AlteryxGallery collections; fields now appear as standard MongoDB fields. If you have admin workflows that used the ServiceDataParser macro to unpack data from this blob, they will need to be refactored.
<p>23.2</p>	<p>DCM Administration Change - DCM Connections can now be shared for collaboration</p> <ul style="list-style-type: none"> When sharing a DCM Connection in Server UI, the option "Share for Collaboration" allows the DCM Connection to be used by other users in their Designer. Data Connection Manager: Server UI > Share for Collaboration This change allows for easier collaboration of shared workflows and creation of new workflows using a colleague's DCM Connection.
<p>23.2</p>	<p>Python Upgrade - Embedded Python upgrades from 3.8.5 to 3.8.16</p> <ul style="list-style-type: none"> Users should retest Python in workflows. Engine still uses Python Version 3 so there should be little impact on scripts. Alteryx Embedded Python