

Report of the Independent Accountant

To the Management of Trustwave Holdings, Inc.:

We have examined Trustwave Holdings, Inc. (“Trustwave”) management’s assertion that for its Certification Authority (“CA”) operations at Chicago, Illinois, throughout the period October 1, 2017 to September 30, 2018 for its XRamp Global Certification Authority, SecureTrust CA, Secure Global CA, Trustwave Global Certification Authority, Trustwave Global ECC P256 Certification Authority, and Trustwave Global ECC P384 Certification Authority, Trustwave, has:

- disclosed its code signing certificate lifecycle management business practices in its:
 - Trustwave Certificate Policy and Certification Practices Statement (“CP/CPS”),
 - § Version 5.0, dated January 31, 2018
 - § Version 4.8, dated August 23, 2017
- including its commitment to provide code signing certificates in conformity with the CA/Browser Forum Guidelines on the Trustwave website, and provided such services in accordance with its disclosed practices
- maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and code signing certificates it manages is established and protected throughout their lifecycles; and
 - code signing certificates subscriber information is properly authenticated (for the registration activities performed by Trustwave)
 - maintained effective controls to provide reasonable assurance that:
 - requests for Code Signing Authority and Code Signing Timestamp Authority certificates are properly authenticated; and

- certificates issued to Code Signing Authorities and Code Signing Timestamp Authorities are not valid for a period longer than specified by the CA/Browser Forum
- maintained effective controls to provide reasonable assurance that its Code Signing Authority and Code Signing Timestamp Authority is operated in conformity with the CA/Browser Forum Guidelines

based on the WebTrust^{SM/TM} Principles and Criteria for Certification Authorities – Publicly Trusted Code Signing Certificates Version 1.0.1. Trustwave’s management is responsible for its assertion. Our responsibility is to express an opinion on management’s assertion based on our examination.

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. Our examination did not extend to controls at individual subscriber and relying party locations and we have not evaluated the effectiveness of such controls.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether management’s assertion is fairly stated, in all material respects. An examination involves performing procedures to obtain evidence about management’s assertion. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material misstatement of management’s assertion, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide reasonable basis for our opinion.

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 management’s assertion, as referred to above, is fairly stated, in all material respects.

The report does not include any representation as to the quality of Trustwave’s services other than its CA operations at Chicago, Illinois, nor the suitability of any of Trustwave’s services for any customer’s intended purpose.



Chicago, Illinois
November 30, 2018

Trustwave Holdings, Inc. Management's Assertion

As set forth in Appendix A, Trustwave Holdings, Inc. ("Trustwave") operates the Certification Authority ("CA") service known as XRamp Global Certification Authority, SecureTrust CA, Secure Global CA, Trustwave Global Certification Authority, Trustwave Global ECC P256 Certification Authority, and Trustwave Global ECC P384 Certification Authority and provides code signing services.

Trustwave management has assessed its disclosure of its certificate practices and controls over its code signing services. Based on that assessment, in providing its code signing services at Chicago, Illinois, throughout the period October 1, 2017 to September 30, 2018, Trustwave has:

- disclosed its code signing certificate lifecycle management business practices in its:
 - Trustwave Certificate Policy and Certification Practices Statement ("CP/CPS"),
 - Version 5.0, dated January 31, 2018
 - Version 4.8, dated August 23, 2017

including its commitment to provide code signing certificates in conformity with the CA/Browser Forum Requirements on the Trustwave website, and provided such services in accordance with its disclosed practices.

- maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and code signing certificates it manages is established and protected throughout their lifecycles; and
 - code signing certificates subscriber information is properly authenticated (for the registration activities performed by Trustwave)
- maintained effective controls to provide reasonable assurance that:
 - requests for Code Signing Authority and Code Signing Timestamp Authority certificates are properly authenticated; and
 - certificates issued to Code Signing Authorities and Code Signing Timestamp Authorities are not valid for a period longer than specified by the CA/Browser Forum
- maintained effective controls to provide reasonable assurance that its Code Signing Authority and Code Signing Timestamp Authority is operated in conformity with the CA/Browser Forum Guidelines

based on the WebTrust^{SM/TM} Principles and Criteria for Certification Authorities – Publicly Trusted Code Signing Certificates Version 1.0.1.

A handwritten signature in blue ink, appearing to read "Art Wong", is written over the printed name "Art Wong".

Trustwave Holdings, Inc.

Art Wong

Chief Executive Officer

November 30, 2018

Appendix A

ROOTS:

subject=C = US, OU = www.xrampsecurity.com, O = XRamp Security Services Inc, CN = XRamp Global
Certification Authority
SHA256
Fingerprint=CE:CD:DC:90:50:99:D8:DA:DF:C5:B1:D2:09:B7:37:CB:E2:C1:8C:FB:2C:10:C0:FF:0B:CF:0D:32:86
:FC:1A:A2

subject=C = US, O = SecureTrust Corporation, CN = SecureTrust CA
SHA256
Fingerprint=F1:C1:B5:0A:E5:A2:0D:D8:03:0E:C9:F6:BC:24:82:3D:D3:67:B5:25:57:59:B4:E7:1B:61:FC:E9:F7:37
:5D:73

subject=C = US, O = SecureTrust Corporation, CN = Secure Global CA
SHA256
Fingerprint=42:00:F5:04:3A:C8:59:0E:BB:52:7D:20:9E:D1:50:30:29:FB:CB:D4:1C:A1:B5:06:EC:27:F1:5A:DE:7
D:AC:69

