

## Volume - Displacement



This tutorial shows how it is possible to offset where a volume is sampled using a noise shader connected to the *Displacement* attribute of the Standard Volume shader. You can create some interesting effects using this technique, for example, animating the noise shader to represent some flowing gaseous smoke. We will be using a noise shader in this example. However, you can use any texture map to offset the volume.

- Start off by downloading the **bunny volume** file from the [open vdb download page](#).
- Create an Arnold **Volume** and open the volume vdb file - **bunny\_cloud.vdb**
  
- Go to the **SHOP** and create an **Arnold Shader Network**. Inside the vopnet create the network below.
- Create a **Noise** shader. Connect the Noise shader to the **Displacement** attribute of the **Standard Volume** shader.

### Noise Type Examples

The images below show the effect of using different noise types connected to the Standard Volume's *Displacement* attribute.



**Arnold noise**



**Cell noise**

