July 11, 2017: Lucasfilm and Industrial Light & Magic (ILM) announced the inaugural Open Source release of the MaterialX Library for computer graphics. MaterialX is an open standard developed by Lucasfilm's Advanced Development Group and ILM engineers to facilitate the transfer of rich materials and look-development content between applications and renderers.

Industry-leading companies including Autodesk, Inc. and Foundry have voiced support for MaterialX.

Chris Vienneau, Director of Media and Entertainment at Autodesk noted, "Autodesk is very pleased to be a contributor to the MaterialX project and we are looking forward to adding native support for MaterialX workflows to our digital content creation tools. As with other open formats, MaterialX is going to improve collaboration and help make production pipelines more efficient, so we are thankful that Lucasfilm have chosen to share their technology with the community through open source software."

"Foundry is happy to see the MaterialX project reach this latest milestone," said Jordan Thistlewood - Senior Product Manager: Look Development and Lighting at Foundry. “The possibilities for smoothing the transfer of look development information between our own applications is exciting. The broader principle of open source projects and multi-vendor data exchange are important for the industry as a whole. Thus we look forward to including MaterialX powered workflows in future releases of our applications."

Originated at Lucasfilm in 2012, MaterialX has been used by ILM in feature films such as Star Wars: The Force Awakens and Rogue One: A Star Wars Story, and real-time immersive experiences such as Trials On Tatooine. The MaterialX team will host a ‘Birds of a Feather’ meeting at the ACM SIGGRAPH Conference in Los Angeles, CA on Monday July 31 2017, 9:30-11:00am, in room 511BC of the Los Angeles Convention Center.
Workflows at Computer Graphics production studios require multiple software tools for different parts of the production pipeline, and shared and outsourced work requires companies to hand off fully look-developed models to other divisions or studios which may use different software packages and rendering systems. There are currently high-quality solutions (e.g. USD, Alembic) for exchanging scene hierarchies and geometric data between tools, but no effective solutions for exchanging rich material content. MaterialX addresses the current lack of a common, open standard for representing the data values and relationships required to transfer the complete look of a computer graphics model from one application or rendering platform to another, including shading networks, patterns and texturing, complex nested materials and geometric assignments. MaterialX provides a schema for describing material networks, shader parameters, texture and material assignments, and color-space associations in a precise, application-independent, and customizable way.

Lucasfilm is no stranger to open source projects having developed and released key projects over the years. The company has played a key role in developing Alembic, co-developed with Sony Imageworks and released in 2012, and OpenEXR, which was developed by ILM in 2000. Both have become industry standards and continue to be developed by the open source community.

MaterialX is an Open Source project released under a modified Apache license. For more information visit the MaterialX website: www.materialx.org and follow MaterialX on Twitter @MaterialXCG for the latest news.

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