

What's New

This time, iClone 6 is more than an animation production tool, as we've incorporated leading technologies such as Nvidia's PhysX, SpeedTree and Allegorithmic's Substance to produce stunning visual quality, in addition to superb render quality with Indigo RT. Throw in tessellation capabilities and a brand spankin' new PhysX physics engine, and you've got yourself a sweet iClone stew brewing. On top of that, a flexible new UI design allows you more freedom in customizing your workflow, and improves usability so it's easier for you to access those innovative new one-piece G6 characters, apply Substance materials, and whip up a forest with SpeedTree!

VISUAL ENHANCEMENT

USABILITY PERFECTION

CONTENT EVOLUTION

Ultra Realistic Render

A photo-realistic, cinematic look and feel in iClone is now a reality. Thanks to GPU accelerated raytracing render capabilities in Indigo RT, your characters, props, and scenes now look completely different from before. To streamline this unique workflow, Reallusion provides automatic shader mapping between iClone and Indigo. In addition, users can perform custom refinement using Indigo's unique shader options, or download Indigo's material library to achieve even better results. Skylight and emissive material settings ensure correct global illumination, and allow for realistic light behavior via reflection, refraction, transmittance, and caustic effects. Furthermore, the physical camera DOF and tone mapping system can be combined with excellent lighting and materials to create vivid and astounding story visuals like never before!

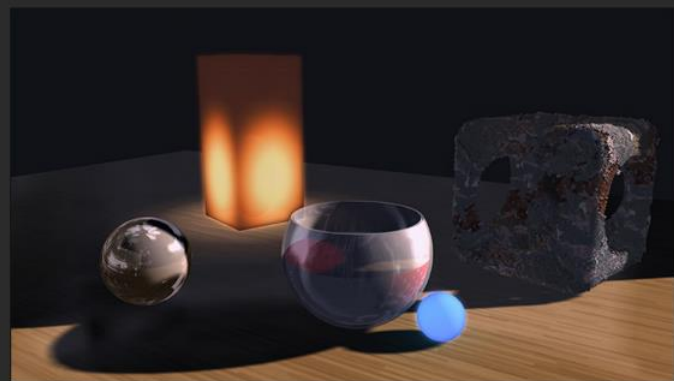




iClone



Indigo



iClone



Indigo

Real-time Surface Smoothing

As you may know, Reallusion is working hard on the development of iClone 6, and you might be wondering about what sort of astounding improvements it has in store. Reallusion is bringing you cutting-edge real-time visual technology in iClone 6 that can help to expand your production potential. In this first video, we introduce real-time surface smoothing, which essentially smooths out the appearance of objects and characters in your scene so they look more detailed and of higher quality.



Before



After

Tessellation from DirectX11

Tessellation allows you to add geometry details to any model and have it render in real-time via the addition of height and vector displacement maps. This is made possible via DirectX11 support within iClone 6.

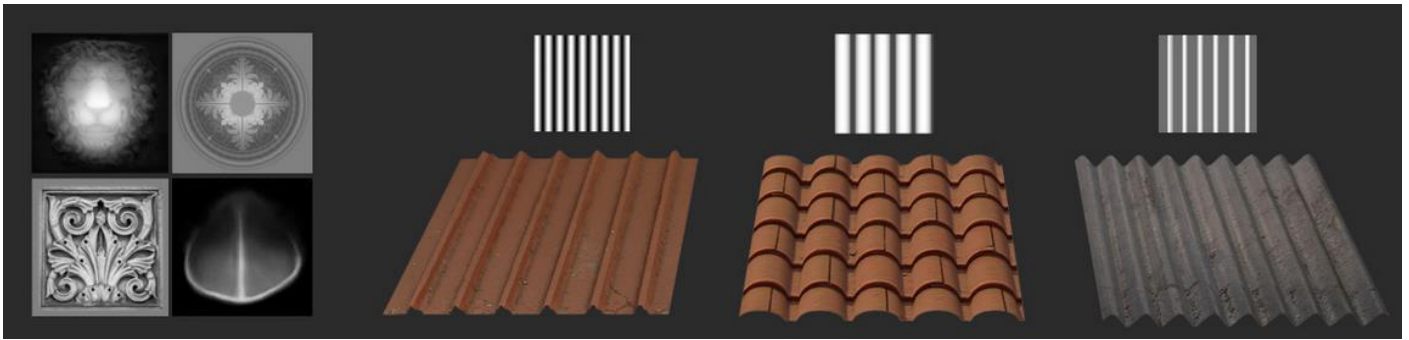
3D Visuals from 2D Image Displacement Maps

