

## Claris FileMaker Server 21.1.1 Release Notes

November 2024

This software updates FileMaker Server to version 2024 (21.1.1), adds new features and enhancements, and addresses issues.

FileMaker Server 21.1.1 is available as a full installer, which can also upgrade or update an existing installation.

**Download the installer from your Electronic Software Download (ESD) page.** Or contact our Sales team at: [sales@winsoft-international.com](mailto:sales@winsoft-international.com)

### New features and enhancements

#### macOS Sequoia support

- This release adds support for macOS Sequoia 15.

Note FileMaker Server 2024 is not supported on macOS Monterey 12 and, in this release, will no longer install on Monterey. If you're a Monterey user, you must upgrade to a later version of macOS before you can install this version of FileMaker Server. For the supported versions of macOS, see [Claris FileMaker 2024 Technical Specifications](#).

#### Scripting

- Server-side scripts can now use the Perform Script on Server script step to run a script in a separate session on the server. See [Perform Script on Server](#).

#### HTTPS tunneling

- HTTPS tunneling is now supported for FileMaker Server on Windows and macOS.
- Windows: In Admin Console on the Configuration > FileMaker Clients tab, you can now enable Use Nginx Web Server to use Nginx for HTTPS tunneling. See [FileMaker HTTPS tunneling](#).
- In Admin Console on the Configuration > FileMaker Clients tab, if you enable HTTPS tunneling when Nginx is not installed, you are now prompted to install and enable Nginx.
- Windows, macOS: The Use HTTPS Tunneling flag is now present in the Assisted Install.txt file.

#### Web publishing

- The installed JDK version is now displayed in the Connectors > Web Publishing tab in Admin Console.
- Windows, macOS: In Admin Console, the Connectors > Web Publishing tab now includes the option to replace the installed JDK so you can easily update it. See [Web publishing settings](#).

#### Security

- When importing certificates in Admin Console, you are now prompted to import signed intermediate certificates if you plan to use Claris Connect. See [Importing a custom SSL certificate](#).
- This release includes general security improvements to the FileMaker Server installer on the Windows platform.

## Admin Console

- When you select a folder, you can now create and delete subfolders.
- On the Configuration > Notifications tab under Email Settings, you may now change the Notification Level to include warnings.
- The Databases tab now shows both folder and subfolder hierarchies when sorting by folder.
- The Configuration > General Settings tab under Startup Settings now lets you specify to only open last opened databases when FileMaker Server starts. You may also use the `fmsadmin set/get serverprefs OnlyOpenLastOpenedDatabases` command to modify and view the new property. The change is stored in the `lastopenedblist.list` file.
- For enterprise licenses, the license key is now obfuscated in Admin Console.
- The Databases tab now shows the database folder groupings in the databases list.
- The Dashboard tab now includes the number of FileMaker Data API connections.

## Annual limits for API usage removed

- Annual limits for usage of the FileMaker Data API and OData API have been removed. API usage starting with this version of FileMaker Server is unrestricted.

## FileMaker Admin API

- The FileMaker Admin API `/server/certificate/importcertfiles` endpoint now supports multi-part form data and allows you to upload a `.pem` file instead of a newline-escaped string.
- The FileMaker Admin API now includes the `/fmclients/httpstunneling` endpoint which allows you to get and set the HTTPS tunneling option.
- Enabling the Web Publishing Engine using FileMaker Admin API now reports failure if Java is not installed.

## FileMaker Data API

- When writing data, the FileMaker Data API and the Execute FileMaker Data API script step now support overriding the Prohibit modification of value during data entry option for auto-enter data in a field. In the request, set the new options.`prohibitMode` key to `script` (ignore this auto-enter rule) or `user` (follow this auto-enter rule).

## OData API

- OData now supports parameter aliases for key values and function parameter values. For example:
  - `GET <host>/fmi/odata/v4/<database>/Purchase(@p1)?@p1='2%2F%5C'`
- OData now supports nesting `$select` within other options. For example:
  - `GET <host>/fmi/odata/v4/<database>/Categories?$expand=Products&$select=Name,Products/Name`
- OData now supports `Edm.<type>` type casting. For example:
  - `GET <host>/fmi/odata/v4/<database>/Purchase(1)/Total/Edm.Int64`
  - `GET <host>/fmi/odata/v4/<database>/Purchase(1)/Total/Edm.String`
  - `GET <host>/fmi/odata/v4/<database>/Purchase?$filter=cast(Total,Edm.String) eq '6.99'`
- OData API now supports the `in` operator.

- OData API batch operations now support preferences that are inherited by sub-operations.

### FileMaker WebDirect

- The OnObjectKeystroke and OnLayoutKeystroke script triggers are now partially supported in FileMaker WebDirect. They activate only for the Return, Enter, and Escape keys. For OnObjectKeystroke, only an active field object with the edit box control style is supported. To disable this feature in FileMaker Server, open the [installation\_folder]/Web Publishing/conf/jwpc\_prefs.xml file, then change the value of the keystrokeenabled parameter from yes (default) to no. Keystroke triggers are enabled by default.

