

# MEET

## 3 AUTODESK® 3DS MAX® 2019.1

3ds Max can only really be as useful as the next tool in the chain ... and only as valuable as the ideas users bring to it. That's why this release of 3ds Max focuses on making it easier for users to develop, manage, and exchange their ideas, whether it's shaders, file formats, scripts, or — most importantly — their work.

### THE CHALLENGE

#### How do you reduce complexity in an ocean of tools and formats?



Every time you switch tools and formats, you introduce room for error. But when you're on a tight deadline, you can only afford so many do-overs. That's why you need to be able to count on robust, predictable performance from your workhorse tools, whether you're importing, exporting, interchanging, or just plain iterating.

### SOLUTIONS IN 3DS MAX 2019.1

#### OSL performance improvements: It's now easier to see what you're working with

- Improved rendering performance for complex OSL shaders, especially with Scanline Renderer.
- Improved viewport representation of OSL shaders, with native support for over 80 of the included OSL shaders.
- Most user-created procedural OSL shaders can now be viewed in viewport.
- Improved OSL Editor, including font customization.

#### Playing nicer with Alembic files

- Now you can inspect the contents of an Alembic file before adding it to your scene.
- Alembic helper icons are resizable and can be toggled on or off.
- 3ds Max Object properties are included in Alembic export and import.
- Custom Attributes created in 3ds Max are now included in Alembic export and import.
- We fixed an issue with Alembic content not being rendered with Arnold.
- Alembic objects with duplicate hierarchy/names now have unique IDs.
- NURBS import and export now behave predictably. Note that any scene splines will be automatically converted to NURBS when exporting.

## Included Updates from Arnold 5.1

- Adaptive sampling gives users a streamlined way to tune images, reducing render times without jeopardizing final image quality.
- The OptiX Denoiser based on NVIDIA AI technology is now integrated into Arnold and can be applied on the beauty pass without needing to create extra AOVs.
- The Noise Denoiser can be run as a standalone tool or from a dedicated UI, exposed as a new tab in the rendering options.
- The new Toon shader is included as part of a non-photorealistic rendering (NPR) solution.
- The new native Alembic procedural provides maximum control and flexibility, helping to eliminate important production bottlenecks.
- Message logging system: the target file for the Arnold messages can now be set directly from the rendering options.
- Structured stats and profiling: render statistics and profiling info can now be output to json files.
- Native Arnold ramp shaders are now available and are particularly useful when tonemapping the toon shader components.
- Fisheye, cylindrical and spherical cameras are now available. The VR camera layout has been updated.

## Scripting improvements

- Python dictionaries now support any MaxScript value as keys.
- Working with user-defined object properties through MaxScript now supports all value types correctly.
- The maxVersion() MaxScript command now reports the full product version.
- Converting a large object set from MaxScript (pymxs.runtime.objects) to a Python list is now instantaneous.

## Generally making life easier

- Switching between projects is now more manageable, with a new toolbar indicating project status, and the option to set your own defaults for switching.
- Share your vision more easily — Shared Views now supports all bitmap types and most procedural textures.
- Using a short MaxScript command (FBXExportSetParam "ExportAnimationOnly" true) allows you to export FBX animation data without needing to include geometry.

## Bringing user ideas to life in 3ds Max 2019.1

Autodesk is committed to responding quickly to 3ds Max user feedback. That's why this release includes over 80 fixes, some of which were submitted by the 3ds Max user community at [3dsmaxfeedback.autodesk.com](https://3dsmaxfeedback.autodesk.com).

A few highlights:

- Archiving and scene file compression now supports large data sets (greater than 2GB)
- Vault users can check large files in and out, and auto-login
- Attaching large amounts of meshes can be up to 7 times faster
- Fixed an issue with boolean operations with multi-element meshes invalidating UV data

## RESOURCES

Consult the [3ds Max 2019.1 Release Notes](#) for further information.

Visit the Solid Angle site for more info on the [MAXtoA Release Notes](#).

Visit the [3ds Max Product Portfolio Page](#) on One Team Source for the latest sales tools.

Learn how customers around the world are using 3ds Max today on the [Autodesk AREA website](#).