

# 3 AUTODESK® 3DS MAX® 2021.1



Autodesk 3ds Max 2021.1 update is focused on modernization, performance, fit & finish. We have continued to evolve Texture Baking, produced a faster and simplified install experience, and added more capability for PBR workflows in the viewport and rendering. You will also find new and improved Viewport quality & settings, additional modeling tool improvements, and various enhancements to fluids in 3ds Max.

## What's New in 3ds Max 2021.1

### MODERNIZATION

#### Bake to Texture

Continued evolution of the Bake to Texture tool.

- Multiple UV tile baking support, including output to common file patterns or directly back into a material via the multi-tile map.
- Animation Support (single frame, active time segment, specified time range). Output can be files or fed back into a material via an animated bitmap node.
- Top voted usability and performance improvements including:
  - Display of active renderer in the Bake to Texture Tool
  - Multi-edit of the output column
  - Better display of the map being baked in the frame buffer, performance improvements.

#### Installer

Faster, simplified install experience.

- 3ds Max 2021.1 can be installed independently, not requiring an existing installation of 3ds Max 2021.
- The 3ds Max 2021 version upgrade to 2021.1 is faster compared to previous releases.

## Arnold as the Default Renderer

A modern and high-end rendering experience right out of the box.

- MAXtoA 4.0.4 includes:
  - AOV token system for organizing output
  - Animation support for Alembic
  - More accuracy in the UI controls
  - Support for Bake to Texture workflows (High resolution to Low resolution projections, Normal spaces, and MikkT)
  - A scene can now be exported to a USD file from the Archive tab of the rendering options.
  - Faster shutdown after rendering massive instances.

## Shared Views

- Shared Views now support the Physical Material in the web viewer, for enhanced visual quality and accuracy.

## User Defined Defaults

- Using Maxscript, users can now set their own default values that persists through 3ds Max sessions, allowing them to further configure their work environments to operate the way they need them to be.

# PERFORMANCE

## Physically Based Rendering (PBR)

New capability to PBR workflows in the viewport when rendering, and when working with real time engines.

- PBR Materials now support displacement maps.

## Improved Viewport Quality & Settings

Simpler viewport configuration workflows allow you to produce high quality and high-fidelity viewports.

- Depth of Field in Viewport can now affect the background/environment map.
- Vignetting scale in Viewport is now the same as value defined in the camera settings.
- Per-Camera/Viewport exposure and white balance settings.
- Matte/Shadow materials are now supported in the Viewport.
- The Viewport can now display up to 128 UDIM textures directly from an OSL BitmapLookup map.

## Modeling

A new extrusion experience for Editable Poly and the Edit Poly modifier and Weighted Normals modifier enhancements.

- Shift + Drag shortcut in Editable Poly or the Edit Poly modifier enables faster polygonal extrusions (using the Move transform tool) and insets (using the Scale transform tool).
- Various improvements have been provided to the Weighted Normals modifier including improved stability and multi-threading support (which provides a 7x increase in speed and performance of this modifier).
- Explicit Normals are now preserved when applying and using various commands with the Edit/Editable Mesh modifier.

## Material Editor

Improved slate material editor performance and functionality.

- The Slate Material Editor interface is smoother and faster when navigating, with noticeable improvements on high resolution displays.
- The Slate Material Editor now has a Global Search for materials and maps

## FIT & FINISH

### SketchUp Import

Enhanced SketchUp importer experience.

- Better handling of internal edge visibility settings, preserving settings from SketchUp source data.

### Render Settings

Modern defaults updates include:

- Updating the default output size preset to HDTV, 720p
- HDTV presets are now: 720p, 1080p, 1440p and 2160p

### Fluids

Various enhancements have been made to fluids.

- Fixes to the velocity channel
- Support for signed and unsigned PRT export
- Exposing the fluid loader so that the data can be loaded and interacted with other systems and objects that operate within 3ds Max.

## Bringing your ideas to life

Autodesk is committed to responding quickly to 3ds Max user feedback.

Join the community and submit your ideas and feedback at [3dsmaxfeedback.autodesk.com](https://3dsmaxfeedback.autodesk.com).

Consult the [3ds Max 2021.1 Release Notes](#) and [3ds Max Public Roadmap](#) for further information.  
Learn how customers around the world are using 3ds Max today on the [Autodesk AREA website](#).