

# COMMON CRITERIA CERTIFICATION REPORT

McAfee Policy Auditor 6.4 with ePolicy Orchestrator 5.10 5 November 2018

383-4-455

Canada

V1.0



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## FOREWORD

This certification report is an UNCLASSIFIED publication, issued under the authority of the Chief, Communications Security Establishment (CSE). Suggestions for amendments should be forwarded through departmental communications security channels to your Client Services Representative at CSE.

The Information Technology (IT) product identified in this certification report, and its associated certificate, has been evaluated at an approved evaluation facility – established under the Canadian Common Criteria Scheme – using the Common Methodology for Information Technology Security Evaluation, Version 3.1 Revision 5, for conformance to the Common Criteria for Information Technology Security Evaluation, Version 3.1 Revision 5. This certification report, and its associated certificate, applies only to the identified version and release of the product in its evaluated configuration. The evaluation has been conducted in accordance with the provisions of the Canadian CC Scheme, and the conclusions of the evaluation facility in the evaluation report are consistent with the evidence adduced. This report, and its associated certificate, are not an endorsement of the IT product by the Communications Security Establishment, or any other organization that recognizes or gives effect to this report, and its associated certificate, and no warranty for the IT product by the Communications Security Establishment, or any other organization that recognizes or gives effect to this report, and its associated certificate, is either expressed or implied.

If your department has identified a requirement for this certification report based on business needs and would like more detailed information, please contact:

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## **OVERVIEW**

The Canadian Common Criteria Scheme provides a third-party evaluation service for determining the trustworthiness of Information Technology (IT) security products. Evaluations are performed by a commercial Common Criteria Evaluation Facility (CCEF) under the oversight of the Certification Body, which is managed by the Communications Security Establishment.

A CCEF is a commercial facility that has been approved by the Certification Body to perform Common Criteria evaluations; a significant requirement for such approval is accreditation to the requirements of ISO/IEC 17025:2005, the General Requirements for the Competence of Testing and Calibration Laboratories.

By awarding a Common Criteria certificate, the Certification Body asserts that the product complies with the security requirements specified in the associated security target. A security target is a requirements specification document that defines the scope of the evaluation activities. The consumer of certified IT products should review the security target, in addition to this certification report, in order to gain an understanding of any assumptions made during the evaluation, the IT product's intended environment, the evaluated security functionality, and the testing and analysis conducted by the CCEF.

The certification report, certificate of product evaluation and security target are posted to the Certified Products list (CPL) for the Canadian CC Scheme and to the Common Criteria portal (the official website of the International Common Criteria Project).



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#### **EXECUTIVE SUMMARY**

McAfee Policy Auditor 6.4 with ePolicy Orchestrator 5.10 (hereafter referred to as the Target of Evaluation, or TOE), from McAfee LLC, was the subject of this Common Criteria evaluation. A description of the TOE can be found in Section 1.2. The results of this evaluation demonstrate that TOE meets the requirements of the conformance claim listed in Table 1 for the evaluated security functionality.

EWA-Canada is the CCEF that conducted the evaluation. This evaluation was completed 5 November 2018 and was carried out in accordance with the rules of the Canadian Common Criteria Scheme.

The scope of the evaluation is defined by the security target, which identifies assumptions made during the evaluation, the intended environment for TOE, and the security functional/assurance requirements. Consumers are advised to verify that their operating environment is consistent with that specified in the security target, and to give due consideration to the comments, observations and recommendations in this certification report.

Communications Security Establishment, as the Certification Body, declares that the TOE evaluation meets all the conditions of the Arrangement on the Recognition of Common Criteria Certificates and that the product will be listed on the Canadian Certified Products list (CPL) and the Common Criteria portal (the official website of the International Common Criteria Project).



#### **1** IDENTIFICATION OF TARGET OF EVALUATION

The Target of Evaluation (TOE) is identified as follows:

Table 1 TOE Identification			
TOE Name and Version	McAfee Policy Auditor 6.4 with ePolicy Orchestrator 5.10		
Developer	McAfee LLC		
Conformance Claim	EAL 2 + (ALC_FLR.2)		

#### **1.1 COMMON CRITERIA CONFORMANCE**

The evaluation was conducted using the Common Methodology for Information Technology Security Evaluation, Version 3.1 Revision 5, for conformance to the Common Criteria for Information Technology Security Evaluation, Version 3.1 Revision 5.

### **1.2 TOE DESCRIPTION**

The TOE helps organizations monitor policy compliance on their assets by performing policy audits and inventory scans on those assets. This solution allows managers to continuously monitor the state of their assets. The TOE utilizes the Security Content Automation Protocol (SCAP) standard and the JavaScript Object Notation standard (JSON) to specify computer security configuration information and inventory checks, respectively. Administrators configure the system, including user accounts. Users schedule policy audits and inventory scans, and review the results.



