

MEET



The release of Arnold 5.2 continues to build on the significant features introduced in Arnold [5.1](#). It delivers a number of **usability and performance enhancements**, plus new features to improve a variety of workflows.

With nearly 200 bug fixes, this latest release continues to respond to user requests, helping them to **render more quickly and efficiently** while offering **maximum flexibility** no matter what their tools of choice.

CHALLENGES



Optimizing for quality and speed

Production requirements demand continuous iterations in the face of increasing time pressures, limited resources, and higher expectations for image sophistication and fidelity.



Managing complexity and scale

Increasingly heavy datasets and complex scene files may stall workflows, slowing productivity and making it difficult to take on larger projects.



Interoperability for open pipelines

Integrating tool sets and building custom workflows can require massive investments in order to effectively bypass technical roadblocks.

SOLUTIONS IN ARNOLD 5.2

Predictable and adaptable. Arnold 5.2 continues to help users to better predict results and save time, while not being restricted in their workflow choices.

Shader enhancements

- A new Cell Noise shader enables the easy creation of cell-like patterns with colors chosen from a specific palette.
- A new Sheen function in the Standard Surface shader is designed to render cloth-like microfiber materials or the peach fuzz on a face.

Texture Baking

- Texture baking, a feature our customers have been requesting, is now supported with a new native render-to-texture workflow.

Deeper Cryptomatte Integration

- Cryptomatte AOV shaders and filters are now more deeply integrated in the Arnold core, providing better built-in support across all DCC plugins.

Denoising

- GPU memory consumption of the fast OptiX denoiser has been greatly reduced proportionally to the number of denoised AOVs.
- The stability and usability of the high-quality Arnold *Noise* denoiser have been improved with various bug fixes and improved error checking.

Maximum control. For technical users, Arnold offers the stability needed to scale performance without sacrificing image quality.

Faster adaptive subdivision

- Adaptive subdivision is now up to 2x to 3x faster even on a single thread, and is now multi-threaded to fully take advantage of machines with many cores, helping to solve major production bottlenecks.

Volume ID and Depth AOVs

- New built-in Volume ID and Depth AOVs give users more control when rendering volumes.

Alembic procedural

- For studios working with Alembic pipelines, improvements to the native Alembic procedural help to provide maximum control and flexibility.

Flexible integrations. Arnold 5.2 pushes onwards with support for open industry standards, helping users to get rid of technical roadblocks that may limit their choice of tools.

Material assignments and overrides

- The operator framework introduced in 5.1 enables flexible support for open standard frameworks such as MaterialX and USD, making it easier to transfer rich material and look-development content between applications and renderers. Arnold 5.2 delivers improved functionality for assignment expressions with regards to reference and string types.

A full list of new features and functionality including **Multiple Universes**, improved **sampling of spherical lights**, and improved **EXR read performance** can be found in the [Arnold 5.2 release notes](#).

RESOURCES

Arnold can be used in Maya, Houdini, Cinema 4D, Katana, and 3ds Max. Visit the [Arnold Plug-ins](#) page for details.

Full release notes for each plug-in are available in the [Arnold Support Portal](#).

[Arnold Answers](#) is a technical Q&A forum for all Arnold users.

Visit the [Arnold Treasure Map](#) for the latest sales tools and resources.