

Web3D Consortium

X3D Conformance Test Process

1. Change History

- V1.0: 21 July 2006 — First Release. © 2006, Web3D Consortium
- V1.1: 26 July 2006 — Update to submission and payment statements; Addition of Conformant Product Statements

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3. Executive Summary

The Web3D Consortium has defined a process by which a Vendor may use the Consortium's X3D[®] Trademark on their products. This document defines that process and fees which must be paid. The process requires the Vendor to pass the appropriate Conformance Test Suite and submit their results to the Consortium. The Consortium will verify the results and issue a use of the X3D[®] Trademark. Mechanisms for Appeals and Bug Reporting/Suggestions are also defined.

4. Purpose

The Web3D Consortium's (the Consortium) Conformance Test Suite (the "Tests") for the X3D[®] specification (the "Specification") are intended to promote consistent implementations of the Specification by many vendors across multiple platforms, and to create an objective definition of conformance for the Specification so that only conforming products may use the X3D trademark (the "Mark"). This document defines the X3D[®] Conformance Test Process ("Process") which specifies

1. how persons or organizations (the Vendors) submit test results (a "Submission") for an implementation of the Specification (an "Implementation")
2. how an Implementation is determined to successfully pass the Tests to be officially conformant to the Specification (a "Conformant Implementation");
3. the definition of which products may be associated with a Conformant Implementation and so may use the Mark ("Conformant Products");
4. the appeals process to rectify any issues with a Submission;
5. how bugs in the Tests are logged and handled;
6. the process by which third parties may make suggestions for improvement of the Tests and Process.

The Consortium reserves the right to modify the Process at any time at its sole discretion.

5. X3D Specification and Test Suite

Vendors that wish to gain access to the current official ISO X3D specification version need to obtain copies of the following ISO documents:

1. ISO/IEC 19775 Parts 1 & 2
2. ISO/IEC 19776 Parts 1 & 2 (and 3 when available)
3. ISO/IEC 19777 Parts 1 & 2
4. ISO/IEC 19775 Amendment 1 to Part 1
5. ISO/IEC 19776 Amendment 1 to Parts 1 & 2
6. Other ISO documents that may be necessary to fully understand and implement the above three documents.

Unofficial versions of the X3D[®] Specification documents are available to Vendors at no charge on the Consortium's web site.

The official Test Suite (Tests) is available to Vendors on the Consortium's web site. The test suite documents describe the tests that need to be run and the results that should be obtained. Any Vendor may use the test

suite to verify operation of their software. Use of the Mark is restricted to those Vendors that submit their results and application(s) to the Consortium for Test verification (the Test Agreement). The Tests is free to all current members of the Consortium. Non-Consortium members must pay a fee to obtain the Tests. See Section 14 — Fee Schedule for the actual amount.

6. Submission Process

Before submission of a product to the Consortium in accordance to the Test Agreement, a Submission Fee must be paid. No product will be considered for use of the Mark until all fees are paid, required information submitted, and appropriate documents are signed. See Section 14 — Fee Schedule for the specific fee amount.

The Submission Fee allows the vendor to submit one product for one profile once. Upgrades to the product require separate fees. Section 14 has the complete details.

Once all of the material has been submitted to the Consortium, the vendor will be signed up to the X3DVendors mailing list. The vendor does not need to take any action beyond completing a submission for this to occur. The remainder of the submission process is covered in (9)—(11).

7. Conformance Test

The Conformance Test is provided as X3D files. The files exist in XML-encoding and Classic VRML encoding. All tests must run from one (or both) of these encodings.

It is the intent of the Consortium not to significantly change the Tests between releases of the Specification; however, the Consortium reserves the right to change the Tests at any time at its sole discretion for all subsequent Submissions. Such a change shall not invalidate previously Conformant Implementations or Submissions in their Review Period. Vendors will have 60 (sixty) days to submit results based on the previous Tests.

The Vendor shall make no changes to the test suite except as covered in Section 16 (Bug Reporting).

8. Criteria for a Conformant Implementation

A Conformant Product must be a hardware, software, or some combination of the two that correctly and fully implements the specification at the desired profile. The Consortium suggests that the product implement more than the minimum required for a particular profile; however, there are no tests for exceeding the minimum. There is no advantage for doing so and no formal disadvantage for not doing more than the minimum.

The Product must

1. pass all test sets marked as required;
2. must pass at least 95% of the discretionary tests

A Submission must contain all of the following information:

1. A statement of conformance in which the Vendor identifies:
 - a. the name of the product;
 - b. the version of the Specification being tested;
 - c. the revision and date of the conformance tests that were used;
 - d. the CPU running the Product;
 - e. the Operating System;
 - f. the graphic sub-system (e.g., OpenGL, DirectX, etc.) used with the Product
 - g. any additional hardware used in the graphics or audio subsystem;
2. The results for all of the executed tests for the desired profile using the supplied test files;
3. The test suite is not to be modified. If the Vendor believes any test is in error, then an appeal should be filed (see Section 10 — Appeal Process).
4. Contact details of the Vendor for any questions or appeals against this Submission.