#### **1.3 TOE ARCHITECTURE**

A diagram of the TOE architecture is as follows:



Figure 1 TOE Architecture

#### 2 SECURITY POLICY

The TOE implements policies pertaining to the following security functional classes:

- Security Audit;
- Cryptographic Support;
- User Data Protection;
- Identification and Authentication;
- Security Management;
- Protection of the TSF; and
- Policy Audit.

Complete details of the security functional requirements (SFRs) can be found in the Security Target (ST) referenced in section 8.2.

#### 2.1 CRYPTOGRAPHIC FUNCTIONALITY

The following cryptographic modules were evaluated by the CMVP and used by the TOE:

Cryptographic Module	Certificate Number
OpenSSL v1.0.2P with FIPS Module v2.0.16	2398
RSA Crypto-C ME 4.1.2	2294
RSA BSAFE Crypto-C Micro Edition v4.0.1	2097

#### Table 2 Cryptographic Module(s)



#### **3** ASSUMPTIONS AND CLARIFICATIONS OF SCOPE

Consumers of the TOE should consider assumptions about usage and environmental settings as requirements for the product's installation and its operating environment. This will ensure the proper and secure operation of the TOE.

#### 3.1 USAGE AND ENVIRONMENTAL ASSUMPTIONS

The following assumptions are made regarding the use and deployment of the TOE:

- The TOE has appropriate access to the systems it is intended to monitor;
- Access to the database used by the TOE via mechanisms outside the TOE boundary is restricted to authorized users;
- The authorized administrators are not careless, willfully negligent, or hostile, and will follow and abide by the instructions provided by the TOE documentation;
- The TOE hardware and software critical to security policy enforcement will be protected from unauthorized physical modification; and
- The hardware, operating system, and other software on which the TOE depends, operate correctly.

#### **EVALUATED CONFIGURATION** 4

The evaluated configuration for the TOE comprises:

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- a single instance of the management system (with ePO plus Policy Auditor, Benchmark Editor, Advanced • Host Assessment and AHA Content Distributor extensions, and the Agent Handler) running on Windows Server 2016 with MS SQL Server 2016 and one or more instances of managed systems (with McAfee Agent, Policy Auditor Agent Plug-in, Audit Content Plug-in, AHA Plug-in and AHA Content Update Plug-in) on one of the following platforms:
  - Windows 2012 Server R2 Update; 0
  - Windows Server 2016; 0
  - Windows 10 1709; and 0
  - Red Hat Enterprise Linux 7. 0

#### 4.1 DOCUMENTATION

The following documents are provided to the consumer to assist in the configuration and installation of the TOE:

- a. McAfee Policy Auditor 6.4.0 Installation Guide, 2018;
- b. McAfee Policy Auditor 6.4.0 Product Guide. 2018;
- c. McAfee Policy Auditor 6.4.0 Interface Reference Guide, 2018;
- d. Installation Guide McAfee ePolicy Orchestrator 5.10.0, 2018;
- e. Product Guide McAfee ePolicy Orchestrator 5.10.0, 2018;
- f. McAfee Policy Auditor 6.4.0 For use with ePolicy Orchestrator 5.10.0 Common Criteria Evaluated Configuration Guide, Revision A, 26 September 2018;
- McAfee Agent 5.5.1 Product Guide, 2018; and g.
- h. McAfee Agent 5.5.1 Installation Guide, 2018.



### 5 EVALUATION ANALYSIS ACTIVITIES

The evaluation analysis activities involved a structured evaluation of the TOE. Documentation and process dealing with Development, Guidance Documents, and Life-Cycle Support were evaluated.

#### 5.1 DEVELOPMENT

The evaluators analyzed the documentation provided by the vendor; they determined that the design completely and accurately describes the TOE security functionality (TSF) interfaces and how the TSF implements the security functional requirements (SFRs). The evaluators determined that the initialization process is secure, that the security functions are protected against tamper and bypass, and that security domains are maintained.

#### 5.2 GUIDANCE DOCUMENTS

The evaluators examined the TOE preparative user guidance and operational user guidance and determined that it sufficiently and unambiguously describes how to securely transform the TOE into its evaluated configuration and how to use and administer the product. The evaluators examined and tested the preparative and operational guidance, and determined that they are complete and sufficiently detailed to result in a secure configuration.

Section 4.1 provides details on the guidance documents.

### 5.3 LIFE-CYCLE SUPPORT

An analysis of the TOE configuration management system and associated documentation was performed. The evaluators found that the TOE configuration items were clearly marked.

The evaluators examined the delivery documentation and determined that it described all of the procedures required to maintain the integrity of the TOE during distribution to the consumer.



#### 6 **TESTING ACTIVITIES**

Testing consists of the following three steps: assessing developer tests, performing independent functional tests, and performing penetration tests.

#### 6.1 ASSESSMENT OF DEVELOPER TESTS

The evaluators verified that the developer has met their testing responsibilities by examining their test evidence, and reviewing their test results, as documented in the ETR. The correspondence between the tests identified in the developer's test documentation and the functional specification was complete.

