

## Independent Accountants' Report

To the Management of Trustwave Holdings, Inc.:

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We have examined Trustwave Holdings, Inc. (“Trustwave”) management’s assertion for its Certification Authority (“CA”) operations at Chicago, Illinois throughout the period October 1, 2015 to September 30, 2016 for its XRamp Global Certification Authority, SecureTrust CA, and Secure Global CA. Trustwave has:

- disclosed its business, key lifecycle management, certificate lifecycle management and environmental control practices in its:
  - Trustwave Certificate Policy and Certification Practices Statement (“CP/CPS”), Version 4.5, dated June 22, 2016
- maintained effective controls to provide reasonable assurance that:
  - Trustwave’s Certification Practice Statement is consistent with its Certificate Policy; and
  - Trustwave provides its services in accordance with its CP/CPS
- maintained effective controls to provide reasonable assurance that:
  - the integrity of keys and certificates it manages is established and protected throughout their lifecycles; and
  - subscriber information is properly authenticated (for the registration activities performed by Trustwave)
- maintained effective controls to provide reasonable assurance that:
  - logical and physical access to CA systems and data is restricted to authorized individuals;
  - the continuity of key and certificate management operations is maintained; and

- CA systems development, maintenance and operations are properly authorized and performed to maintain CA systems integrity

based on Webtrust Principles and Criteria for Certification Authorities v 2.0.

Trustwave's management is responsible for its assertion. Our responsibility is to express an opinion on management's assertion based on our examination.

We conducted our examination in accordance with standards for attestation engagements established by the American Institute of Certified Public Accountants and, accordingly, included:

- (1) obtaining an understanding of Trustwave's key and certificate lifecycle management business practices and its controls over key and certificate integrity, over the authenticity and confidentiality of subscriber and relying party information, over the continuity of key and certificate lifecycle management operations and over development, maintenance and operation of systems integrity;
- (2) selectively testing transactions executed in accordance with disclosed key and certificate lifecycle management business practices;
- (3) testing and evaluation the operating effectiveness of the controls; and
- (4) performing such other procedures as we considered necessary in the circumstances.

We believe that our examination provides a reasonable basis for our opinion.

The relative effectiveness and significance of specific controls at Trustwave and their effect on assessments of control risk for subscribers and relying parties are dependent on their interaction with the controls, and other factors present at individual subscriber and relying party locations. We have performed no procedures to evaluate the effectiveness of controls at individual subscriber and relying party locations.

Because of the nature and inherent limitations of controls, Trustwave's ability to meet the aforementioned criteria may be affected. For example, controls may not prevent, or detect and correct, error, fraud, unauthorized access to systems and information, or failure to comply with internal and external policies or requirements. Also, the projection of any conclusions, based on our findings, to future periods is subject to the risk that changes may alter the validity of such conclusions.

In our opinion, throughout the period October 1, 2015 to September 30, 2016, Trustwave management's assertion, as referred to above, is fairly stated, in all material respects, based on the Webtrust Principles and Criteria for Certification Authorities v 2.0.

This report does not include any representation as to the quality of Trustwave's services beyond those covered by the Webtrust Principles and Criteria for Certification Authorities v 2.0, nor the suitability of any of Trustwave's services for any customer's intended purpose.

Trustwave's use of the WebTrust<sup>SM/TM</sup> for Certificate Authorities Seal constitutes a symbolic representation of the contents of this report and it is not intended, nor should it be construed, to update this report or provide any additional assurance.

*Grant Thornton LLP*

Chicago, Illinois  
November 18, 2016

## Trustwave Holdings, Inc. Management Assertion

Trustwave Holdings, Inc. (“Trustwave”) operates Certification Authority (“CA”) services known as XRamp Global Certification Authority, SecureTrust CA, and Secure Global CA, and provides the following CA services:

- Subscriber registration
- Certificate rekey
- Certificate issuance
- Certificate distribution
- Certificate revocation
- Certificate validation

Management of Trustwave is responsible for establishing and maintaining effective controls over its CA operations, including its CA business practices disclosure on its website, CA business practices management, CA environmental controls, CA key lifecycle management controls, and certificate lifecycle management controls. These controls contain monitoring mechanisms, and actions are taken to correct deficiencies identified.

There are inherent limitations in any controls, including the possibility of human error and the circumvention or overriding of controls. Accordingly, even effective controls can provide only reasonable assurance with respect to Trustwave’s Certification Authority operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

Trustwave management has assessed its disclosures of its certificate practices and controls over its CA services. Based on that assessment, in Trustwave management’s opinion, in providing its Certification Authority services in Chicago, IL throughout the period October 1, 2015 to September 30, 2016, Trustwave has:

- disclosed its key lifecycle management, certificate lifecycle management, and CA environmental control practices in its:
  - Trustwave Certificate Policy and Certification Practices Statement (“CP/CPS”), Version 4.5, dated June 22, 2016
- maintained effective controls to provide reasonable assurance that:
  - Trustwave’s Certification Practice Statement is consistent with its Certificate Policy; and
  - Trustwave provides its services in accordance with its CP/CPS
- maintained effective controls to provide reasonable assurance that:
  - the integrity of keys and certificates it manages is established and protected throughout their lifecycles; and
  - subscriber information is properly authenticated (for the registration activities performed by Trustwave)

- maintained effective controls to provide reasonable assurance that:
  - logical and physical access to CA systems and data is restricted to authorized individuals;
  - the continuity of key and certificate management operations is maintained; and
  - CA systems development, maintenance and operations are properly authorized and performed to maintain CA systems integrity

based on Webtrust Principles and Criteria for Certification Authorities Version 2.0 for the XRamp Global Certification Authority, SecureTrust CA, and Secure Global CA, including the following:

**CA Business Practices Disclosure**

- Certification Practice Statement (CPS)
- Certificate Policy (CP)

**CA Business Practices Management**

- Certificate Policy Management
- Certificate Practice Statement Management
- CP and CPS Consistency

**CA Environmental Controls**

- Security Management
- Asset Classification and Management
- Personnel Security
- Physical and Environmental Security
- Operations Management
- System Access Management
- Systems Development and Maintenance
- Business Continuity Management
- Monitoring and Compliance
- Audit Logging

**CA Key Lifecycle Management Controls**

- CA Key Generation
- CA Key Storage, Backup, and Recovery
- CA Public Key Distribution
- CA Key Usage
- CA Key Archival and Destruction
- CA Key Compromise
- CA Cryptographic Hardware Life Cycle Management

### Certificate Lifecycle Management Controls

- Subscriber Registration
- Certificate Rekey
- Certificate Issuance
- Certificate Distribution
- Certificate Revocation
- Certificate Validation



*Robert J. McCullen*

Trustwave Holdings, Inc.  
Robert J. McCullen  
President and Chief Executive Officer  
November 18, 2016