In a real-time environment, it's difficult to create detailed surfaces without raising polygon count significantly. Thanks to tessellation technology, your GPU can dynamically generate mesh details by applying a displacement value from height or vector displacement maps. This means that you can physically manipulate the geometry of your low-poly model to give it a greater sense of depth and detail without increasing the polygon count.



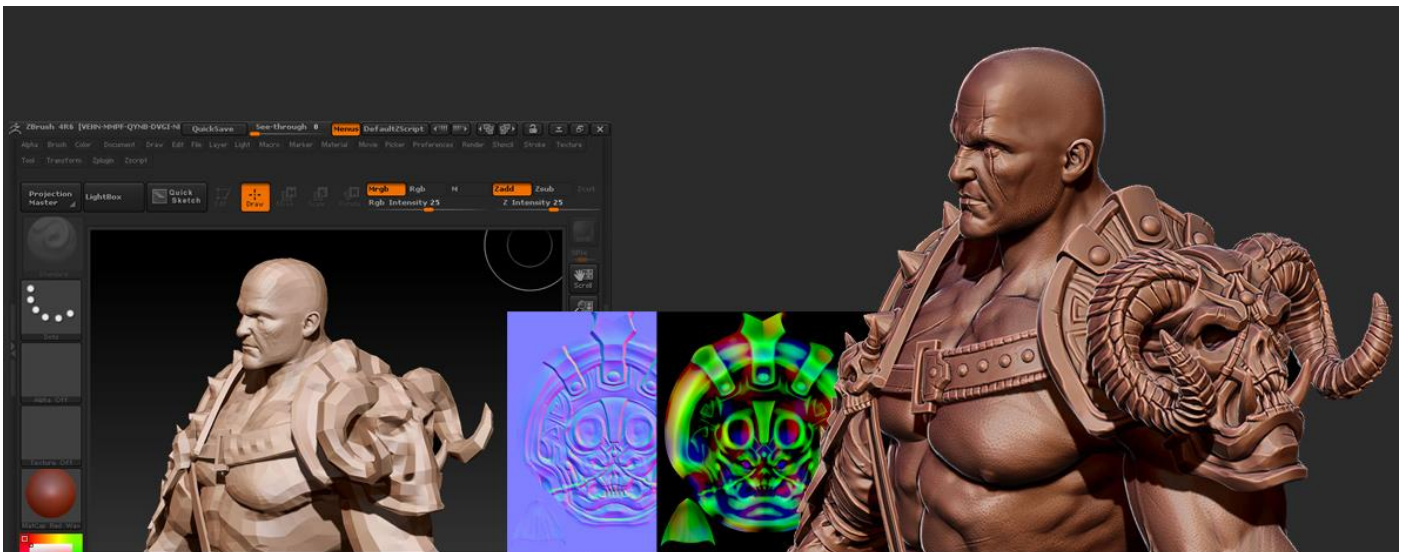
Custom Gray Maps

Anyone can create monochrome image maps with popular image-editing tools such as Photoshop or GIMP. By using grayscale height maps, you can push and pull the surface of a 3D model to achieve the ideal look you desire.



Sculpting Highly Detailed Models with Vector Displacement

Vector displacement technology allows artists and developers to start off by creating detailed models in programs such as ZBrush, Mudbox, or 3D Coat, and then extract displacement maps to later be applied to a simple geometric shape. This process is ideal for real-time engines like iClone, and produce results that are incredibly similar to your actual model. One of the huge advantages of vector displacement is the ability to produce undercut details on your model. While height displacement simply stretches out geometry, vector displacement produces refined curves and edges, creating an unparalleled sense of detail to your model.



