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ECMA-262 Test Suite

Technical
Report



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Introduction

Test262 is a project of Ecma International's Technical Committee 39 that has a goal to make a test suite widely available that can be used by ECMAScript implementers to improve their adherence to the Ecma-262 specification. The test suite consists of individual tests that have been contributed by Ecma TC39 members. The test262 test suite is publicly available and is designed to be executable by any modern web browser simply by loading the web page at <http://test262.ecmascript.org>.

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ECMA-262 Test Suite

1 Scope

This Ecma Technical Report describes a test suite and harness developed by TC39 partners to validate how well an implementation of the Standard ECMA-262 Edition 5.1 adheres to the ECMA-262 set of standards. It is assumed that readers are familiar with general software testing methodologies and the Standard ECMA-262 Edition 5.1.

2 References

For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ECMA-262, *ECMAScript Language Specification*, Edition 5.1 (June 2011)

3 Abbreviations

TC39 Technical Committee 39

ES5 ECMAScript 5

4 Status

Development of test262 is an on-going process. As of September 2011, test262 Version 5 consisted of 11,028 individual test files covering the majority of the pseudo-code algorithms defined in the Standard ECMA-262 Edition 5.1. Each of these files contains one or more distinct test cases. This marks the most comprehensive ECMAScript 5 test suite to date. While test coverage is broad, TC39 does not consider coverage to be complete and as with any software project there exists the possibility of omissions and errors. As TC39 members correct issues or contribute further tests the test suite will be updated at <http://www.ecma-international.org/activities/Languages/test262-Latest.zip>. Prior snapshots of the test suite will be available at <http://www.ecma-international.org/activities/Languages/test262/archive.htm>. The active development version of the source code may be viewed at <http://hg.ecmascript.org/tests/test262>.

5 Contributions

The tests are composed of contributions from Ecma members Google and Microsoft. Google contributed tests from its Sputnik project, a test suite for ECMA-262 Edition 3. Microsoft contributed tests from its Internet Explorer Testing Center, a test suite for the Standard ECMA-262 Edition 5.1 features and changes from Edition 3. Development of test262 began in earnest in summer 2010.

6 Relation to ECMA-262 Edition 5.1

The Standard ECMA-262 Edition 5.1 specification provides the normative definition of the ECMAScript programming language. Test262 is a non-normative test suite for implementations of Standard ECMA-262 Edition 5.1. Any differences between the requirements of ECMA-262 Edition 5.1 and those tested by test262 must be resolved in favour of the ECMA-262 Edition 5.1 specification.