#### 6.2 CONDUCT OF TESTING

The TOE was subjected to a comprehensive suite of formally documented, independent functional and penetration tests. The detailed testing activities, including configurations, procedures, test cases, expected results and observed results are documented in a separate Test Results document.

#### 6.3 INDEPENDENT FUNCTIONAL TESTING

During this evaluation, the evaluator developed independent functional tests by examining design and guidance documentation.

All testing was planned and documented to a sufficient level of detail to allow repeatability of the testing procedures and results. The following testing activities were performed:

- a. Repeat of Developer's Tests: The evaluator repeated a subset of the developers tests;
- b. Security Management: The objective of this test goal is to confirm that a deleted user cannot access any management functions, even if logged in while the account is deleted;
- c. Security Bypass: The objective of this test goal is to confirm that a Linux workstation hosting the McAfee Agent does not have the required permission to stop the McAfee Agent service; and
- d. File Integrity: The objective of this test case is to confirm that the SHA1 and MD5 hash values reported by the File Integrity tool are correct.

#### 6.3.1 FUNCTIONAL TEST RESULTS

The developer's tests and the independent functional tests yielded the expected results, providing assurance that the TOE behaves as specified in its ST and functional specification.



#### 6.4 INDEPENDENT PENETRATION TESTING

Subsequent to the independent review of public domain vulnerability databases and all evaluation deliverables, limited independent evaluator penetration testing was conducted. The penetration tests focused on:

- a. Use of automated vulnerability scanning tools to discover potential network, platform and application layer vulnerabilities such as Heartbleed, Shellshock, FREAK, POODLE, and GHOST;
- b. Port Scan: The objective of this test goal is to conduct a port scan of the McAfee ePolicy Orchestrator's management workstation and McAfee Agent machines to determine open ports;
- c. Information Leakage verification: The objective of this test goal is to monitor for leakage during start-up, shutdown, Login and other scenarios.
- d. Misuse-Concurrent Login: The objective of this test goal is to login with concurrent sessions and determine that the TOE will not crash and that updates made on one user session will take affect across all sessions immediately; and
- e. File Integrity XSS: The objective of this test goal is to confirm that the File Integrity tool is not vulnerable to a basic cross-site scripting attack.

#### 6.4.1 PENETRATION TEST RESULTS

The independent penetration testing did not uncover any exploitable vulnerabilities in the intended operating environment.



#### 7 RESULTS OF THE EVALUATION

This evaluation has provided the basis for the conformance claim documented in Table 1. The overall verdict for this evaluation is **PASS**. These results are supported by evidence in the ETR.

The IT product identified in this report has been evaluated at an approved evaluation facility established under the Canadian Common Criteria Scheme using the Common Methodology for IT Security Evaluation, Version 3.1 Revision 5, for conformance to the Common Criteria for IT Security Evaluation, Version 3.1 Revision 5. These evaluation results apply only to the specific version and release of the product in its evaluated configuration and in conjunction with the complete certification report.

The evaluation has been conducted in accordance with the provisions of the Canadian Common Criteria Scheme and the conclusions of the evaluation facility in the evaluation report are consistent with the evidence adduced. This is not an endorsement of the IT product by CSE or by any other organization that recognizes or gives effect to this certificate, and no warranty of the IT product by CSE or by any other organization that recognizes or gives effect to this certificate, is expressed or implied.

### 7.1 **RECOMMENDATIONS/COMMENTS**

It is recommended that all guidance outlined in Section 4.1 be followed to configure the TOE in the evaluated configuration.



### 8 SUPPORTING CONTENT

#### 8.1 LIST OF ABBREVIATIONS

Term	Definition
АНА	Advanced Host Assessment
CAVP	Cryptographic Algorithm Validation Program
СС	Common Criteria
CCEF	Common Criteria Evaluation Facility
СМ	Configuration Management
CMVP	Cryptographic Module Validation Program
CPL	Certified Products List
CSE	Communications Security Establishment
EAL	Evaluation Assurance Level
ETR	Evaluation Technical Report
GC	Government of Canada
ІТ	Information Technology
ITS	Information Technology Security
JSON	JavaScript Object Notation Standard
РР	Protection Profile
SCAP	Security Content Automation Protocol
SFR	Security Functional Requirement
ST	Security Target
TOE	Target of Evaluation
TSF	TOE Security Function



### 8.2 **REFERENCES**

#### Reference

Common Criteria for Information Technology Security Evaluation, Version 3.1 Revision 5, April 2017.

Common Methodology for Information Technology Security Evaluation, CEM, Version 3.1 Revision 5, April 2017.

McAfee Policy Auditor 6.4 with ePolicy Orchestrator 5.10 Security Target version 1.0, October 15, 2018.

Evaluation Technical Report for McAfee Policy Auditor 6.4 with ePolicy Orchestrator 5.10, version 1.3, November 5, 2018.