Soft Cloth

One of the long-anticipated features soft cloth is finally here with iClone 6. The animated character will look super natural with flowing hair, skirt and physical movement. No more penetration, the real-time simulation performance is much better using the new NVIDIA PhysX engine.

Weight Map for Smooth Transition

Soft cloth is an incredibly versatile feature that can be used for hanging, swaying, or rolling motions in your scene. You can use the gray map to determine which part of the cloth is controlled by cloth physics and which part is let free or governed by skin-bone control. We've also added wind behavior in order to make soft cloth self-animated, allowing for much more natural movement without external animation forces.

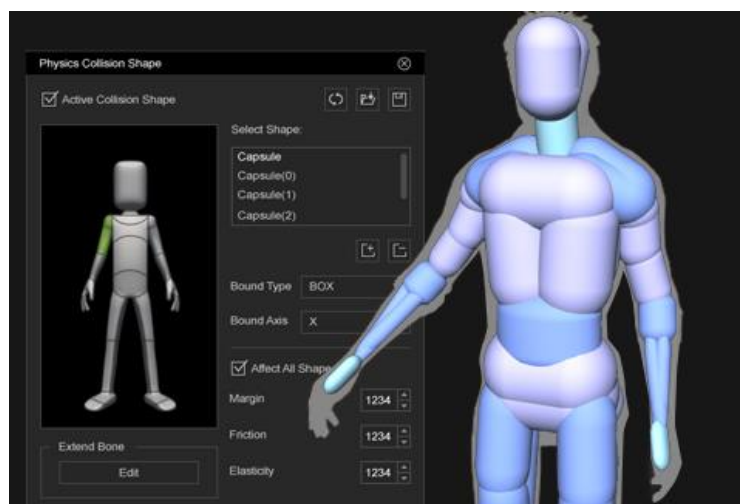


Natural Hair & Skirt Movements

Animated characters will now look incredibly realistic by incorporating flowing hair, skirts, and other physics-enabled objects to their bodies. The real-time simulation via NVIDIA's PhysX engine means no more penetration of physics objects into the body. You can even bake these simulated physics results and re-use the animations.

Collision Shape Editing

Characters models can now realistically interact with other physics objects in your scene. Simply select any body part and resize the graphic reference to match the desired collision area, then go wild with any number of interesting physics interactions.



Object-oriented Constraint

Previously, iClone allowed you to adjust constraint settings to simulate the dropping behavior of a rigid body object in a certain range or direction. However, all the connection settings were invisible, making it difficult to observe and modify. The new constraint gizmo tool in iClone 6 makes it a lot easier to design physics objects and clearly observe the relations between two separate objects.



Complete Light System

In previous versions of iClone, you needed to adjust lights separately from light props, which couldn't be attached and saved as single objects. In iClone 6, you can directly drag in a light prop to light up your scene. The brightness, color, and range of your light prop can be duplicated and reused in your projects with ease.

Infinite Lights

You can now add an infinite number of lights in your scene! This allows for endless combinations of more detailed and complex lighting schemes, both for interior and exterior use.



Light Props

We've thrown the light number limitations out the window. You can now be creative with developing your own lighting assets. Simply attach any light to your objects and start building your own custom light library.



