

PRODUCT RELEASE SUMMARY

AVEVA™ Point Cloud Manager (on-premise) 5.7.0.1

Release Date: 19/10/2021

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

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Superseded software version: LFM Server 5.6.0.0

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

The following machine specification is for a CAD machine, we offer machine specifications for other processes such as Dataset creation. Follow the link to find out more [here](#).

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

3. Important Announcement

AVEVA Connect has received security enhancements which now require users to authenticate via Point Cloud Manager 5.6 or higher. Anyone wishing to upload laser scans or published Viewer projects to a Connect folder must use v5.6 onwards. Older versions will not be able to authenticate and the connection will fail.

4. 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

5. Enhancements for this Release

5.1. Ability to publish RVM Model files to a Viewer project.

In previous versions of Point Cloud Manager, the method of publishing objects was only possible by using a ZGL file. In AVEVA Point Cloud Manager 5.7.0.1 users can now import RVM files direct into Point Cloud Manager and convert straight to cache files when publishing. This is beneficial as it allows users to import directly from more CAD systems.

5.2. Download Point Cloud Manager resources from AVEVA Connect

With 5.7.0.1 users can now download projects from Viewer on Connect. These projects will be in a format and folder structure that will be readable by Point Cloud Manager 5.7.0.1. and later releases. With this enhancement users are now able to generate datasets on Connect utilising cloud processing leaving their own hardware free for use, then download the dataset for use with Point Cloud Manager 5.7.0.1. Currently the download will contain the entire project with future enhancements allowing for downloads of specific datasets.

5.3. Continued ZFS import improvements

Z+F have continued to increase the functionality of the ZFS scan format, it can now include filters/masks added through Laser Control software. Point Cloud Manager can now respect those applied in Laser Control when choosing the “specific intensity value” on import. This gives users confidence that the scans will be consistent through the generation process.

5.4. Increased support for CAD systems

AVEVA’s focus is to develop and test for the latest and greatest 3rd party CAD packages, in this release we have updated the compatibility of our software with a range of the latest 3rd party applications. see table below.

CAD SYSTEM	RELEASE SUPPORTED
AutoDesk Naviswork	2021, 2022

6. Known Issues

INTERNAL REFERENCE	DESCRIPTION
1542854	<p>Support for International Characters-</p> <p>Point Cloud Manager does not currently support international characters, this can cause issues when floorplans or models contain characters not used in the English alphabet. We are currently looking to support more languages but for a workaround the removal of international characters from names is recommended for expected behaviour.</p>
1573317	<p>ZFS files contain artefacts in bubbleview-</p> <p>Whilst improving the functionality of .zfs imports some fringe cases have come to light that can leave artefacts in the sky in filtered .zfs files from Laser Control. If this is happening to files, please let us know at lfm.support@aveva.com</p>
1572962	<p>SP3D is loading then unloading lfd's when opening Point Cloud Manager-</p> <p>If a User loads all datasets and saves the project inside of Point Cloud Manager when the application is opened through SP3D then all datasets will be loaded then unloaded, not respecting the "Do not load datasets" option from within Point Cloud Manager. This is being addressed for future release.</p>

7. 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.

7.1. 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.

7.2. 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.

7.3. 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.