COMMON CRITERIA CERTIFICATION REPORT

Secusmart SecuSUITE Client v3.0 and Vodafone Secure Call Client v3.0

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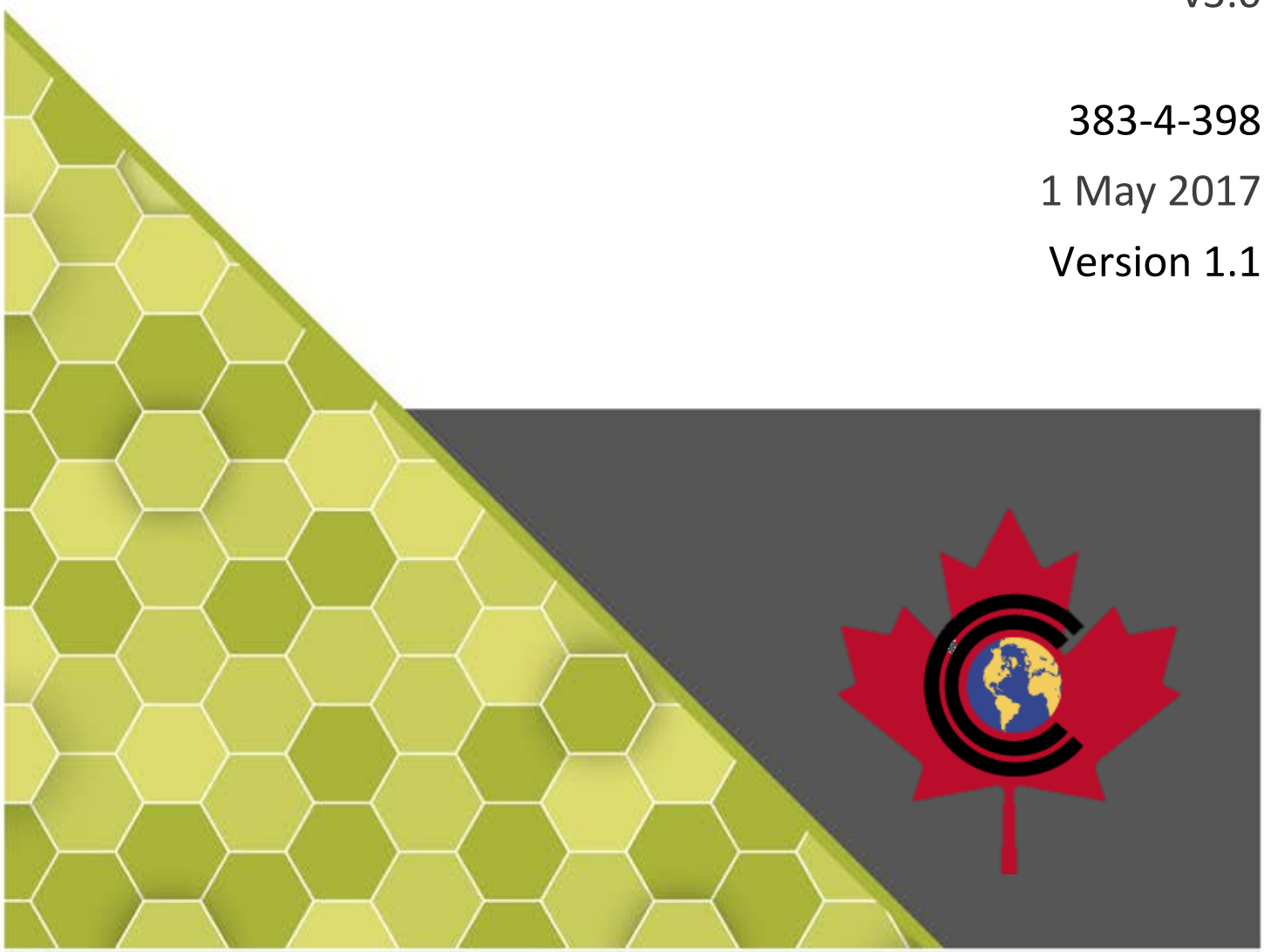
Version 1.1



Canada

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 4, for conformance to the Common Criteria for Information Technology Security Evaluation, Version 3.1 Revision 4. 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. Accreditation is performed under the Program for the Accreditation of Laboratories - Canada (PALCAN), administered by the Standards Council of Canada.

The CCEF that carried out this evaluation is EWA-Canada.

