The Open Group
COE Platform Certification Program

Security Testing Procedures

Posix-Based Platform Compliance (PPC)
COE Kernel revision level 4.5p6

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Revision 1.0

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1.Overview

1.1Document Purpose and Scope

This document defines a Security Validation Procedure that is part of the required set of test procedures to be used in the certification of products to The Open Group COE Platform Product Standard.

This document is intended for suppliers who intend to submit a product for certification. These test procedures, along with the components referenced in the program's policy and in conjunction with the appropriate certification agreement and the trademark license agreement, constitute the requirements and obligations for achieving certification. Buyers intending to procure certified products may also find this document useful for understanding the test procedures that were performed as part of the certification process.

The Open Group's COE Platform certification program is a voluntary program, open to any product meeting the conformance requirements.

1.2 Recommended Reading

The reader is referred to the *COE Platform Certification Policy* for definitions and abbreviations used within this document.

The reader is also referred to the *COE Certification Guide* for high-level guidance on the overall testing program for the COE Platform Product Standard.

1.3 About This Document

This document provides several pieces of information on the steps necessary to complete the testing required for the Security section of the COE Platform Certification.

Section 2 describes the test suite contents and porting procedure. This section relies on the document "Host-Oriented Security Test Suite (HOSTS) Version 1.5.0.0", included in the "Docs" directory included as part of the Host-Oriented Security Test Suite (HOSTS) distribution.

Section 3 describes the test procedure, information that must be submitted, and pointers to the waiver process if problems are found.

2.Test Contents and Procedure

2.1 Test Contents

The COE Security Conformance test consists of a test suite, called the HOSTS tests, which is used for evaluating an implementation's compliance with the Defense Information Infrastructure (DII) Common Operating Environment (COE) Security Requirements Specification (SRS). These tests are primarily written in the PERL language v. 5 and the Bourne shell, and are portable to POSIX systems.

The HOSTS distribution is organized into several sections, including the main driver program, several common task plugin modules, and test input files based on the five COE KPC security test categories.

2.2 Test Porting

The HOSTS tests will exercise a number of security features and behaviors that form part of the COE SRS, but are not yet common practice across different vendor implementations. Therefore, these tests may require modification to allow them to correctly demonstrate compliance with that specification. As noted above, the tests are organized so that common functions are contained in plugin libraries (located in the directory named "plugins") in the test distribution. Porting changes to the tests should be restricted to this directory, and documentation of the changes is required as part of the certification data. This documentation should take the form of interpretation requests for each file changed in the 'plugin' directory. Like changes can be grouped together on a single Interpretation request as long as the scope, nature and rational of the changes is clear. These interpretations will be processed as Test Suite deficiencies (TSDs) and when authorized will give authorization for the modification to be used for the certification testing process.

2.3 Test Setup

Instructions for running the HOSTS test suite are provided in part 2 of the document "Host-Oriented Security Test Suite (HOSTS) Version 1.5.0.0", included in the "Docs" directory included as part of the Host-Oriented Security Test Suite distribution.

3.Test Procedure

The intent of the HOSTS is to serve (once ported) as an automated test to indicate compliance with the SRS, and to provide a unambiguous PASS/FAIL indication of both the overall and individual test results.

3.1 Test Execution

Detailed instructions for executing the HOSTS test can be found in Section 3 of the document "Host-Oriented Security Test Suite (HOSTS) Version 1.5.0.0", included in the "Docs" directory included as part of the Host-Oriented Security Test Suite distribution. Additionally, when executing the tests for purposes of certification submission, the test procedure must do the following:

- Test execution must be executed as an uninterrupted run.
- The "-autogen" command line option must not be used.
- An unmodified output log of the test run, along with the SKIPTEST file, must be submitted as a component of the certification process.

3.2 Determination of Overall Test Results

The overall PASS/FAIL result for the HOSTS tests is determined as follows: The overall test result is "PASS" if and only if the Global Summary of the test result as shown in the output log file shows the result: "Failed Tests: None". An example output of this test log showing this result can be found in Section 3, Step 10 of the test documentation.

3.3 Test Documentation

When submitting results for certification, the following documentation must be included:

- The output log file of the testing run
- The SKIPTESTS file used
- An output of the "diff" command showing what changes, if any, were made to files in the "plugins" directory.
- A document that references and authorized TSD for each change present in the "diff" output. The change utilized for the certification testing must be identical to that defined on the approved TSD.

3.4 Problem Reporting, Waivers and Interpretations

Information about the procedures for applying for interpretations and waivers can be found on The Open Group's World Wide Web site, at the URL

http://www.opengroup.org/interpretations

A searchable database of existing interpretations and waivers is available at the URL
http://www.opengroup.org/interpretations/database

3.5 Test Items Not In Use

It may be determined, based on decisions by the COE Forum, that some tests are not needed to indicate compliance. These tests will be disabled through the use of the SKIPTESTS feature built in to the test suite. A SKIPTESTS file indicating which tests are not required will be provided as part of the test distribution.

4. Change History

Version 1.0 02 June 2003 – Initial Release.