

PRODUCT RELEASE SUMMARY

AVEVA™ Point Cloud Manager (on-premise) 5.5.1.0

Release Date: 31/03/2021

This document outlines all changes made in the above release of AVEVA™ Point Cloud Manager.

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Superseded Software Version: LFM Server 5.5.0.1

1. Point Cloud Manager Version Numbers

Point Cloud Manager 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 Point Cloud Manager machine specifications please click [here](#).

IMPORTANT ANNOUNCEMENT

Please be aware Point Cloud Manager will no longer be supporting Bentley MicroStation V7 effective immediately in line with Bentley Systems no longer issuing major updates or support for Bentley MicroStation V7. As AVEVA's focus is to develop and test for the latest and greatest 3rd party CAD packages, dropping support for V7 will allow us to better focus our attention on more widely used and supported 3rd party CAD packages.

3. Recommended Graphics Cards

Point Cloud Manager is tested with a range of graphics cards. Below is a list of graphics cards that work successfully with Point Cloud Manager.

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 Release

4.1. Uploading Viewer projects to multiple regions

As AVEVA Point Cloud Manager on AVEVA Connect will support 5 regional datacentres from v2.1.0 releasing end of March 2021, we have created AVEVA Point Cloud Manager 5.5.1.0 on-premise which includes the ability to upload data to one of the five supported AWS datacentres for use on the cloud. The five datacentres supported are US (West), Ireland, Mumbai, Tokyo and Sydney. This will give our customers more flexibility in which region their data is stored on our cloud platform and should give better performance with regards to access to data for customers further afield.



5. Known Issues

INTERNAL REFERENCE	DESCRIPTION
LFM-5255	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.
LFM-4059	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.
LFM-2196	Clashing PDMS objects are not displayed in Point Cloud Manager after performing exact clashing and toggling objects on.
B3692	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.
B5195	<p>Point Cloud Manager: 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 Point Cloud Manager 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 Point Cloud Manager 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 Point Cloud Manager 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.