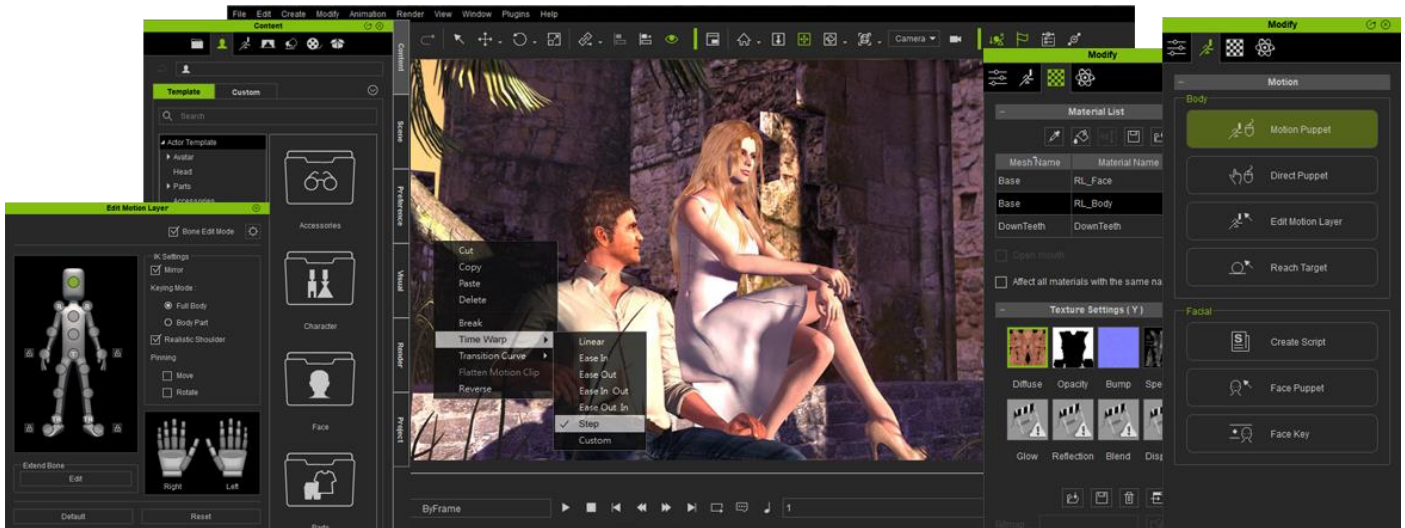
VISUAL ENHANCEMENT

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Flexible UI

The revolutionary new iClone Qt User Interface is now able to adapt to your working behavior, visual preference (Green & Gray or Pure Gray UI color schemes), and provides various font and UI sizes which adapt to different resolutions. You now have the freedom to customize your iClone UI layout like never before!



New Dockable User Interface

The new Qt UI design lets you drag, dock and combine your various work panels to any area of the screen, allowing for the quickest workflow in any number of scenarios. You can then save your custom UI layout for future use. Quickly switch between different layout frameworks like animation view, scene setup view, or cinematic view.

Multi-screen Monitors

Like working with 2 screens? No problem! Simply undock the upper timeline and all the work panels, and then just place them all on one screen, while you dedicate the other screen to animation on your stage. Adapt or font and UI sizes to different resolutions to enhance your multi-screen setup as well.

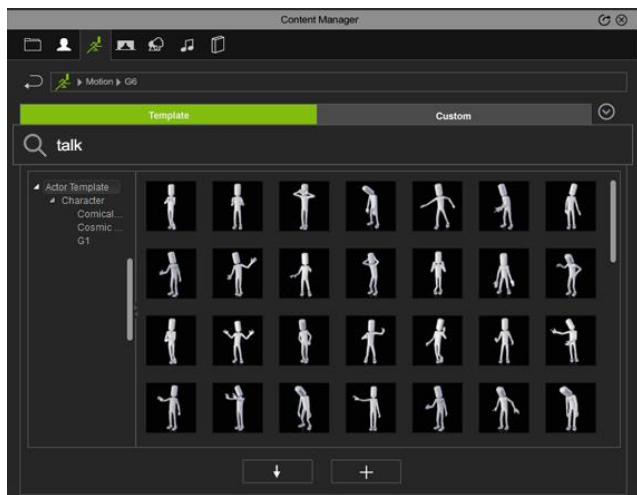


Optimized Content Manager

An iClone user's creative process relies heavily on quick and easy access to a rich library of content. The new UI can be customized to help keep things organized in levels according to your own personal preference, allowing you to quickly find specific categories and content that you're looking for.