subject= /C=US/ST=Illinois/L=Chicago/O=Trustwave Holdings, Inc./CN=Trustwave Global Certification Authority
SHA256
Fingerprint=97:55:20:15:F5:DD:FC:3C:87:88:C0:06:94:45:55:40:88:94:45:00:84:F1:00:86:70:86:BC:1A:2B:B5:8D
:C8

subject= /C=US/ST=Illinois/L=Chicago/O=Trustwave Holdings, Inc./CN=Trustwave Global ECC P256
Certification Authority
SHA256
Fingerprint=94:5B:BC:82:5E:A5:54:F4:89:D1:FD:51:A7:3D:DF:2E:A6:24:AC:70:19:A0:52:05:22:5C:22:A7:8C:C
F:A8:B4

subject= /C=US/ST=Illinois/L=Chicago/O=Trustwave Holdings, Inc./CN=Trustwave Global ECC P384
Certification Authority
SHA256
Fingerprint=55:90:38:59:C8:C0:C3:EB:B8:75:9E:CE:4E:25:57:22:5F:F5:75:8B:BD:38:EB:D4:82:76:60:1E:1B:D5:
80:97

Code Signing CAs:

subject=C = US, ST = Illinois, L = Chicago, O = "Trustwave Holdings, Inc.", CN = "Trustwave Code Signing CA,
Level 2", emailAddress = ca@trustwave.com
SHA256
Fingerprint=95:46:9A:45:EE:12:F3:A7:D1:CA:88:0A:2F:52:44:2E:28:63:59:39:23:FE:C0:8A:F6:BC:AB:23:75:45:
9E:9B

subject=C = US, ST = Illinois, L = Chicago, O = "Trustwave Holdings, Inc.", CN = "Trustwave Code Signing
SHA256 CA, Level 1", emailAddress = ca@trustwave.com
SHA256
Fingerprint=F4:20:94:9B:B5:5A:46:2D:9B:92:74:49:E4:9D:A2:3F:68:3A:B4:B6:16:6E:05:81:58:08:F5:D9:FD:36:6
4:6B

subject=C = US, ST = Illinois, L = Chicago, O = "Trustwave Holdings, Inc.", CN = "Trustwave Code Signing
SHA256 CA, Level 1", emailAddress = ca@trustwave.com
SHA256
Fingerprint=53:A8:12:9F:71:A9:82:7D:03:70:46:70:72:0C:37:50:61:82:11:55:C0:76:E8:6A:49:0D:6E:B8:71:E0:3A
:F0

subject= /CN=Trustwave Global Code Signing CA, Level 1/O=Trustwave Holdings,
Inc./L=Chicago/ST=Illinois/C=US

SHA256

Fingerprint=4D:10:A0:86:86:67:31:C0:E1:61:74:19:21:14:C6:07:6C:79:95:DD:54:93:00:6D:D2:05:4E:FB:D1:69:A
E:2B

subject= /CN=Trustwave Global ECDSA P-256 Code Signing CA, Level 1/O=Trustwave Holdings,
Inc./L=Chicago/ST=Illinois/C=US

SHA256

Fingerprint=73:0E:02:CD:3A:FD:48:9F:DB:9D:70:8F:67:4B:45:FA:8C:FD:73:AB:92:6B:94:85:5B:2C:03:76:F9:A
5:28:D9

subject= /CN=Trustwave Global ECDSA P-384 Code Signing CA, Level 1/O=Trustwave Holdings,
Inc./L=Chicago/ST=Illinois/C=US

SHA256

Fingerprint=7F:2A:89:0E:8D:9A:FD:B9:C0:F0:8A:F1:CB:8D:DA:18:C5:80:2C:5B:EA:50:E0:B1:80:71:D3:CF:97:
3A:46:BD

Timestamping CAs:

subject=C = US, ST = Illinois, L = Chicago, O = "Trustwave Holdings, Inc.", CN = "Trustwave
Timestamping CA, Level 1"

SHA256

Fingerprint=EF:5A:E8:BB:F2:14:33:77:79:B8:A3:07:30:96:26:38:BB:3A:FE:10:0C:61:5A:49:7
3:0F:70:9A:25:18:86:1B

subject= /CN=Trustwave Global Timestamping CA, Level 1/O=Trustwave Holdings,
Inc./L=Chicago/ST=Illinois/C=US

SHA256

Fingerprint=64:3B:81:C9:0B:35:05:BF:AF:F8:0E:AA:C9:EE:28:C9:F4:06:36:2A:8F:56:DD:26:EC:FA:29:33:59:58
:C8:56

subject= /CN=Trustwave Global ECDSA P-256 Timestamping CA, Level 1/O=Trustwave Holdings,
Inc./L=Chicago/ST=Illinois/C=US

SHA256

Fingerprint=7F:C2:9B:85:6B:23:EE:FC:3A:5E:68:77:5E:0B:37:DC:32:06:27:FD:5C:19:36:8B:B6:83:97:EE:21:9A:
66:7A

subject= /CN=Trustwave Global ECDSA P-384 Timestamping CA, Level 1/O=Trustwave Holdings,
Inc./L=Chicago/ST=Illinois/C=US

SHA256

Fingerprint=F7:5E:65:42:0A:D6:C0:18:D9:15:BB:BA:40:A7:71:22:B3:0A:CF:D4:17:DA:3A:88:5E:4C:4C:D9:E0:
65:A4:15