Conformance Process

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Khronos Conformance Philosophy

- **A standard without strong tests for conformance is not a standard at all**
  - Need multi-vendor consistency to create reliable development platform

- **Any standard must be ‘complete’ before ratification**
  - Agreed specification, at least two implementations, set of conformance tests

- **The legally defensible protection is use of the API trademark**
  - Use of a mark referring to an API implementation must be for conformant products
  - Khronos actively defends against use of it’s mark on non-conformant products

- **Conformance process designed for low-cost and overhead - inclusiveness**
  - ‘Trust but verify’
  - Self-administered – no need for external text labs

- **Conformance tests can never be exhaustive**
  - Statistical coverage – with focus on key use cases
Khronos Standardization Process

Working Groups
One working per API

- Academic Members
  - Participation in working groups
- Contributor Members
  - Participation and vote in working groups
- Promoter Members
  - Participation and vote in working groups
  - Board seat for strategy, budget and spec ratification

Any member can propose a new working group and can contribute technology they want to be considered for adoption by the working group

Conformance Tests
Ratified Specifications
SDKs, Sample Implementations, Documentation and Man Pages

Adopters
Build conformant implementation and products

Developers
Develop applications using the APIs

Khronos Adopters Agreement enables products to be conformance tested and API trademark to be used on conformant products

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Khronos Conformance Process

- Khronos Administers an Adopters Program for each API
  - Full source access to tests for small fee (typically $10K for unlimited products)
  - Adopter ports and runs tests – generates test logs
  - Peer review of uploaded results by working group (30 day timeout)
  - Conformant products listed on Khronos web-site and can use mark

- www.khronos.org/adopters

Company implementing Khronos spec wishes to use the trademark E.g. “We have implemented OpenGL ES” → Adopters Agreement and Fee to enter Adopters program → Port Test Source to product and generate test results → Upload test results to Khronos private web-site. Peer review by members/Adopters → Successful Review enables products to use Khronos trademarks
Driving for COLLADA IO Reliability

• Conformance Tests for COLLADA 1.4 now available for free
  - Implementers Program alongside existing Adopters Program
  - www.khronos.org/implementers

• Comprehensive set of over 500 detailed tests and a scripted framework
  - Rigorously exercises applications that import and export COLLADA assets to ensure that they can reliably participate in a COLLADA-based toolchain

• Can upload successful test results to a provided Khronos server
  - To call implementations conformant

• Paid Adopters program provides more bragging rights
  - Use COLLADA logo and a series of COLLADA Conformance Badges