

OpenEXR / ID

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★ *Guerilla Render*

Today

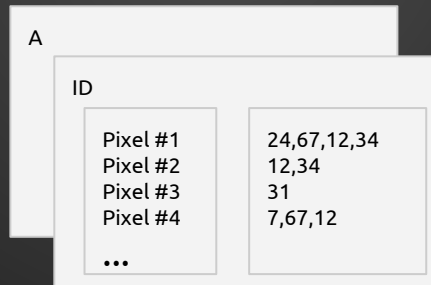
- Isolate part of the image with regexps
- Unmodified OpenEXR 2.0
- Flat images, not deep
- Support AA, motion blur, DOF, transparency
- IO C++ library
- OpenFX plug-in

File format for mask

EXRIdNames attribute, zlib compressed

ID #1 : "plane|left_wing"
ID #2 : "plane|right_wing"
ID #3 : "plane|wheels"
ID #4 : "plane|propeller"
...

OpenEXR deep slices

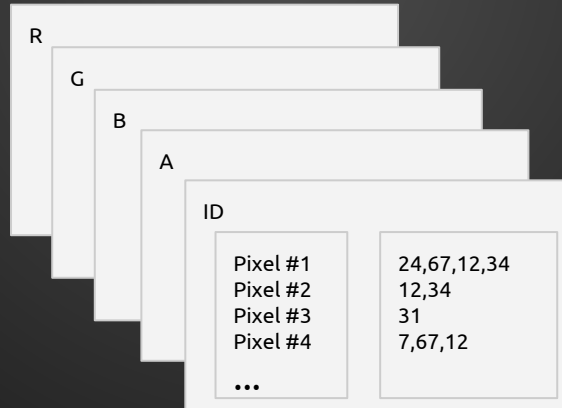


File format RGBA

EXRidNames attribute, zlib compressed

ID #1 : "plane|left_wing"
ID #2 : "plane|right_wing"
ID #3 : "plane|wheels"
ID #4 : "plane|propeller"
...

OpenEXR deep slices



Reconstruction

IDs path :

ID #1 : "plane|left_wing"
ID #2 : "plane|right_wing"
ID #3 : "plane|wheels"
ID #4 : "plane|propeller"

Match

RE2 automata
Regexp : "wing"

Result

IDs state :

ID #1 : 1
ID #2 : 1
ID #3 : 0
ID #4 : 0

Renderer Integration Notes

- Reconstruction filters
 - Use 3x3 not 5x5
- Limit ID per pixel, on the fly
- Compression
 - Limit ID per pixel, afterward
 - Cut lowest contributions

Tomorrow

- Nuke plug-in
- Compression
- Patch for OpenEXR
- Deep ID Images

Open-source

GitHub :

github.com/MercenariesEngineering/openexrid

Paper :

onanimationstudios.com/technology

Thanks !

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