

March 6, 2024

Time

9AM PST

Agenda

Update on formal work product presentation - Primal Cube
Shared link + collaboration on other topics to address with this asset
Validation framework feedback / discussion

GDC

- Remedy Talks
- 18th to 22nd March
- Update during next meeting

Update on formal work product presentation - Primal Cube

TJ will gather and set the presentation page very soon.

Validation Framework

USD Validation Framework : <https://github.com/PixarAnimationStudios/OpenUSD-proposals/pull/29>

- We are using a cache for the validation.

Question from TJ :

<https://academysoftwarefdn.slack.com/archives/C03GKF4DG7K/p1709671482409539>

Thomas Trently

Has anyone had a chance to check out the validation proposal yet? I was reading through it and was curious if it had any concepts for caching data to improve runtime speed. I've had to consider this a few times in other validation systems where we wanted to check multiple components at different levels but didn't want to pay the look-up cost each time.

ex. If I wanted multiple tests to process vertex data, I would want to loop vertices once and run each test while it has that data vs each test looping vertex data.

Varun Talwar

Hey Thomas, thanks for reading the proposal. I haven't considered caching of scene data while test execution.. will keep an eye for it while I am working on the implementation.

Varun Talwar

I also feel it will be hard for the framework to introspect what individual tests are testing for such a cache. Maybe test writers can bundle tests appropriately in StageLevel tests and PrimLevel tests if there is an expensive operation they don't want to run for every single prim ... etc.

Varun Talwar

Also I will try to be on the call tomorrow, if anyone else has questions.

Thomas Trently

That would be awesome, it would be nice to have some more discussion on it.

Varun Talwar

For sure, all suggestions and feedback are welcomed

Caching should happen only for a particular run but not across different runs.

Eg : querying all the triangles only once.

The same context could be shared different test but for the same run.

- Validation should be very quick. So the idea would be to reduce the validation time.
- There is a **Fix It** feature. It is awesome.
Internally, there was a big chat and they decided to have it manually.
But the client could, later on, decide to automatically apply some fixes.

Sometimes, content creators want automatic fix (for example, when working with Unreal, some flags, parameters, should be set up correctly.

Adding a flag to automatically apply some fixes?

It should be trivial thing to be wrapped by the clients given the right set of APIs, but framework still shouldn't provide a means to always apply a fix. Varun took note to extend the API.

- Every project will have its own sets of rules
 - parameters would be different
 - validators could be config driven (eg : naming convention)
- Example of automatic fix:
 - new light schema
 - BUT what if there are 2 ways of fixing the issue

Attendance

- ☒ François Devic, Co-Lead
- ☒ TJ Trently, Co-Lead, Firewalk
- ☐ Alex Schwank - WG Co-chair, Apple
- ☒ Nick Porcino - WG Co-chair, Pixar
- ☐ Michael Min - USD Camera WG, Netflix
- ☐ Roman Zulak - USD on the web WG, NVIDIA
- ☐ Aaron Luk, NVIDIA
- ☐ Adam Harder
- ☐ Alan Blevins, NVIDIA
- ☐ Alessandro Bernardi - Ubisoft - HELIX Studio
- ☐ Alex Gerveshi, AWS
- ☐ Alex Wilkie
- ☐ Alexander Kalyuzhnyy, Wizart Animation
- ☐ Allen Hastings, Foundry
- ☐ Aloys Baillet, Animal Logic
- ☐ Alson Entuna, Crytek
- ☐ Alyssa Reuter
- ☐ Andy Beers
- ☐ Andy Biar, Warner Bros.
- ☐ Ana Gomez
- ☐ Anandhaiyappan, Botvfx
- ☐ Angelo Gabriel Sapaula
- ☐ Anthony Tan, Autodesk
- ☐ Anton Palmqvist
- ☐ Arash Keissami, Nira.app
- ☐ Arielle Martin, Foundry
- ☐ Ashwin Bhat - USD and MaterialX, Autodesk
- ☒ Barry Dempsey
- ☐ Barry Ruff
- ☐ Ben Chung-Hoon, NVIDIA
- ☐ Ben Deniz
- ☐ Bernard Kwok, Autodesk
- ☐ Bill Dwelly
- ☐ Bill Spitzak, Dreamworks Animation
- ☐ Blazej Floch
- ☐ Brian Gyss, 5th Kind
- ☐ Bruno Ebe
- ☐

