

PRODUCT RELEASE SUMMARY

AVEVA LFM Server 5.4.0.3

Release Date: 19/08/2020

This document outlines all changes made in the above release of AVEVA LFM Server.

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Superseded Software Version: LFM Server 5.3.0.1

1. AVEVA LFM Version Numbers

AVEVA LFM version numbers take the format X.X.X.X.

- First version field denotes general software series number.
- Second version field is incremented to track major new feature implementation.
- Third version field is incremented to track minor new feature implementation.
- Final (fourth) version field is incremented to track error fixes.

2. Recommended CAD Machine Specification

COMPONENT	RECOMMENDATION
Processor	Intel Core i7 Processor. 8MB cache 4/8 Cores
Operating System	Windows 10 Pro x64
Memory	DDR3 1600 MHz 8GB RAM 1600 MHz
Graphics	NVidia Quadro K2200 with 4GB of GPU memory
Data Storage	500GB SSD (Operating System & local project storage – if required)
Network	1GB Ethernet Card

For further information about AVEVA LFM machine specifications please click [here](#).

IMPORTANT ANNOUNCEMENT

After January 14th 2020, Microsoft will no longer provide security updates or support for PCs running Windows 7. This means that no technical support, software updates or security updates will be provided for machines running Windows 7 after this date.

In line with this, AVEVA LFM Server will no longer be supported on Windows 7 after 14th January 2020. AVEVA LFM Server will continue to work on machines running Windows 7 but any defects specifically related to Windows 7 will not be fixed. Any support queries concerning issues specifically related to Windows 7 will not be addressed.

In line with Microsoft's recommendations, AVEVA LFM advises those running Windows 7 to upgrade to Windows 10.

For more information from Microsoft about support for Windows 7, please see <https://www.microsoft.com/en-us/microsoft-365/windows/end-of-windows-7-support>

3. Recommended Graphics Cards

LFM Server is tested with a range of graphics cards. Below is a list of graphics cards that work successfully with LFM Server.

GRAPHICS CARDS	GPU MEMORY
NVIDIA Quadro P5000	16GB GDDR5X
NVIDIA Quadro K6000	12GB GDDR5
NVIDIA Quadro M6000	12GB GDDR5
NVIDIA Quadro M5000	8GB GDDR5
NVIDIA Quadro P2000	5GB GDDR5
NVIDIA Quadro M2000	4GB GDDR5
NVIDIA Quadro K600	1024MB DDR3
NVIDIA Quadro P600	2GB 64-Bit GDDR5
NVIDIA Quadro K2000	2GB GDDR5
NVIDIA Quadro P6000	24GB GDDR5X
NVIDIA Quadro RTX6000	24GB GDDR6

4. Enhancements for this Series

4.1. Better quality BubbleViews (FLS)

Furthering our continual commitment to improving import routes with AVEVA LFM Server, version 5.4 improves the import of FLS files to ensure areas where there is no laser data are represented within BubbleViews. This is achieved by using the associated colour image rather than being blank. This feature also improves the overall visualisation of the data as shown in the example below. This higher quality is also passed through to AVEVA LFM NetView on AVEVA Connect.



Above: BubbleView from .fls file – LFM Server 5.3.0.1 and earlier



Above: BubbleView from .fls file – LFM Server 5.4.0.3

4.2. Floorplan placement improvements

AVEVA LFM Server 5.4 offers improvements requested by our users when placing floorplans for use in AVEVA LFM NetView on AVEVA Connect. Users can now utilise benchmark positions to automatically place floorplans which makes the floorplan placement process quicker and more accurate.

4.3. Move to AVEVA Licencing System

AVEVA LFM Server 5.4 now supports the AVEVA Licencing System which makes it easier for administrators to run AVEVA products in parallel with each other. Additionally, this makes issuing of LFM licences easier across AVEVA so better support can be offered across various time zones.

4.4. Import panoramic positional information

Users can now bulk import positional information for panoramic images, making the positioning of panoramic images within a project much more efficient for larger scale projects.