### Schedules

- The script schedules last status filter has been updated to include only the possible status outcomes: Blank, Failed, Skipped, Succeeded, and Verify Failed.
- Multiple backup schedules may now be processed simultaneously.

### Logging

- The Only open last opened databases option now creates event.log file entries.
- The event.log file now includes error where the WPE process did not start because Java was not installed.

### FileMaker Developer Tool

- The FileMaker Developer Tool now supports uploading databases to specified sub-folders.
- The FileMaker Developer Tool now includes the following commands and options:
  - --querySize
  - --sortBySize
  - --uploadDatabases
  - -target\_tablename, -tt
  - -target\_fieldname, -tf
  - -query\_index, -qi
  - -quantity, -qu
  - -exclude\_container, -ec

### Open source model server

- Files in the Open\_Source\_LLM folder have been updated to support image embedding and additional open source models. These changes are not compatible with previous versions of FileMaker Pro, FileMaker Go, or FileMaker Server, nor are previous versions of the Open\_Source\_LLM folder compatible with the current versions. See the [Clariss Engineering Blog](#).

## Installation

- The FileMaker Server installation on Windows now includes the option to install, use, and configure Nginx.
- Modifiable files in the Tools\Lets\_Encrypt folder are no longer replaced when upgrading FileMaker Server, but are moved to a Lets\_Encrypt-backup folder.

## Updated libraries and packages

- The following Node.js modules have been updated:
  - ejs
  - express
  - jsonwebtoken
  - aws-sdk
  - engine.io
  - passport
  - socket.io
  - cookiejar
  - xml2js
- The deprecated swagger-tools Node.js package has been replaced with the @jeffe95/swagger-tools package.
- The Xalan library has been upgraded for web publishing to version 2.7.3.
- The xercesImpl library has been upgraded for web publishing to version 2.12.2.
- OpenSSL has been upgraded to version 3.3.1.
- Apache Tomcat has been upgraded to version 10.1.26.

## Addressed issues

### Security

- A reflected cross-site scripting (XSS) attack was made possible due to returned login errors not being HTML encoded.

### FileMaker WebDirect

- Within a transaction, when the Show Custom Dialog script step was used, closing the custom dialog reverted the transaction.
- Microsoft AzureAD authentication failed for users belonging to over 200 groups.
- Clicking into nested tab controls caused the controls to render incorrectly.

### FileMaker Admin API

- When the FileMaker Server license expired, FileMaker Admin API allowed sign in, but not sign out.
- The FileMaker Server Admin Server process stopped abruptly after calling the FileMaker Admin API server/certificate/info endpoint.

### OData API

- Running scripts that accessed other database files using the same credentials failed.

## FileMaker Developer Tool

- Ubuntu: Opened databases were not correctly returning an error when attempting to perform actions like copy or clone using the FileMaker Developer Tool.
- The FileMaker Developer Tool --renameFiles command incorrectly overwrote existing files when the -f option was not specified.
- After using the command tool to re-encrypt EAR files, the incorrect key was reported back.
- Renaming files with the FileMaker Developer Tool failed when using relative paths for files.
- Recovering a file with the FileMaker Developer Tool left the original file in a read-only state.

## Schedules

- In Admin Console, filtering schedules on enabled or disabled failed to display schedules.

## Scripting

- When performed in a hosted file, the Perform Semantic Find script step configured with a Return count value higher than 10 returned a found set that wasn't consistently sorted by cosine similarity as expected.
- Perform Script on Server script steps lost access to databases and failed when running a script called by FileMaker Data API if the session ended before the Perform Script on Server script steps completed.
- Using the Get(ScriptResult) function for server-side scripts did not always reflect the server-side script result.
- Ubuntu: The Get(SystemLocaleElements) function only reported US locale elements, even when non-US locales were used.

## Tools

- The Let's Encrypt fm\_request\_cert.sh and fm\_renew\_cert.sh scripts failed to detect the certbot binary on Intel-based Macs.

## Logging

- The event.log file entry Database Server Auto Restart is disabled. incorrectly contained a non-breaking space.

## Installation

- macOS: Upgrading primary and secondary machines caused the secondary machine to become disconnected from the primary machine.
- When upgrading FileMaker Server, previous configuration values were retained even when load previous configuration was set to No.
- Ubuntu: When setting the Swap File Size option in the Assisted Install.txt file, if the unit type (MB, GB, etc.) was not set, the swap file was not created. Now the swap file type defaults to GB even if not supplied.

- Running fmsadmin on Ubuntu without first restarting after an installation caused the segmentation fault error to be displayed instead of prompting for credentials.
- Persistent caches created from an earlier version of FileMaker Server caused persistent cache recovery to fail after upgrading to a newer version of FileMaker Server.

### **APIs, technologies, or features to be deprecated**

As FileMaker Server evolves, the list of supported technologies, APIs, and features will change. As part of this evolution, certain operating systems versions, hardware, and features may be deprecated in favor of newer ones. Although deprecation does not mean the immediate deletion of an item, you should migrate your solution away from deprecated technologies, because these technologies may be removed in a future version of the product.

For the latest information about deprecated APIs, technologies, and features, search the [Knowledge Base](#).