- ☐ Bruno Landry (Unity)
- ☐ Carlos Felipe Garcia Murillo
- ☐ Carolin Colón
- ☐ Carson Brownlee, Intel
- ☐ Charleen Chu, SPI
- ☐ Charles Flèche, Ubisoft Montréal
- ☐ Chris King
- ☐ Christopher Lexington
- ☐ Chris Rydalch, SideFX
- ☐ Claire Chen
- ☐ Claire Yb
- ☐ Claude Robillard
- ☐ Connor Smith, Magic Leap
- ☐ Corey Revilla
- ☐ Cory Omand, TWDS/Pixar
- ☐ Curtis Andrus
- ☐ Dan Herman
- ☐ Dan Lee
- ☐ Dan Rolinek
- ☐ Daniel Heckenberg, Animal Logic
- ☐ Daniel Lanner
- ☐ Dave Hale, Riot Games
- ☐ David Aguilar, Walt Disney Animation
- ☐ David Larsson, Adobe
- ☐ Dean Jackson, Apple
- ☐ Deke Kincaid, Digital Domain
- ☐ Dhruv Govil, Apple
- ☐ Divyansh Mishra
- ☐ Diya Joy
- ☐ Domenico Alessi
- ☐ Dominic Couture
- ☐ Doug MacMillan, Tippett Studio
- ☐ Edward Slavin, NVidia
- ☐ Élie Michel
- ☐ Eric Chadwick, Wayfair
- ☐ Eoin Murphy, NVidia
- ☐ Eric Enderton, NVidia
- ☐ Eric Majka, Psyonix/Epic Games
- ☐ Erik Ostsjo
- ☐ Étienne Archambault
- ☐ F. Sebastian Grassia, Pixar
- ☐ Fabrice Macagno, Animal Logic
- ☐ Felix Herbst, Prefrontal Cortex
- ☐ Fernando Leandro
- ☐ Francois Lord, NAD-UQAC / Rodeo FX
- ☐ Frieder Erdmann, Ubisoft Massive
- ☐ Gary Jones, Foundry
- ☐

- ☐ Geoff Evans, NVIDIA
- ☐ Georgie Challis
- ☐ Gordon Bradley, Autodesk
- ☐ Gordon Cameron, Epic Games
- ☐ Guido Quaroni, Adobe
- ☐ Guillaume Laforge, Autodesk
- ☐ Guy Martin, NVIDIA
- ☐ Hamed Sabri
- ☐ Hendrik Helpach
- ☐ Henrik Edstrom, Autodesk
- ☐ Henry Vera, DNEG
- ☒ Ife Olowe
- ☐ James Pedlingham, Foundry
- ☐ Jason Rosson
- ☐ Jeff Bradley, Dreamworks
- ☐ Jenna Bell, Disney / Invisible Thread
- ☐ Jennifer Horowitz, Maxar
- ☐ Jenny Zhang
- ☒ Jeremiah Zanin, Santa Monica Studio
- ☐ Jeremy Cowles - USD Assets WG Chair, Valve
- ☐ Jerran Schmidt, NVIDIA
- ☐ Jerry Gamache
- ☐ Jesse Barker
- ☐ Jesse Ng, Metropolitan Museum of Art
- ☒ Jessica Wang, Pixar
- ☐ Joe Hultgren
- ☐ John Burnett, Bonfire Studios
- ☐ John Creighton, Apple
- ☐ John Hood, SPI
- ☐ John Mertic, Linux Foundation
- ☐ Jon Creighton, Apple
- ☐ Jon Wade, Spotify
- ☐ Jonah Friedman, Autodesk
- ☐ Jonathan Gerber
- ☐ Jonathan Stone
- ☐ Jonghwan Hwang
- ☐ Jordan Soles, Rodeo FX
- ☐ Jordan Thistlewood, Epic
- ☐ Joshua Miller
- ☐ Joseph Goldstone
- ☐ JP Mackel
- ☐ JT Nelson, Pasadena Open Source Consortium/SoCal Blender group
- ☐ Julien Dubuisson
- ☒ Kev Kirkland
- ☐ Kevin Bullock
- ☐ Kelvin Chu, Riot Games
- ☐ Kimball Thurston, Weta
- ☐

