

## 3.2.3.1

### Milestone 3.2.3

#### Enhancements

- **EXR layer names changed to R,G,B:** Instead of prepending the AOV name to the layer name, we now use R, G, B, A for the layer names. This can be controlled with the `preserve_layer_name` option in the `driver_exr` node. (trac#1806)
- **Multi-path support in procedural\_searchpath and AiLoadPlugins():** You can now specify multiple search paths separated by the ":" character in Linux/OSX or the ";" character in Windows. For example: "some/path:another/path:yet/another/path". (trac#1807, trac#1817)
- **Reduced noise in glossy inter-reflections in standard shader:** We now clamp the Phong exponent to a maximum value of 50 for secondary rays, greatly reducing spike noise in sharp glossy reflections seen through rough glossy reflections. (trac#1818)
- **Support for polygons with more than 255 points:** The maximum number of points per polygon in the polymesh node has been increased from 255 to 65535. (trac#22)

#### API additions

- **AtParamIterator:** This API lets you iterate over the built-in parameters of a node. This was already possible by using the `AiNodeEntryGetNumParams()` and `AiNodeEntryGetParameter()` functions, which are now deprecated. The example below illustrates the recommended usage. (trac#1810)

```
AtParamIterator* iter = AiNodeEntryGetParamIterator(node_entry);
while (!AiParamIteratorFinished(iter))
{
    const AtParamEntry* pentry = AiParamIteratorGetNext(iter);
    printf("Built-in parameter : %s\n", AiParamGetName(pentry));
}
AiParamIteratorDestroy(iter);
```

- **AtUserParamIterator:** This API lets you iterate over the user-defined parameters of a node. Previously there was no way to do this. See the example below. (trac#1810)

```
AtUserParamIterator* iter = AiNodeGetUserParamIterator(node);
while (!AiUserParamIteratorFinished(iter))
{
    const AtUserParamEntry* upentry = AiUserParamIteratorGetNext(iter);
    printf("User parameter : %s\n", AiUserParamGetName(upentry));
}
AiUserParamIteratorDestroy(iter);
```

#### Bug fixes

#1582	untiled texture maps are redundantly loaded once per thread
#1820	Texture access to the wrong texture (hash collision issues)
#1827	Avoid loading sitoa plugin from AiLoadPlugins
#1826	Upgrade OpenImageIO to 0.8.1
#1825	quad area lights with inverted sidedness are broken
#1824	kick doesn't use gamma correction on display driver
#1823	kick command line options should not depend on their order
#1822	quote all string parameters when writing to .ass
#1821	memory leak when removing polymesh invisible faces with face_visibility