

# Reducing Noise and Improving Performance



In ray tracing, reducing the noise in the image is referred to as convergence. It's preferable to make the image converge as quickly as possible to save time.

The RenderMan Community site has an excellent resource from Patrik Hadorn on how to reduce noise in a render by using tools available to users like:

- AOVs
- Sampling and Integrator choices
- Statistics Output

You can find the material here: [Debugging and Optimization](#)