Introduction to NSI File

An NSI file contains the scene description for rendering. NSI stands for *Nodal Scene Interface*¹. It was created in 2017-2018 as an open standard and modern version of the RIB file (Renderman Interface Bytestream) we used to support since the early 2000s.

There are two kinds of NSI files: ASCII encoded and binary encoded. A binary NSI file is smaller than its ASCII encoded equivalent, but an ASCII NSI file has the advantage of being human readable and editable in a text editor.

To convert an NSI file from binary to ACCII, you can use the renderdl command utility:

renderdl -cat binary.nsi.gz > ascii.nsi

To render an NSI file, you use the renderdl command line utility:

renderdl myfile.nsi

¹ For the technically inclined, one can read the full NSI specification here.