

# Key features of Maya

From fantastic creatures to sweeping landscapes and explosive battle sequences, the Academy Award–winning Maya® toolset is a top choice for creating believable characters and the worlds around them.



## **Bifrost for Maya**

Create physically accurate simulations in a single visual programming environment.

## **USD in Maya**

Load and edit large datasets quickly and work directly with data using native tools.

## **Fast playback**

Review animations faster and produce fewer playblasts with cached playback in Viewport 2.0.

## **Unreal Live Link for Maya**

Stream animation data from Maya to Unreal in real time with the Unreal Live Link for Maya plug-in.

## **Time editor**

Make high-level animation edits with a nondestructive, clip-based nonlinear editor.

## **Graph editor**

Create, view, and modify animation curves using a graphical representation of scene animation.

## **Polygon modeling**

Create 3D models using geometry based on vertices, edges, and faces.

## **NURBS modeling**

Construct 3D models from geometric primitives and drawn curves.

## **Character setup**

Create sophisticated skeletons, IK handles, and deformers for characters that deliver lifelike performances.

## **Integrated Arnold renderer**

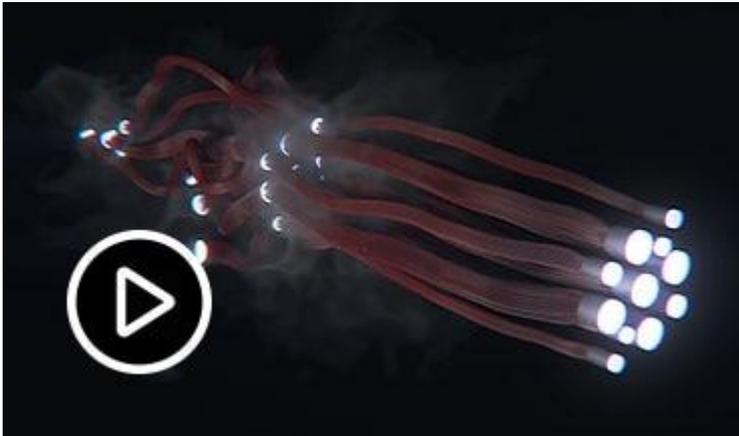
Use Arnold Render View to view scene changes in real time, including lighting, materials, and cameras.

## More features of Maya

### Dynamics and effects

Bifrost visual programming environment

Create physically accurate and incredibly detailed simulations in a single visual programming environment. (video: 4:49 min.) [Learn more](#)



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Ready-to-use graphs

Create great-looking effects, such as snow and dust storms, right out of the box with prebuilt graphs. [Learn more](#)



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Interactive hair grooming

Use powerful interactive groom tools to create realistic hair and fur for your characters. [Learn more](#)



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### Bifrost Fluids

Simulate and render photorealistic liquid effects. [Learn more](#)

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### Bifrost Ocean Simulation System

Create realistic ocean surfaces with waves, ripples, and wakes. [Learn more](#)

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### Physics and effects

Create highly realistic rigid, soft-body, cloth, and particle simulations. [Learn more](#)

### Lighting speed

Load and edit massive data sets in a matter of seconds using USD in Maya.

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### Seamless import/export

Import USD data as native Maya data and export native Maya data as USD data.

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### Lightweight previews

See quick previews of USD scene structure using the Hierarchy View window. [Learn more](#)

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### Native USD support

Work directly with USD data in common Maya editors, such as the Outliner, Attribute Editor, and Channel Box.

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### USD in the viewport

See USD natively alongside Maya data in the viewport.

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### Open source and fully customizable

The Maya USD plug-in is available as an open-source project for studios to customize as needed.