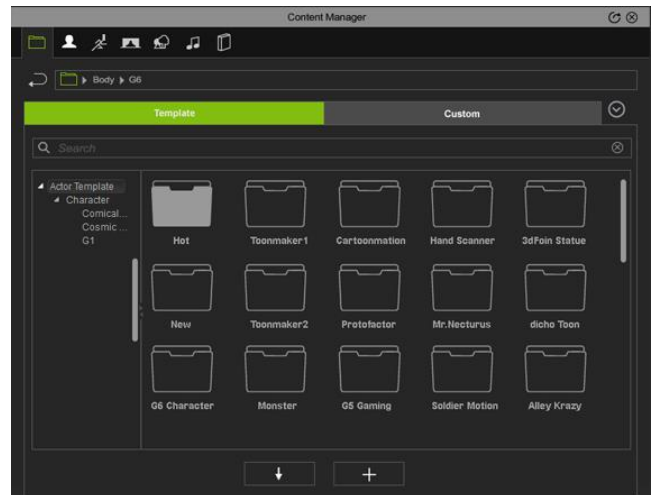
Quick Search & Pack View

The only disadvantage to having a large content library is that it gets more difficult to find a specific thing. Thankfully, there is now a progressive search field that allows you to find what you're looking for in a flash. In addition, the pack view allows you to streamline scene creation workflows with props, characters, accessories, and any other items that are included in the same content packs, regardless of content type.



