

Features and Benefits

Autodesk® Stingray is a modern game engine built on a powerful, data-driven core architecture. It features a physically-based renderer that helps produce visually stunning games and VR experiences. Stingray has connectivity with Autodesk® 3ds Max®, Autodesk® Maya®, and Autodesk® Maya LT™ animation software, helping simplify art-to-engine workflows.

The Stingray 1.4 release helps improve connectivity with Autodesk 3D tools, improves support for VR platforms, and adds experimental support for WebGL2, so developers can deploy projects to certain web browsers. Stingray also features other updates that help improve the user experience in several functional areas of the engine.

Key Benefits

Level Sync with Maya and Maya LT

In addition to linking individual assets, users can now link and export entire scenes built in Maya or Maya LT directly to Stingray. Once Maya or Maya LT are linked to the Stingray editor, scene assets can be automatically or manually tagged, and then reproduced with the same layout in Stingray. Modifications made to the assets in Maya or Maya LT are then updated inside Stingray. This process helps create a much easier way to build, iterate, review and change scenes, without having to manually reproduce layouts in two tools.

WebGL2 support

Stingray 1.4 offers a new way for developers to begin developing for WebGL2-supported web browsers. An experimental mode in Stingray can be used to help deploy Stingray projects to run in the developer beta builds of certain web browsers. This is a great way for forward-looking developers to test their projects on a new target platform in advance of those platforms being consumer-ready, or to review their games with other stakeholders, instead of deploying multiple builds. (Note: This functionality requires the use specific developer builds of certain web browsers in conjunction with an experimental mode in Stingray. The functionality is designed for early testing of projects in WebGL2).

VR support

Stingray 1.4 helps improve support for VR platforms, adding support for the Oculus Rift SDK v1.3 and the SteamVR SDK v0.9.19.

Flow scripting for Vive controllers

Developers can now make use of Flow, the node-based visual scripting system in Stingray, to help create controller actions for HTC Vive controllers (SteamVR). This offers a much faster and simpler way to add interactivity to a Vive VR experience and makes it easier for designers to create and test their prototypes without manual coding.

Cross-project asset sharing

Users can now share assets much more easily between different Stingray projects. A context menu can be used to select a file for export, and this selection includes a number of file dependencies into one convenient, compressed file. This helps simplify asset sharing across projects, teams, or selling in digital asset stores.

NavMesh improvements for better AI behavior

Stingray now supports multiple NavMesh databases to help accommodate a greater variety of different characters in a game world simultaneously, while maintaining their believability of movement. For example, a project could feature very large characters and very small characters that would have different NavMeshes to define their movements. This helps designers create scenes that feel more realistic and lived-in.

Stingray 1.4 now supports the generation of separate NavMeshes that can be loaded at runtime. This allows for the creation of massive game spaces where portions of the level are loaded gradually, while maintaining more realistic AI character movement.

Edit UV scale/offset values in Stingray

When exporting materials from Maya, Maya LT, or 3ds Max, Stingray now includes and exposes UV scale and offset values in the material so that users can continue to edit the UV tiling in Stingray.

Other Benefits

Shader Graph improvements

The Shader Graph Editor now supports multiple Shader Graphs to be open at one time. This helps greatly simplify the workflow when working between different shader graphs. Next, built-in search functionality highlight target shader nodes, making it easier to work with large shader graphs. Finally, nodes in the Shader Graph Editor now feature built-in links to the Help & Documentation pages, allowing users to access supporting material to learn how to use and implement shader elements.

Flow scripting improvements

Flow, the node-based script editor in Stingray, receives usability updates in this release. Users can now access the Help & Documentation pages directly from a Flow node, which links to its corresponding Help page. Users can also search through Flow graphs to find specific nodes to navigate and build complex scene interactivity in Flow.

Uniform scaling

The XYZ scale transform values for scene objects can now be locked, enabling a user to change the scale of an object directly in the Properties Editor while maintaining the same ratio. This helps to scale objects more consistently to make them fit the requirements of a scene or project.

TIFF support

Stingray 1.4 supports importing TIFF files to use as textures.

Improved cloth simulation

Stingray 1.4 helps improve the support for NVIDIA APEX clothing added in Stingray 1.3. The new update adds collision for cloth on ragdoll characters, making cloth move more realistically and believably around characters moving through a scene.

Expanded Android support

The 1.4 update to Stingray adds support for the Mali series of GPUs, providing a greater range of Google Android based mobile devices as deployment targets.

Autodesk® Stingray 1.4

Improved rendering performance

The powerful Stingray renderer has been optimized when using Screen Space Ambient Occlusions (SSAO), resulting in better speeds, overall.