### Fast playback

Review animations faster and produce fewer playblasts with cached playback in Viewport 2.0. (video: 12 sec.) [Learn more](#)



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**NEW**

## Unreal Live Link for Maya

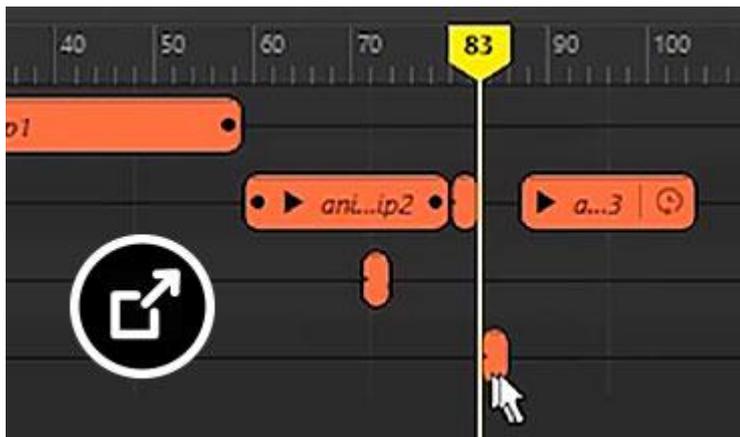
The Unreal Live Link plug-in lets you stream animation data from Maya to Unreal in real time. Whether working between the two in a virtual production environment or building your next game, you can now work on character assets in Maya and see your work reflected immediately in Unreal as you make changes.



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## Time Editor

Make high-level animation edits with a nondestructive, clip-based, nonlinear editor. [Learn more](#)



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## Graph Editor

Create, view, and modify animation curves using a graphical representation of scene animation. [Learn more](#)



Ghosting Editor

Precisely visualize movement and the position of animated objects over time.

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**NEW**

Blue pencil toolset

Sketch poses over time, define motion arcs, mark up a shot, or add comments and annotations to your scene.

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Deformation effects

Enhance character and object animation with powerful deformation effects. [Learn more](#)

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Native Motion Library plug-in

Access high-quality motion capture data right in Maya. [Learn more](#)

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Polygon modeling

Create 3D models using geometry based on vertices, edges, and faces. [Learn more](#)



NURBS modeling

Construct 3D models from geometric primitives and drawn curves. [Learn more](#)



UV editing and toolkit

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View and edit the UV texture coordinates for polygon, NURBS, and subdivision surfaces in a 2D view. [Learn more](#)



Integrated Arnold renderer

Use Arnold Render View to view scene changes in real time, including lighting, materials, and cameras. [Learn more](#)



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GPU and CPU rendering

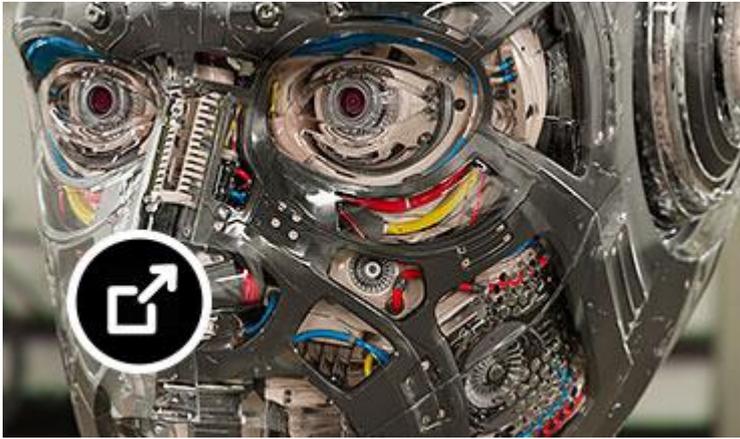
Use Arnold for production rendering on both the CPU and GPU. [Learn more](#)



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Standard Surface Shader

Model materials such as car paint, frosted glass, and plastic, and preview renders in the viewport. [Learn more](#)



[MASH procedural effects](#)

[Use MASH to create versatile motion design animations with procedural node networks. Learn more](#)

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[3D Type](#)

[Create branding, flying logos, title sequences, and other projects that require text. Learn more](#)

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[Adobe Live link](#)

[View a scene in both Maya and Adobe After Effects at the same time. Learn more](#)