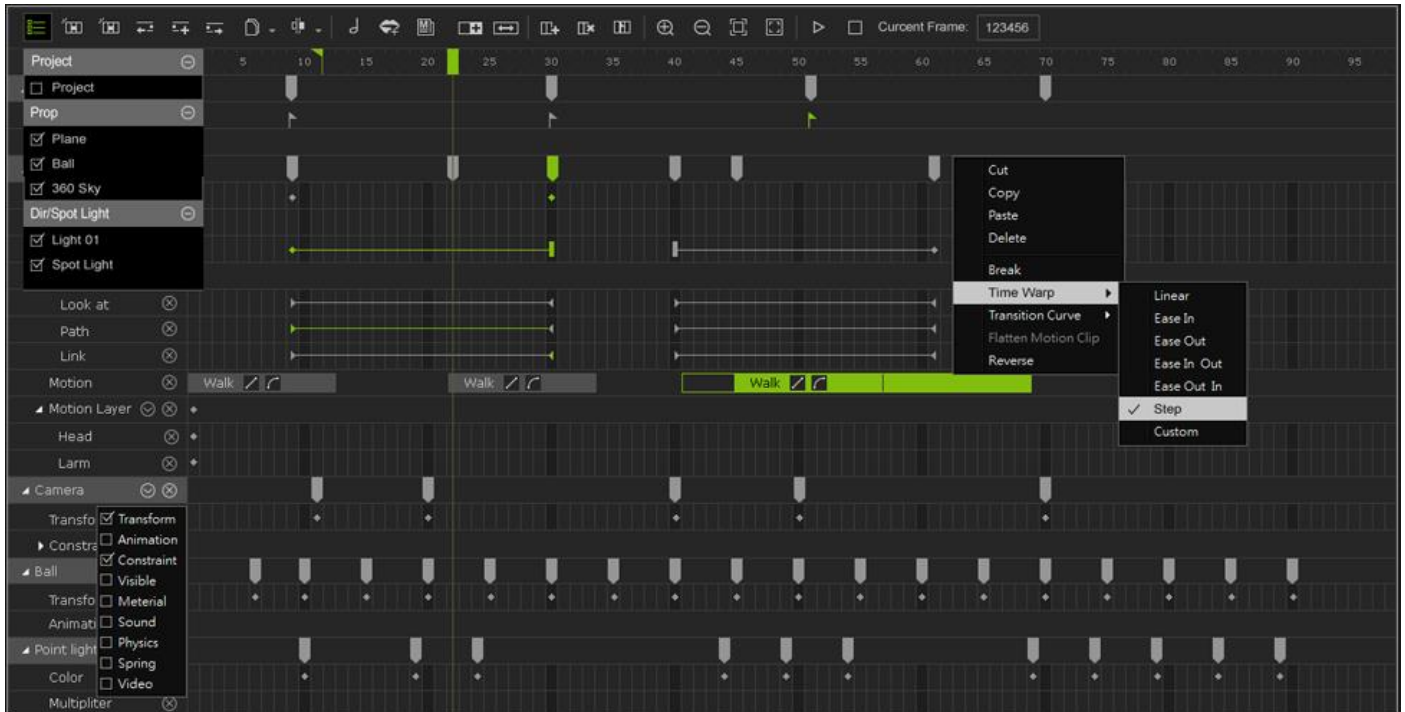
Virtual Folder & Online Inventory

You can now also create your own custom virtual folders and place all related content for certain projects in the same place for easy access later. The new Content Manager will also provide you easy and quick access to the newest and hottest content in the Marketplace and Content Store, so you can keep updated on the best new assets and access them more conveniently than ever!



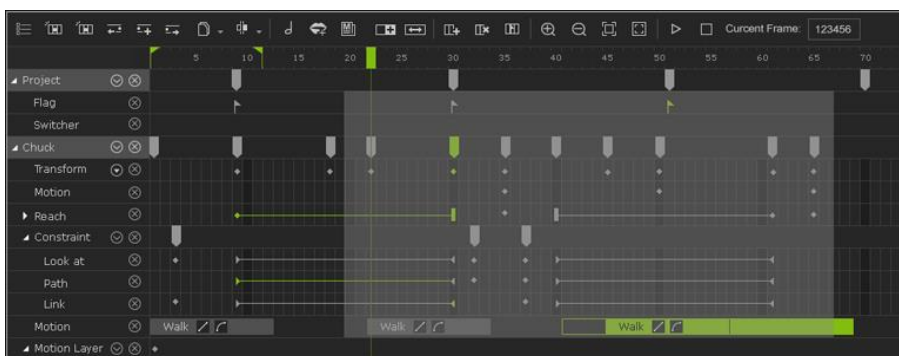
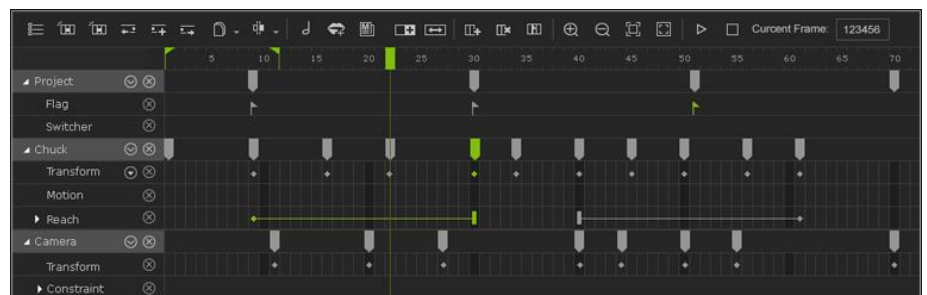
Timeline Enhancements

With the new timeline enhancements, you no longer need to worry about a smaller key editing UI when you raise your screen resolution. Now you can simply scroll your mouse to enlarge its display size, and hold the Alt key to pan the timeline view. In addition, there are lots of other improvements which let users manage object sub-tracks much easier.



Dope Sheet

You can directly perform key edits on the master track without having trouble clicking on every individual track to find the specific keys you created, which makes observation and editing much easier.



Multi-object Track Editing

Previously, when you needed to adjust the time frame in your timeline, you would need to move the keyframes of different characters, objects, and materials separately from different tracks. iClone 6 includes a new Rectangle Select feature, which allows you select multiple items in separate tracks and move them simultaneously.

