





With its procedural node-based workflow, Houdini Core lets you create more content faster to reduce timelines and enjoy enhanced flexibility in all your creative tasks. Houdini Core is ideal for generalists, modelers, lighters, character riggers and animators to use on its own, or as a layout and lighting tool for visual effects created in Houdini FX.



Houdini Core hair styling rendered in Mantra | Andrey Belichenko

FILM/TV | Houdini's artist-friendly node-based workflow offers Film/TV studios unprecedented levels of flexibility and control which will enhance the way you work creatively and make you and your team much more productive. Houdini makes it easy to respond to director feedback and make changes at any time, even deep into production. This makes it easy to make last minute creative decisions that would be too costly in a traditional CG pipeline.

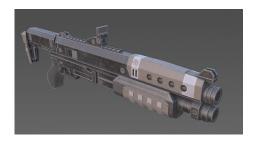


Procedural pipes, cables and corridor assets in Unreal Engine | SideFX

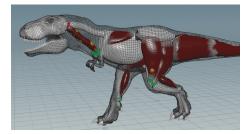
PROCEDURAL GAME ART | Houdini's procedural node-based workflow lets you rapidly build games populated with environments, props and detailed levels. Studios must meet deadlines and contain costs while staying focused on great gameplay. Going procedural with Houdini offers a smarter way to create quality games with the team you have while maintaining creative control throughout the process.

"Houdini's concept of digital assets is unique and very powerful, allowing multiple people to work simultaneously on one scene. Its proceduralism allows us to be very flexible, allowing us to work on modelling a character, while concurrently animating, shading and rendering it."

- Mikhail Lesin | CTO | Main Road | Post



MODELING | Houdini includes a wide variety of polygon, NURBS and subdivision surface modeling tools. Procedural techniques can be used to maintain a robust construction history and to create complex models such as environments.



CHARACTER RIGGING | Houdini's node-based approach fits perfectly with the working methodology of a typical character rigging TD. Characters can then be wrapped up into a single Digital Asset node and delivered to the animation team.



TERRAINS | Houdini's terrain system lets you layer and edit terrain easily with tools such as procedural noise, or paint or mask out areas directly. The operations are very similar to image compositing, so terrain artists will find the workflow familiar.



CLOUDS & VOLUMES | The Cloud FX tools offer an artist-friendly way of building, sculpting and rendering cloud formations. This workflow utilizes sparse volume sculpting tools created as part of the OpenVDB open source initiative.

ANIMATION | Houdini has an animator-friendly workflow which includes a channel editor, dope sheet and interactive timeline. Set keyframes on any parameter or use Houdini's Advanced Motion-editing tools for even more control.



LIGHTING | Houdini's lighting workflow provides a flexible and powerful environment for managing lights, building shaders and defining the look of a shot. Environment and GI lights work well with Mantra's physically-based rendering.

MANTRA RENDERING | With Houdini, you can rely on a robust built-in rendering solution called Mantra or create custom support for a wide variety of third party renderers such as Pixar's RenderMan,® Solid Angle's Arnold, Redshift and Otoy's OctaneRender.® Mantra is particularly good at rendering volumes such as smoke.

COMPOSITING | Houdini includes a node-based compositor which is perfect for creating slap comps. Lighters can test out render passes before sending plates to artists working with other compositing apps.



HOUDINI DIGITAL ASSETS | Create Houdini Digital Assets for use in Houdini or other apps via the Houdini Engine. Assets from Houdini FX can be opened up and manipulated in Houdini Core.

INTEROPERABILITY | Import and export to a variety of formats including Alembic, FBX, OBJ, OpenEXR and more.

