

NAME

pkgBSDF - package BSDFs provided as XML for Radiance

SYNOPSIS

pkgBSDF [*-i*] [*-s*] **bsdf.xml** ..

DESCRIPTION

PkgBSDF takes one or more XML files, each describing the bidirectional scattering distribution function of a surface or geometric system, and packages them into RADIANCE scene descriptions. If the input file(s) do not begin with a '.' or '/', the directories in the RAYPATH environment variable will be searched. One rectangle is produced for each BSDF that has no detail geometry and/or no rear-side reflectance distribution. If both front and back reflectance distributions are present with detail geometry, then two rectangles will be used to sandwich the geometry extracted from the BSDF file. The front surface will always be centered just in front of the origin facing the positive Z-direction, with "up" in the positive Y-direction. The back surface, if present, will parallel the front surface at a distance slightly greater than the BSDF system thickness. Scene units will always be in meters.

The *-i* option causes *pkgBSDF* to produce frozen octree instances for any detail geometry, which may reduce memory requirements in scenes with many references to the same complex BSDF object.

Normally, *pkgBSDF* produces one RADIANCE scene file for each XML input, replacing the required '.xml' suffix with '.rad' in the same directory. The *-s* option sends the RADIANCE scene description to the standard output rather than writing it to a file, but only works for a single XML input. Any instance octree is still written out to a file generated by replacing the '.xml' suffix with '.oct' in the same directory.

EXAMPLE

Package all the XML files in the current directory as Radiance scene files, employing frozen octree instances for any detail geometry:

```
pkgBSDF -i *.xml
```

AUTHOR

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SEE ALSO

genBSDF(1), oconv(1), xform(1)