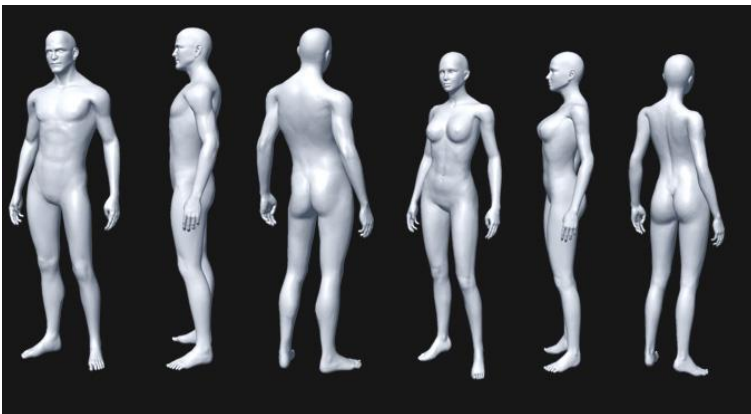
G6 Characters

One of the most exciting content updates is the innovative single-mesh character system. This new generation of characters brings the visual quality to the next level with enhanced topology for natural facial animation and body morphs.



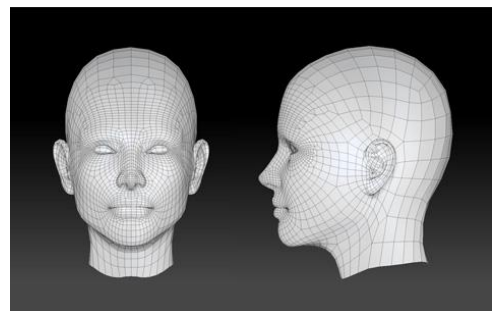
Morph-based Character

The brand new, stylish one-mesh G6 characters are designed for versatile body morphs. One dress can conform to different body shapes, and the joints appear incredibly seamless and smooth.



Enhanced Facial Details

With the enhanced topology of the face mesh, not only can you change the character look, but you can also make facial expressions more smooth and natural. The texture has been created and refined with professional tools, resulting in astounding skin detail.



New SpeedTree Technology



More Than Just Trees

In this new update, you will now find a lot more content besides trees, including flying bugs, butterflies, fences, rocks, leaves, and plants in the shape of 3D text. Another enhancement is that all of the grass is now 3D!



Visual Quality Improvement

All trees now come with multiple texture channels, including diffuse, normal, specular, and even alpha values for transmissive effects. You can even see the bark details and light as it passes through the leaves.



Lively Plants Swaying in the Wind

Wind behavior has also been vastly improved. Different species of plants like broad-leaf, needle-leaf, or grass now react accordingly to wind settings. Even a single tree can have branch and leaf motion settings so you can see it naturally oscillating in the wind. In addition, you can now use the timeline to key in wind changes from still and gentle to hurricane speed!



Enhanced LOD (Level of Detail)

Although SpeedTree previously had a LOD system to ensure steady performance in a massive forest, some skips or jittering could still occur when changing mesh levels or altering camera distance. In iClone 6, you will hardly find any changes during these level transitions. The same smooth transitions have also been applied to SpeedTree objects such as rocks, fences, or other props.

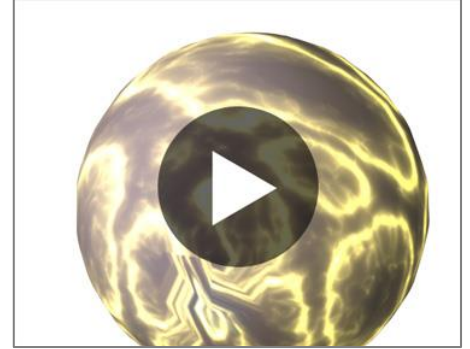
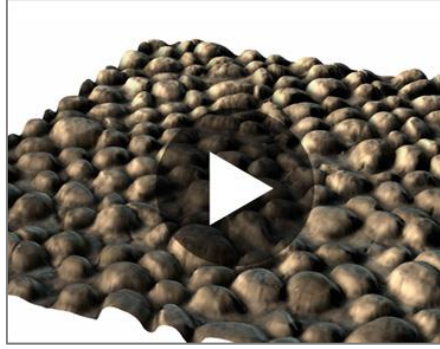
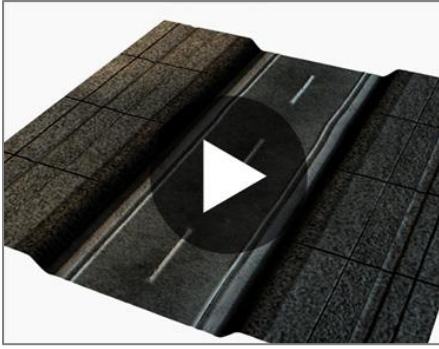
Super Realistic Substance Material