The Consortium may change the above criteria for a Conformant Implementation at any time for all subsequent submissions. Such a change in conformance criteria shall not invalidate previously Conformant Implementations or Submissions in their Review Period. Vendors have 60 (sixty) days from the date of announcement to submit their products under the previous submission criteria.

9. Test Submissions

When the Vendor is ready to submit their product, the Test results are entered into a form on the Consortium's web site. The Vendor warrants that it has generated the Submission in-house or has sub-contracted organization to do so on its behalf. The Submission must indicate what platform (hardware and operating system) were used for the Tests.

The Consortium or its agent(s) verifies all submissions. The Vendor must provide or make available the product to be verified to the Consortium. If the Product requires a non-supported hardware configuration, then the Vendor must either:

- Ship the hardware to the Consortium's tester
- Provide travel costs and access for the tester to a Vendor approved facility for verification purposes

Note: some hardware configurations may require that the Vendor provide the second option.

The list of supported hardware configurations including the processor details and graphics hardware is maintained on the Consortium's web site and may change at any time.

10. Submission Verification

All Submissions will become available to Consortium members within five (5) business days after the Submission has been completed by the Vendor, including paying of fees and providing for access to the Product, unless other arrangements have been made prior to paying of fees.

All Submissions are verified by the Consortium or its agent(s). The verified results will be available within 30 calendar days after the Submission becomes available to Members. The results of the submissions and verification are available for inspection by all Members (Organizational and Professional) of the Consortium. The Consortium shall distribute an email to the Consortium mailing list and the Vendors mailing list each time a Submission is made. All Vendors shall be subscribed to the Vendors mailing list — which shall be used for notices to Vendors and discussion threads related to Conformance Testing.

The Review Period lasts for 30 (thirty) days after the Submission becomes available to the Consortium Members. Unless subject to an Appeal (as defined below) then at the end of the Review Period the Submission is deemed to be successful (a "Successful Submission") and the Product

covered by the Submission is deemed to be a Conformant Product and may use the Mark.

The Consortium may modify the duration of the Review Period at any time for subsequent Submissions.

11. Submission Updates and Upgrades

While a Submission or Upgrade is in the Review Period, the Submitter (and only the Submitter) may make corrections to the Submission or Upgrade (a "Correction"), replacing the original Submission and restarting the Review Period, or may delete the Submission or Upgrade entirely. A Successful Submission or Successful Upgrade may not be corrected or deleted or replaced, only modified through Upgrades (see below).

Vendors can update one of their own Successful Submissions (an "Update") to modify any aspect of their Submission. The fee schedule associated with each update is listed in Section 14 — Fee Schedule.

Updates after the Review Period has completed are called Upgrades. Upgrades are treated the same as initial Submissions, though they may be subject to different fees. See Section 14 for the details. Successful Upgrades may be further subject to further Upgrades. The original Submission and any previous Upgrades shall continue to be available on the Test Repository, but marked as superseded, once an Upgrade is successful.

Upgrades to a Product include (but not necessarily limited to)

- Enhancements to provide new features
- Enhancements to provide support to a new X3D[®] Specification

A Product may be tested under multiple platforms. A platform is a separate code path through the Product being tested. These include (but are not limited to) different operating system, graphics sub-system, rendering engine, etc. See Section 14 for a description of Fee Schedules.

Verification at different X3D[®] Profiles each require a separate submission.

Items not covered by the X3D[®] Conformance Tests include installation scripts, examples, and non-X3D[®] related graphics and processing.

12. Appeal Process

An Appeal may be raised during the Review Period for any Submission or Update to resolve any issues. An Appeal may be raised by any Consortium Organizational Member, Board of Director Member, or existing Vendor that has an issue with a third party Submission (a "Reviewer") or a Vendor who has made the Submission (the "Submitter"). Note: Professional members may only appeal through the Profession representatives on the Board of Directors. Issues with Submissions may include but are not limited too:

- Use of a Vendor's Package that is non-current;
- Any [unapproved] source changes to the Tests;
- Incorrect reporting of results;
- Inappropriate promotion of back doors and non-conformant configurations that are not in the best interest of the X3D[®] Specification's standing in the industry or against the spirit of the Process;
- Bugs in the Tests that materially affect the success of a Submission;
- Inappropriate association of Conformant Products with an Implementation.

