AVEVA™ E3D Whitespace Optimizer

AVEVA E3D Whitespace Optimizer is an add-on product for AVEVA™ E3D Design that uses an Artificial Intelligence (AI) infused engine via our secure Cloud platform AVEVA™ Connect, to locate and efficiently utilize drawing whitespace to automatically clean-up annotations on drawing deliverables, saving valuable design time spent manually correcting automated drawings.

Drawings may be processed individually or as batches, freeing technical staff from the time-consuming, repetitive, detail-focused burden of checking and editing automatically produced drawings. AVEVA E3D Whitespace Optimizer ensures that you can work on projects more efficiently with ease and accuracy.
The challenge

Over the course of a capital project’s life, many thousands of detailed design drawings will be created as multiple revisions, updates and final deliverables. Typically, in order to efficiently handle such volumes of content, automated drawing production methods are utilized within AVEVA E3D Design.

While automated drawing production is an excellent way to rapidly and efficiently produce vast numbers of technical drawings, in some cases the drawings generated often require additional supervision and editing to ensure that annotations are correctly located within the drawing’s available whitespace. Automated drawing processes are designed to focus on inclusion of critical design information as opposed to the presentation of such. The final step of cleaning-up drawings by skilled staff members adds time to the design cycle.

Even a seemingly trivial time-spend of 10 to 30 extra minutes on each drawing adds up significantly over the course of the thousands required for project completion, costing time and resources and ultimately reducing profit margins.

Solution overview

AVEVA E3D Whitespace Optimizer automatically finds and utilizes the blank and empty spaces – drawing whitespace – in engineering drawing sheets to clean-up automatically produced drawings. Achieved using AI and advanced algorithms, it is designed to place drawing annotations in the most optimal whitespace positions with little to no user interaction required.

AVEVA E3D Whitespace Optimizer is a Software-as-a-Service (SaaS) solution, provided through AVEVA’s secure cloud platform AVEVA Connect, available to be accessed directly from within the AVEVA E3D Design User Interface (UI).

![The drawing pre-whitespace optimization](image1.png)

![The drawing post-whitespace optimization](image2.png)
**Key benefits**

**Reassign resources**
- Significantly reduce the manual effort required to finish design-ready deliverables
- Service operates in the background on the cloud, returning results to the user and simultaneously facilitating full AVEVA E3D Design functionality throughout

**Batching and customization**
- Easy to use batch mode interface
- Control and customize automatic annotation placement constraints
- Batches can be scheduled and saved
- Multiple files from across databases can be bundled
- Batches can be appended to customization or automatic drawing production runs
- Batch report tool for clear result analysis
- Programmable Macro Language (PML) callable

**Connect your teams, data and processes with cloud**

AVEVA software in the cloud drives business resiliency and ensures sustainable growth. It enables you to transform faster, reduce costs and easily scale to respond to dynamic conditions.

AVEVA Connect is our common cloud platform. Providing a central location to access the broadest and deepest industrial software portfolio, enhanced by the power of industrial AI.

For more information about AVEVA Whitespace Optimizer please contact your local AVEVA representative or submit a contact request via the AVEVA E3D Design page on our website: https://aveva.com/en/products/e3d-design

To learn more about AVEVA Connect please visit: https://aveva.com/en/solutions/aveva-connect