- ☐ Koen Vroijenstijn, Activision / Infinity Ward
- ☒ Kristof Minnaert, Remedy Entertainment
- ☐ Kurtis Schmidt
- ☐ Laura Scholl
- ☐ Larry Gritz, SPI
- ☐ Lee Kerley, SPI
- ☐ Levi Biasco, Santa Monica Studio
- ☐ Louis Marcoux, NVIDIA
- ☐ Lucas Morante, Illusorium
- ☐ Luca Scheller, RiseFX
- ☐ Luiz Kruel, R* NYC
- ☐ Luke Titley
- ☐ Manuel Köster, Crytek
- ☐ Mark Alexander
- ☐ Mark Elendt, SideFX
- ☐ Mark Final, Foundry
- ☐ Mark Masson
- ☐ Mark Manca
- ☐ Mark Sisson
- ☐ Mark Tucker, SideFX
- ☐ Marteinn Oskarsson, Sony Imageworks
- ☐ Martin Karlsson
- ☐ Mathieu Bertrand
- ☐ Mathieu Mazerolle, Foundry
- ☐ Matias Codesal, NVIDIA
- ☐ Matt Johnson, Epic Games
- ☒ Matt Kuruc, NVIDIA
- ☐ Matthew Levine, WDAS
- ☐ Matthew Low, DWA
- ☐ Michael B. Johnson, Apple
- ☐ Michael Blain, Unity
- ☐ Michael Buckley
- ☐ Michael Kass, NVidia
- ☐ Michael Min
- ☐ Mika Vehkala, Remedy Entertainment
- ☐ Mikko Haapoja, Shopify
- ☐ Nat Brown
- ☐ Natasha Tatarchuk, Unity
- ☐ Neil Chodorowski
- ☐ Niall Redmond, Foundry
- ☐ Nicolas Popravka, Soul Machines
- ☐ Nicolas Savva
- ☐ Nishanth Singaraju
- ☐ Nishith Singhai
- ☐ Oliver Dunn
- ☐ Oscar Sebio, Autodesk
- ☐ Paolo Selva, Weta
- ☐

- ☐ Paul Baaske, Jellyfish Pictures
- ☐ Paul Molodowitch, NVIDIA
- ☐ Patrick Palmer
- ☐ Peter Arcara
- ☐ Pete Segal
- ☐ Phil Sawicki, NVIDIA
- ☐ Prapanch Swamy, Disney / Invisible Thread
- ☐ Pier Paolo Ciarravano, MPC
- ☐ Pierre-Luc Bruyere
- ☐ Quentin Birrer
- ☐ Ramesh Santhanam
- ☐ Rebecca Hallac
- ☐ Richard Frangenberg
- ☐ Richard Kerris, nVidia
- ☐ Richard Lei, Weta
- ☐ Rob Pieké
- ☐ Rob Stauffer, SideFX
- ☐ Robert Krupa, Elemental Games
- ☐ Robin Rowe, CinePaint
- ☐ Rohit Khonde
- ☐ Rory Woodford, Foundry
- ☐ Ryan Stelzleni
- ☐ Scott Geffert, Metropolitan Museum of Art
- ☐ Scott Keating
- ☐ Sean Looper, AWS
- ☐ Sean McDuffee, Intel
- ☐ Seb Schmidt, Weta
- ☐ Sebastian Herholz, Intel
- ☐ Sebastian Grassia, Pixar
- ☐ Sebastian Rath, Snowtrack Montréal
- ☐ Sebastien Dalgo, Unity
- ☐ Sergei Shaykin, Apple (usdzconvert)
- ☐ Sergio Rojas, Different Dimension
- ☐ Serguei Kalentchouk, Netflix
- ☐ Shane Davis, SideFX
- ☐ Shawn Dunn, Epic Games
- ☐ Simon Haegler, Esri
- ☐ Silvia Palara
- ☐ Sneha Jaikumar
- ☐ Spencer Luebbert
- ☐ Stefan Habel, Foundry
- ☐ Stephan Leroux, Shopify
- ☐ Steve Agland, Animal Logic
- ☐ Steve Hwan, DD
- ☐ Steve LaVietes
- ☐ Steven Anichini, Disbelief
- ☐ Sue Sauer, Sunrise Productions
- ☐

- ☐ Sylvain Trottier, NVIDIA
- ☐ Thibault Lambert
- ☐ Thomas Chollet
- ☐ Thomas Kümlehn
- ☐ Tiago Carvalho
- ☐ Tim Armstrong
- ☐ Tim Fowler
- ☐ Tzung-da Tsai
- ☐ Vadim Slyusarev
- ☒ Varun Talwar
- ☐ Wayne Wu
- ☐ Will Telford, NVIDIA
- ☐ Xiaoxi Liu, Unity
- ☐ Yassine Mankai
- ☐ YJ Jang