The Board of Directors of the Consortium shall appoint an Appeal Review Board consisting of at least five Consortium Members. The Appeal Review Board will drive the Appeals Process as follows:

- A Reviewer should make direct contact with a Submitter and make all reasonable efforts to clearly identify any concerns;
- If necessary, the Submitter may make a Correction to the Submission to address the concerns of the Reviewer and restart the Review Period;
- If Reviewer and Submitter do not agree on the need for a Correction, or if the Appeal is being made by the Submitter, then the Reviewer or Submitter may lodge an Appeal to the Appeal Review Board which shall take all available information under consideration and determine by majority vote (50% or more of the Appeal Review Board members) whether the Submission needs a Correction before being allowed to proceed or whether the current issue should not preclude the Submission's success. If the Reviewer or the Submitter sits on the Appeal Review Board then they shall be excluded from voting on this Submission. If the Appeal Review Board takes more than 30 days to reach a decision after the Appeal is lodged then the Submission or Update shall be deemed successful;
- If the Submitter feels that its Submission is being unfairly disallowed then it may request the Consortium's Board of Directors to make a final decision, through its normal voting process, on the validity of the Submission.

13. Accelerated Review

Entirely at its own discretion, the Appeal Review Board may review a Submission or Update and waive the remainder of the 30 day review period. In this case Upon approval, the Product shall be deemed Conformant and may immediately use the Mark.

14. Fee Schedule

The Consortium has instituted various fees for maintaining the X3D[®] Conformance program. These fees support test development, submission verification, brand promotion, and activities of the Web3D Consortium. Fee schedules are based on professional or organizational membership in the Consortium. The table below defines the fees for all aspects of the submission process. Additional fee structures may be added as new test suites become available.

Interchange Profile	Organizational	Non-Member	Professional
Test Suite Access	Free	\$1000	Free
Initial Conformance			
1st platform	\$2000	\$5500	Not Available
Additional Platforms	\$500	\$500	Not Available
Upgrade Test			
1st platform	\$800	\$800	Not Available
Additional Platforms	\$400	\$400	Not Available

15. Press Release Wording Guidelines

Statements that may always be used by Consortium members include:

- Vendor supports the X3D[®] Specification;
- Vendor encourages developers to use the X3D[®] Specification.

Statements that may be used by a Vendor that has a passing test submission in review:

- Vendor's Product is designed to implement the X3D[®] Specification for Interactive Profile;
- Vendor has submitted Product to the Web3D Consortium's X3D[®] Specification Conformance Process;
- Vendor expects Product to successfully pass the Web3D Consortium's

X3D[®] Conformance Process;

- If Vendor's product passes the Web3D Consortium's X3D[®] Conformance Process it will become officially certified to use the X3D[®] logo.

If any of the last four statements are used, then the following footnote text should also be used:

- "Product is based on the published X3D[®] Specification, but only successfully passing products are licensed by The Web3D Consortium to use the X3D trademark. Current conformance status can be found at www.web3d.org."

When a Vendor's Product is approved, the Consortium will send to the Vendor the official X3D[®] graphics and wording statements.

16. Bug Reporting

Any Vendor, upon discovering potential bugs in the Tests, agrees to submit a formal bug report using the bug logging procedure as defined by the Consortium. Bug reports will be taken under consideration and acted on in the Consortium's sole discretion. If a Vendor believes that a potential bug materially affects a Submission's success then the Vendor may Appeal.

17. Suggestions

The Consortium shall create a public forum and encourage any Member, Vendor, or external entity to make suggestions to the Consortium on how the Tests and Process may be improved, and identify issues that are negatively affecting the effectiveness of Tests.

All received comments shall be passed to the Consortium and the Conformance Working Group that shall take any appropriate action, entirely at their own discretion.

Conformance Test Submission Form

The application is not complete until this form is sent with the appropriate fee to the Consortium (address below) and all requested information is entered into the Conformance Submission form on the Consortium's web site (<http://www.web3d.org>).

Address:
 Web3D Consortium
 225 Bush Street, 16th Floor
 PMB #8900
 San Francisco, CA. 94104

Interchange Profile	Organizational	Non-Member	Professional
Test Suite	Free	\$1000	Free
Initial Conformance			
1st platform	\$2000	\$5500	Not Available
2nd+ Platforms	\$500	\$500	Not Available
Upgrade Test			
1st platform	\$800	\$800	Not Available
2nd+ Platforms	\$400	\$400	N/A

Fee Paid: \$ _____ (circle amount(s) above and enter total here)

Vendor Name: _____

Contact Name: _____

Contact Email: _____

Contact Phone: _____

Product Name: _____

Product Version: _____

Profile Name: _____

Platform: _____

Vendor warrants that the Submission Test Results have been generated in-house or sub-contracted to an organization to do so on the Vendor's behalf.

 (Vendor Authorized Representative)