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

Secusmart SecuSUITE Client v3.0 and Vodafone Secure Call Client v3.0 (hereafter referred to as the Target of Evaluation, or TOE), from Secusmart, was the subject of this Common Criteria evaluation. The results of this evaluation demonstrate that the TOE meets the requirements of the conformance claim listed in Table 1 for the evaluated security functionality.

The TOE is a Voice Over IP (VoIP) application that executes on a mobile device operating system allowing users to place secure VoIP calls over data connections.

EWA-Canada is the CCEF that conducted the evaluation. This evaluation was completed on 01 May 2017 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 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	Secusmart SecuSUITE Client v3.0 and Vodafone Secure Call Client v3.0
Developer	Secusmart
Conformance Claim	Protection Profile for VOIP Applications Version 1.3

1.1 COMMON CRITERIA CONFORMANCE

The evaluation was conducted using the Common Methodology for Information Technology Security Evaluation, Version 3.1 Revision 4, for conformance to the Common Criteria for Information Technology Security Evaluation, Version 3.1 Revision 4.

1.2 TOE DESCRIPTION

The TOE is a Voive Over IP (VoIP) application that executes on a mobile device operating system allowing users to place secure VoIP calls over data connections. The TOE establishes a secure tunnel, providing confidentiality, integrity, and data authentication, for voice communications with another SecuSUITE client. This occurs using the Secure Real-Time Transport Protocol (SRTP) that has been established using the Session Description Protocol (SDP) and the Security Descriptions for Media Streams for SDP. The TOE also protects communications between itself and the Secusmart SecuSUITE SIP Server by using a Transport Layer Security (TLS) protected signalling channel. The TOE also makes use of certificates to authenticate both the SIP server end and the TOE itself through the TLS connection. The TOE does not work in isolation but relies on SecuSUITE infrastructure components depicted in Figure 1 below to enable secure VoIP communications.

1.3 TOE ARCHITECTURE

A diagram of the TOE architecture is as follows:

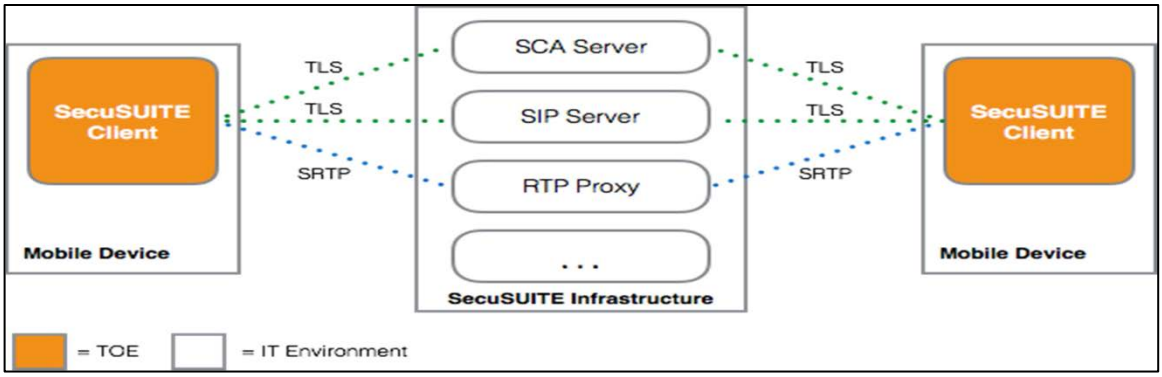

Figure 1 TOE Architecture

2 SECURITY POLICY

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

- Cryptographic Support
- User Data Protection
- Identification and Authentication
- Security Management
- Protection of the TSF
- Trusted Path/Channels

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

2.1 CRYPTOGRAPHIC FUNCTIONALITY

The following Government of Canada approved cryptographic algorithms were evaluated for correct implementation in the TOE:

Table 2 Cryptographic Algorithm(s)

Cryptographic Algorithm	Standard	Certificate Number
Advanced Encryption Standard (AES)	FIPS 197	4382
Rivest Shamir Adleman (RSA)	FIPS 186-4	2368
Secure Hash Algorithm (SHS)	FIPS 180-3	3610
Keyed-Hash Message Authentication Code (HMAC)	FIPS 198	2910
Elliptic Curve Digital Signature Algorithm (ECDSA)	FIPS 186-4	1046
Deterministic Random Bit Generation (DRBG)	SP 800-90A	1408
Key Agreement Scheme	SP 800-56A	112
Component Validation List	ANSI X9.63 SP 800-56A	1079, 1080

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:

- Network resources shall be available to allow VoIP clients to satisfy mission requirements and to transmit information.
- The operational environment of the TOE appropriately addresses those requirements, threats, and policies not applicable to the TOE itself, but that are necessary to support the correct operation of the TOE.
- Personnel configuring the TOE and its operational environment will follow the applicable security configuration guidance.