4.5. Bentley Connect Integration

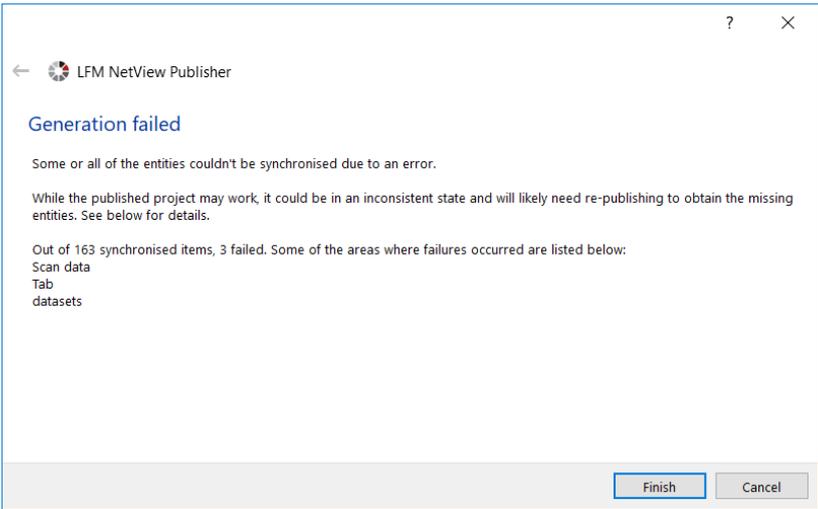
Users can now utilise AVEVA LFM Server 5.4 with Bentley Systems' latest iteration of their software, Bentley Connect. Users can expect the same features they have with previous versions of Bentley MicroStation.



4.6. Ability to select units for ZGL models

Furthering our continual commitment to improving import routes with AVEVA LFM Server, version 5.4 allows users to define the import units for ZGL files. This resolves issues when ZGL files have been created in a unit other than what AVEVA LFM Server was expecting. Now that users can define the import units, issues with scaling and position after import are largely reduced.

5. Known Issues

INTERNAL REFERENCE	DESCRIPTION
LFM-6218	<p>On completion of uploading an AVEVA LFM NetView project to AVEVA Connect the error shown below is visible. The files that the dialog claims have not uploaded successfully can vary. This is an AVEVA Connect issue which we have reported to the AVEVA Connect team. In our testing we found that the AVEVA LFM NetView projects do actually function despite these supposed failures so this warning can be ignored.</p> 
LFM-5255	<p>Unable to add a clash clearance for Smart® 3D clashing. This is due to a technical limitation within the Smart® 3D solution when using exact clashing. We have offered our assistance to Hexagon to optimize this functionality for use with laser surveys.</p>
LFM-4059	<p>Not all points are visible in the Ortho View after selecting Register All on a group of scans in Gateway Mode. This is expected behaviour for scans at certain positions if the Options > Orthographic View Depth setting is set to Automatic. To resolve this issue, please change the Options > Orthographic View Depth setting to Medium Range or Long Range.</p>
LFM-2196	<p>Clashing PDMS objects are not displayed in LFM Server after performing exact clashing and toggling objects on.</p>
B3692	<p>Importing an .lfm project file into another .lfm project file gives the wrong target positions resulting in red traffic lights for all targets. To get around this please update the scan headers in the source projects and add the updated .zfc files to a new project. This will result in one project containing all scans that are registered correctly.</p>

B5195	<p>LFM Server: Gateway Mode expects and supports the following variant of .ptx file:</p> <pre> 20222 X size 8623 Y size 785.884915 534.863432 43.552212 Position -0.086158 -0.996281 0.000973 3x3 orientation 0.996280 -0.086159 -0.001912 0.001988 0.000805 0.999998 -0.086158 -0.996281 0.000973 0 Homogenous matrix of position and orientation 0.996280 -0.086159 -0.001912 0 0.001988 0.000805 0.999998 0 785.884915 534.863432 43.552212 1 0.000176 0.539844 -1.156689 0.056916 36 35 33 x,y,z, intensity(0.0 -> 1.0), r,g,b (8-bit) 0.000175 0.537848 -1.151469 0.056931 36 35 33 </pre> <p><i>AVEVA are aware of some instances of ptx files that do not match the format above. AVEVA will look to incorporate support for these variants as and when they become known. However, any variations on this format are susceptible to problems (including crashes or failure to convert). This includes failure to convert with the error "Failed to create a .zfc file, Intensity and Image files PATH.int ! Disk Full?"</i></p>
LFM-4216	Dataset generation recovery sometimes fails.

6. Product QA cycle:

The development philosophy used to produce AVEVA LFM Server applies AGILE principles to ensure a high-quality product which evolves to match customer requirements. Throughout the development cycle, test and evaluation is used to guide the process and minimise the final test overhead.

The final test process has three stages, and this document has been prepared after these have been completed. These stages are outlined below.

6.1. Individual Function Test

All LFM Server desktop functionality is examined for correct responses. Functions called from the Main Menubar, Main Toolbar, Modelling Toolbars, and Component Browser are tested in turn. This ensures that the functionality matches the design intent, and previously recorded errors have been fixed.

6.2. Destructive Test

This section of the test schedule is aimed at investigating to see if a software product exhibits proper behaviour when subjected to improper usage, or improper input. The tests are applied to different data samples, machines, and in a random manner to try to replicate 'real world' variations in user conditions.

6.3. Software Acceptance Tests

AVEVA concludes the LFM Server test cycle with a series of controlled examples aimed at simulating real life use situations. The finished models are QA checked against calibrated historical data, to ensure that the product maintains the previous output standard.