

# TroubleShooting & Tips

## Lighting

- When you migrate from RenderMan 20.x to 21.x, you cannot use Pxr Std lights (which are RSL lights). Create a new Pxr C++ light. See [Adding Light](#).
- After you add Pxr C++ lights and get "Invalid Light Handle" error. Check your rendermn.ini and make sure you don't have RiOption for "int directlightingservices" turned off. For C++ lights to work, it needs to be turned on. It is on by default.

## Geometry

- Poorly tessellated (non-subdivision) surfaces may show artifacts when rendering like dark edges and outlines. It's recommended to render smooth subdivisions to avoid this artifact. You may also use polygons with no normals defined and then subdivide, RenderMan will compute the normals for you.

## Rendering

- Since there have been improvements, it is recommended to create a new RenderMan RIS ROP to avoid any unexpected errors.