3.2 CLARIFICATION OF SCOPE

The TOE incorporates CAVP-validated cryptography and was not subjected to CMVP (FIPS-140) validation.

The TOE is available as two differently branded mobile applications (SecuSUITE Client v3.0 and Vodafone Secure Call Client v3.0) with the only difference being name and branding graphics.

4 EVALUATED CONFIGURATION

The evaluated configuration for the TOE comprises the SecuSUITE Client v3.0.17 and Vodafone Secure Call Client v3.0.17 running on the following mobile devices:

- Blackberry Passport, Leap, Classic, Q10, Z30 and Z10 (Security Target: https://www.cse-cst.gc.ca/en/system/files/pdf_documents/blackberry-v1033-sec-eng.pdf)
- Samsung Galaxy S7 and S7 Edge (Security Target: https://www.commoncriteriaportal.org/files/epfiles/st_vid10726-st.pdf)
- Apple iPhone 6 and 6 Plus (Apple iOS 9.3) (Security Target: https://www.commoncriteriaportal.org/files/epfiles/st_vid10725-st.PDF)

The TOE is part of the SecuSUITE security solution and requires the following components to be present in the environment:

- SecuSUITE Admin Portal v1.0
- SecuSUITE Database Server v1.0
- SecuSUITE SCA Server v1.0
- SecuSUITE SIP Server v1.0
- SecuSUITE RTP Proxy v1.0

4.1 DOCUMENTATION

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

a. SecuSUITE App User Guide, Version 2.4.

b. Vodafone Secure Call App Release 3.0 User Manual, Version 2.2.

c. Common Criteria Configuration Guide SecuSUITE and Vodafone Secure Call Client, v3.0, Version 2.1.

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 TOE functional specification and design documentation; they determined that the design completely and accurately describes the TOE security functionality (TSF) interfaces, the TSF subsystems and how the TSF implements the security functional requirements (SFRs). The evaluators analyzed the TOE security architectural description and determined that the initialization process is secure, that the security functions are protected against tamper and bypass, and that security domains are maintained. The evaluators also independently verified that the correspondence mappings between the design documents are correct.

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 evaluators analyzed the developer's test coverage analysis and found it to be complete and accurate. 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. PP Assurance Activities: The evaluator performed the assurance activities listed in the claimed PP.

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 VULNERABILITY ANALYSIS

The evaluator performed an independent review of public domain vulnerability databases and all evaluation deliverables. The evaluator also performed a review of the TOE using the OWASP Mobile SecurityTesting Guide as a basis. The vulnerability analysis 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 the 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 4, for conformance to the Common Criteria for IT Security Evaluation, Version 3.1 Revision 4. 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
CAVP	Cryptographic Algorithm Validation Program
CCEF	Common Criteria Evaluation Facility
CM	Configuration Management
CMVP	Cryptographic Module Validation Program
CSE	Communications Security Establishment
EAL	Evaluation Assurance Level
ETR	Evaluation Technical Report
GC	Government of Canada
IT	Information Technology
ITS	Information Technology Security
ITSET	Information Technology Security Evaluation and Testing
OWASP	Open Web Application Security Project
PALCAN	Program for the Accreditation of Laboratories - Canada
PP	Protection Profile
SDP	Session Description Protocol
SFR	Security Functional Requirement
SRTP	Secure Real-Time Transport Protocol
ST	Security Target
TLS	Transport Layer Security
TOE	Target of Evaluation
TSF	TOE Security Function

Term	Definition
VoIP	Voice Over IP

8.2 REFERENCES

Reference
Common Criteria for Information Technology Security Evaluation, Version 3.1 Revision 4, September 2012.
Common Methodology for Information Technology Security Evaluation, CEM, Version 3.1 Revision 4, September 2012.
Secusmart SecuSUITE Client v3.0 and Vodafone Secure Call Client v3.0 Security Target, Version 1.10, May 01, 2017.
Evaluation Technical Report for Secusmart SecuSUITE Client v3.0 and Vodafone Secure Call Client v3.0, Version 1.6, May 01, 2017.
Assurance Activity Report for SecuSUITE Client v3.0 and Vodafone Secure Call Client v3.0, Version 2.4, May 01, 2017.