Previously in iClone, all 3D models had their own set of materials, which presented a pretty basic look. Now with Substance technology from Allegorithmic, you have the power to alter the material look and style, making existing materials look more natural and realistic. Aside from that, you can also create animated effects using the Substance library as well.

Massive Material Library

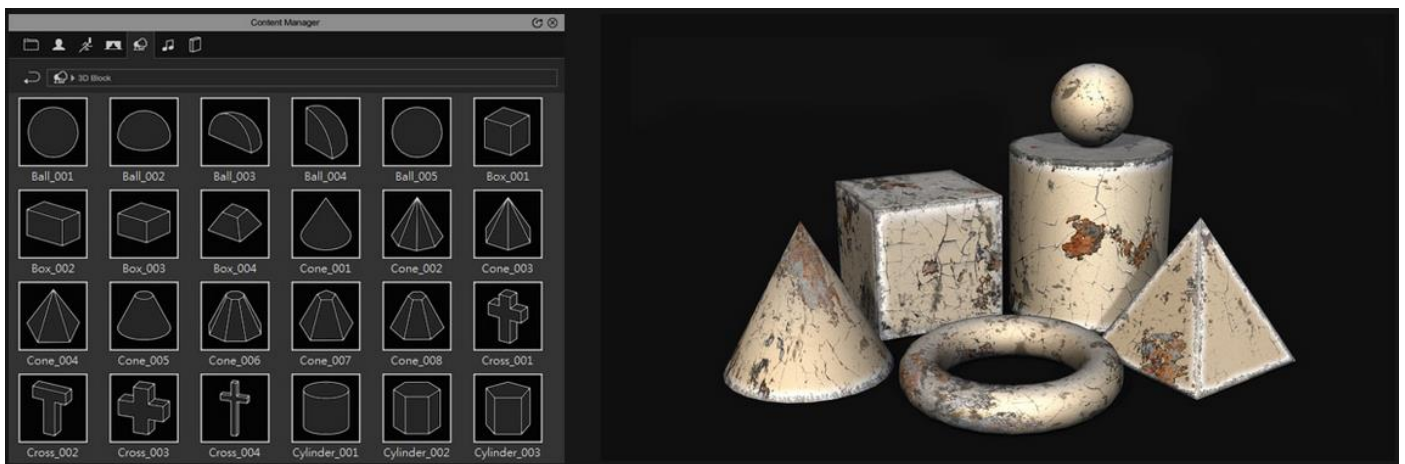
With the built-in Substance engine, users can easily add dynamic texture behaviors to existing iClone materials. In the future, Reallusion will provide a number of additions to create a massive Substance library for your immediate use, allowing you to unleash your creativity by using the Substance tools.





Realistic Looking 3D Shapes

By working with built-in Substance technology, you can now choose metal, wood, or rock looks for the 3D block system, and simulate natural weathering effects in a few simple clicks. Easily create effects such as chipped paint and aged wood with moss, or add scratches and character to metal to give it a rusted look.



Dynamic Sky System

Aside from the insane lighting enhancements, Reallusion also provides a universal day-to-night sky system that can be applied to any of your projects for random adjustment of illumination. This allows you to easily set a suitable light atmosphere for any timeframe, and even alter the cloud density and movement.

