

Phoenix in a Nutshell

Phoenix in a nutshell

What can I do with Phoenix?

Chaos Phoenix is a dynamics simulator, which enables you to create fluids like liquids and gasses, such as fire and smoke, that interact with the surrounding environment. Phoenix is used for visual effects, architectural and product visualizations, as well as creating game assets and more.

For example, you can create liquids such as water, coffee, and honey, as well as waterfalls, vast oceans, and even lava. For fire and smoke, you can create effects like explosions, burning fuel, large scale smoke such as from volcanoes, as well as dust, tornadoes, clouds, galactic nebulae and more, all with Chaos Phoenix!

Phoenix also has built-in support for Rigid Body Dynamics using [Active Bodies](#), which can make a ship, or ice cubes, or any other object float in water. You can even simulate waves that can carry them around, or wash them away.

If you want to jump right into creating a scene or doing something hands-on, you can get started with our existing [Quick Start Guides](#), which are set up with beginners in mind. You can also explore our [Template Scenes](#) and [Example Scenes](#), though some of these demonstrate more advanced techniques that may not be suited for beginners.

There is also a bunch of tutorial content that is classified for different skill levels, located in the [Tutorials](#) rollout of the Docs. These can give you a sense of the vast capabilities that Phoenix offers, and can help you learn how to create a variety of different simulations.

Ready presets

Phoenix comes with a handy [toolbar](#) that offers presets for [common setups](#), such as a large scale ocean simulation or gasoline explosion, or small scale setups like coffee, beer, candles and so forth. The presets offer base simulation settings that you can use right out of the box. They also serve as a basic setup, that you can then further customize and modify to fit your needs.

Licenses

Phoenix is licensed using the Chaos [License Server](#) which provides dongle or online licensing. There are two types of [licenses](#) - GUI licenses required for using the 3ds Max user interface, and Simulation licenses which can be used to run simulations through managers such as [Backburner](#) or [Deadline](#) on remote machines. The combination of 1 GUI and 1 Simulation license is referred to as a Workstation license and is the minimum you need to be able to use Phoenix.

Rendering is free! Phoenix volumes such as smoke and fire, Phoenix meshed liquids or Phoenix particle systems such as Foam and Splash do not require a license for rendering - you just need Phoenix installed on the machine which will render the data. The same goes for any of the Phoenix [textures](#).

Installations

Phoenix for 3ds Max comes in 3 build types - compatible with V-Ray 6, V-Ray 5 and V-Ray Next. If you don't have V-Ray, it does not matter at all which one you install - Phoenix would still be able to simulate, load, save and preview caches, and it would render with the Scanline Renderer. If you do have V-Ray 6, V-Ray 5 or V-Ray Next, please take care to install a matching Phoenix build. You can see the system requirements of Phoenix [here](#).

Rendering Phoenix simulations

Renderers with official support for Phoenix 5 for 3ds Max are: V-Ray Next and newer, Corona 6 and newer, Octane and Scanline. Mesh mode rendering is supported by any CPU renderer for 3ds Max. Phoenix can also be rendered by 3rd party plugins or external software after exporting the simulation grid, mesh or particle data to OpenVDB, Field3D, Alembic, Thinkbox X-Mesh, V-Ray VRmesh or VRscene or Krakatoa PRT. Phoenix can also shade data from other software with its dedicated [volumetric shader](#) for fire/smoke or its [Particle Shader](#) by importing OpenVDB, Field3D or Krakatoa PRT data.

V-Ray Next GPU and V-Ray 5 GPU can render fire/smoke and meshes, and the Phoenix [Particle Shader](#) in Fog mode. V-Ray 5 GPU can also render Particle Shaders in Bubble and Splash mode.

Phoenix goodies

Phoenix 4 adds support for [Active Bodies](#) interacting with the FLIP liquids, so objects can float over the liquid surface or be washed away by pouring liquid.

Phoenix for 3ds Max also provides real-time [GPU preview](#) of fire/smoke in the viewport, [texture maps](#) which can be used for ocean simulations and rendering or to extract grid and particle data from the simulator, [dedicated forces](#) and [voxel](#) and [particle tuners](#) which can drive and art-direct the simulations, interoperability with Thinkbox Krakatoa, Stoke MX and Frost, integration with [thinkingParticles](#) and [Particle Flow](#), as well as [MaxScript support](#) and a [Phoenix C++ API](#).

Phoenix also comes with some [handy tools](#) for AUR, VDB and F3D cache files, such as a Standalone Cache Previewer and a cache converter.

Phoenix links

[Try Phoenix for free](#)

You can try out Phoenix for 30 days without any limitations. You just need to sign up [here](#). After 30 days, Phoenix will expire and you won't be able to simulate. [Here](#) is more info on how to install a trial.

Learning

You can find the answers to frequently asked questions in the [Phoenix FAQ](#) section.

You can find more detailed info on Phoenix workflows in the [Phoenix Explained](#) section.

Ready example scenes and tutorials are available in the [Tutorials and Examples](#) section.

Contacts

Please post any questions or requests in the [Phoenix forums](#). You need to have a license in order to post in the forums - if you have any issues, please visit [support.chaos.com](#).

Please report any bugs or other issues via the 'Submit a request' form on [support.chaos.com](#). Check our guide on [How to Report a Bug](#).

Nightly builds

The Phoenix nightly builds are available [here](#). They are built every day and contain all the latest additions and fixes. The nightlies are open to all clients. Keep in mind that they could be unstable.

If you don't see the Phoenix builds, please use the 'Submit a request' form on [support.chaos.com](#) and you'll be granted access.

You can check the daily development progress in the nightly_changelog_#####.zip file next to the nightly builds.